ScaleLink Pro

USER GUIDE

For Version 3.26c
June 2006

ISHIDA CO., LTD

Revision History

Date	Program Version	Page/Section	Description
4th July 2003	3.11	35	Added note about ADO version of Scalelink Pro
4th July 2003	3.2	107	Updated system requirements section
18th Nov 2003	3.21	86, 144	Added explanation of e-mail settings
1st April 2004	3.22	59, 122	1. Revised explanation of store name & address for AC-4000 2. Added additional explanation of label size settings.
18th June 2004	3.22b	96	Removed reference to being able to disable the auto resend feature and automatic checking of off-line scales, as this can no longer be disabled.
30th June 2004	3.22c	110 - 114	Updated explanation of Options setup dialog to match recent changes.
30th June 2004	3.22c	7.1	Added explanation of price zones in PLU list report
8th May 2004	3.22c	3.1, 9.8	Added note that automatic resending to scale can be disabled.
8th August 2004	3.23	2, 6.5, 6.9, 6.12, 6.13	Added SR-2000 support
29th October 2004	3.24	6.13, 6.14, 7.3	Added support for SR-2000 preset key images.
26th November 2004	3.24c	6.13, Appendix A.2	Revised support for SR-2000 preset key images. Added explanation of price zone setting in user access control. Added explanation of setting PLU active/inactive as a price zone field.
11th January 2005	3.2x	Appendix C	Updated list of integer codes used as Automation method parameters.
25th January 2005	3.24d	6.13	Added explanation of default key for SR presets.
28th June 2006	3.26c	6.13	Added "Creating and Editing Index Presets (USA)"

Contents

1. Introduction

This manual describes how to use ScaleLink Pro, the Ishida PLU Editor.

The aim of the ScaleLink Pro software is to simplify the process of creating and managing the PLU and other information used in Ishida scales. ScaleLink Pro includes the following features.

- Provides a visual interface for creating and editing the following scales data.
  - PLUs
  - Ingredients and other messages
  - Nutrition information
  - Advertising messages (scrolling messages)
  - Keyboard presets
  - Campaigns
  - Store name and address
  - Tray data
- Scales data can be sent to and read from the scales via a serial port or LAN connection.
- Quick price change feature
- Search function for quickly locating the desired PLU
- PLU and production data reports
- Batch mode for off-line changes
- Price zone feature for multi-store operation
- Text file import and export
- Import from ODBC database
- Scheduler feature for automating often-used operations
- Print scale keyboard templates

How to Use This Manual

If you are a new user wishing to familiarize yourself with the software.	⇨ See Chapter 2 *Getting Started*
If you are about to install a copy of ScaleLink Pro and configure it for a particular store.	⇨ See Appendix A *Installing ScaleLink Pro at a New Store*
If you wish to learn how to use a specific feature.	⇨ Lookup the feature in the *Contents* and find the relevant chapter.
If you require information about the operation of a particular menu or other command.	⇨ Refer to On-Line Help (click **Index** in the Help menu.)

2. Getting Started

This section gives a quick tutorial on how to use ScaleLink Pro and introduces the main concepts you will need to edit and manage scales data.

This section assumes that ScaleLink Pro has already been installed and setup for your store. (If not, see Appendix A *Installing ScaleLink Pro at a New Store*.)

Which Communications Link are You Using?

ScaleLink Pro provides two different methods of communicating with the scales. It is assumed that your copy of ScaleLink Pro has already been configured for one (or both) methods, that the cabling is installed and plugged into the correct sockets, and that the target scale or MSCU is turned on. If not, an error message will appear when you attempt to communicate with the scales. In this case, contact the person responsible for installing the system.

If you have an Ishida IF21FD backup unit, it is also possible to use ScaleLink Pro without a communications link to the scales. In this case, use the **Import IF21FD** and **Export IF21FD** commands in the **File** menu to read and write data on the floppy disk.

The two different methods of communicating with the scales are described briefly below.

On-line communications

The ID-ENQ and AstraXT communication protocols use a serial port or LAN for an on-line connection to the scale.
This method operates in the background and changes you make in the ScaleLink Pro database are sent to the scale immediately. If the scale is off-line (for example if the power is turned off or the network connection is down), the data is stored and automatically resent when the scale comes back on-line.

The right-hand end of the status bar at the bottom of the ScaleLink Pro screen displays the current status of scale communications, including whether any unsent data is waiting. For a more detailed view of the scale communications status, select Comms Link Status in the Comms menu.

If your copy of ScaleLink Pro is not configured to use on-line communications. “Scale Comms: Off-Line” appears at the right-hand end of the status bar.

Data Save

This method communicates with the Data Save function on the scales. Unlike on-line communications, data transfer with the scales must be initiated manually.

The basic flow of operations when using Data Save communications is as follows:

- Receive the Data Save file from the scales.
- Open the received file in ScaleLink Pro
- Use ScaleLink Pro to edit the file data
- Save the Data Save file and transmit to the scales.

These steps are described in full in the Data Save section of *Chapter 3 Communicating with the Scales*.

Astra/AstraXT serial communications

Like the Data Save function, this method also requires that data transfer with the scales be initiated manually.

This method is used to send or receive a full set of data to the scale at one time. Individual data records cannot be sent independently.

The operation is described in full in the Astra/AstraXT Serial

Communications section of *Chapter 3 Communicating with the Scales*.

Important Note for Data Save and Astra/AstraXT Serial Comms Users

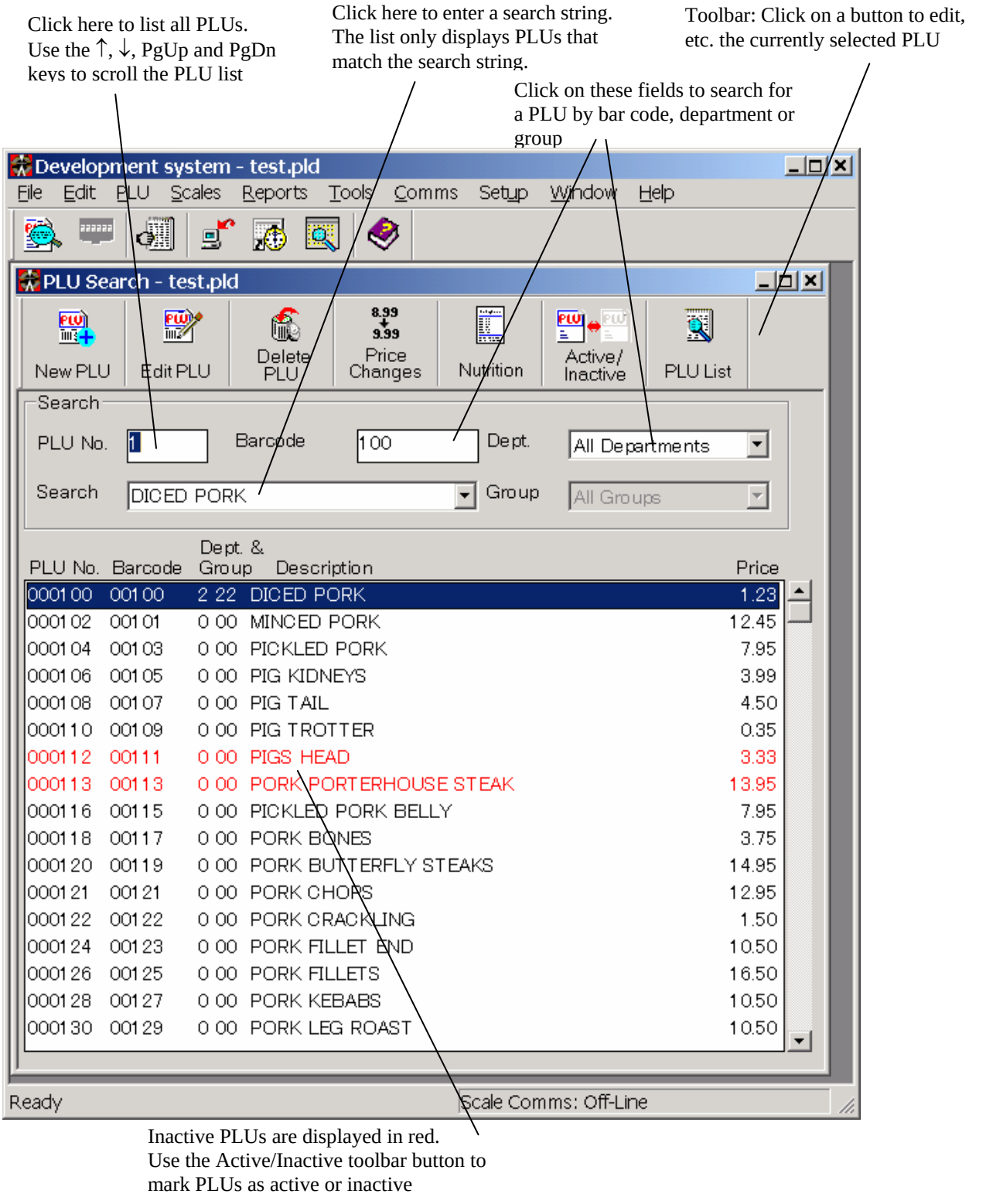
After completing this tutorial, which teaches the basic operations of the ScaleLink Pro software, proceed to Chapter 3 *Communicating with the Scales* for an explanation of Data Save and/or Astra/AstraXT serial communications.

Starting ScaleLink Pro

When you start ScaleLink Pro, the program automatically loads the database that was open when you last exited. (The database is not loaded if auto-loading of the database is set off in the setup. In this case, use the File menu to open a database or Data Save file.)

The figure below shows the initial screen.

Note: Screen appearance may differ depending on how your copy of ScaleLink Pro is configured.



The initial screen opens with the cursor in the **PLU No.** field of the PLU Search window. The PLU Search window provides a number of methods for you to find the PLU you are looking for and to edit or delete the selected PLU. You can also add new PLUs from this window.

Finding a PLU

If you know the PLU number
Enter the PLU number in the **PLU No.** field. The specified PLU appears selected in the PLU list.

If you know some or all of the PLU name
The PLU name is the first line of the PLU description that appears on the label. Enter the initial characters of the PLU name in the **Search** field. The PLU list displays only those PLUs with names that start with the entered text. For example, entering “BEEF” displays all PLU names starting with the word “beef”. (The search is not case-sensitive: entering “beef” is the same as entering “BEEF”.)

You can also use the wildcard characters (‘*’ and ‘?’) to specify a more detailed search condition. For example, entering “*BEEF” displays all PLU names containing the word “beef”.

The search re-executes automatically each time you type a character. The response may be a bit slow on older computers. In this case, allow a few seconds for the list to update.

If you do not know the PLU number or name
When the cursor is in the **Search** field, the PLU list only displays those PLUs that match the search condition. Move the cursor back to the **PLU No.** field (e.g. click on the field) to clear the search results and display all PLUs in the PLU list.
Next, use the scroll bar, the up and down arrow keys, or the PageUp and PageDown keys to scroll the PLU list until you find the PLU you are looking for.

See Chapter 6 *Creating and Editing PLUs* for a full explanation of the PLU Search window.

Adding a New PLU

Click the **New PLU** button in the PLU Search window toolbar. This opens a dialog for you to enter then PLU number. The number defaults to the next unused PLU number. Enter an unused number, then click OK to open a PLU Edit dialog.

If you entered the number of an existing PLU, the data for that PLU is displayed. Otherwise, a new PLU is created and the initial values of the fields in the lower half of the dialog are set to their default values.

The cursor is initially positioned in the PLU description field. Enter the PLU description. Next, use the mouse or TAB key to move the cursor to the price field and enter the PLU price.

Next, check the PLU number (middle-right of window). An unused PLU number is assigned automatically but you can change the number if desired. (A warning message appears if you try to save the PLU with the same number as an existing PLU.)

Click the **Save** button. This saves the PLU in the database and sends the PLU to the scales (if connected).

Click the **Close** button to return to the PLU Search window. Use the procedure described in **Finding a PLU** above to check that the PLU has been added.

Editing and Deleting PLUs

When you have found the new PLU, click on the PLU name in the list to select it. The selected PLU appears highlighted.

To edit the selected PLU
Click the **Edit PLU** button. A PLU Edit window opens displaying the data for that PLU.
The operation of the PLU Edit window is described in more detail below. For now, click the

Close button at the top right of the window. This returns you to the PLU Search window.

To delete the selected PLU
Click the **Delete PLU** button. A dialog opens asking whether or not to delete the PLU. Click **No** if you don't want to delete the PLU. If you click **Yes**, the PLU is deleted from the database and, if connected, a command is also sent to delete the PLU on the scales.

Changing PLU Prices

Click the **Price Changes** button in the PLU Search window toolbar to open a dialog for changing PLU prices (or select **Price Changes** in the **PLU** menu).

The purpose of this feature is to allow you to rapidly change the prices of a number of PLUs without having to edit each PLU in the PLU Edit window.

Using the Price Change Dialog

Enter the new price and press Enter. This saves the specified price and, if connected, sends the price change to the scales. A PLU Search dialog opens (defaulted to the next sequential PLU number) for you to specify the next PLU number.

The **Next** and **Prev** buttons jump to the next or previous PLU respectively. The **Select** button opens a PLU Search dialog for you to select another PLU.

Markdown Price Changes
Selecting **Markdown Price Changes** in the **PLU** menu opens a dialog for changing markdown prices. The operation is the same as for the standard price change dialog described above.

Nutrition

This feature is only applicable to some countries.

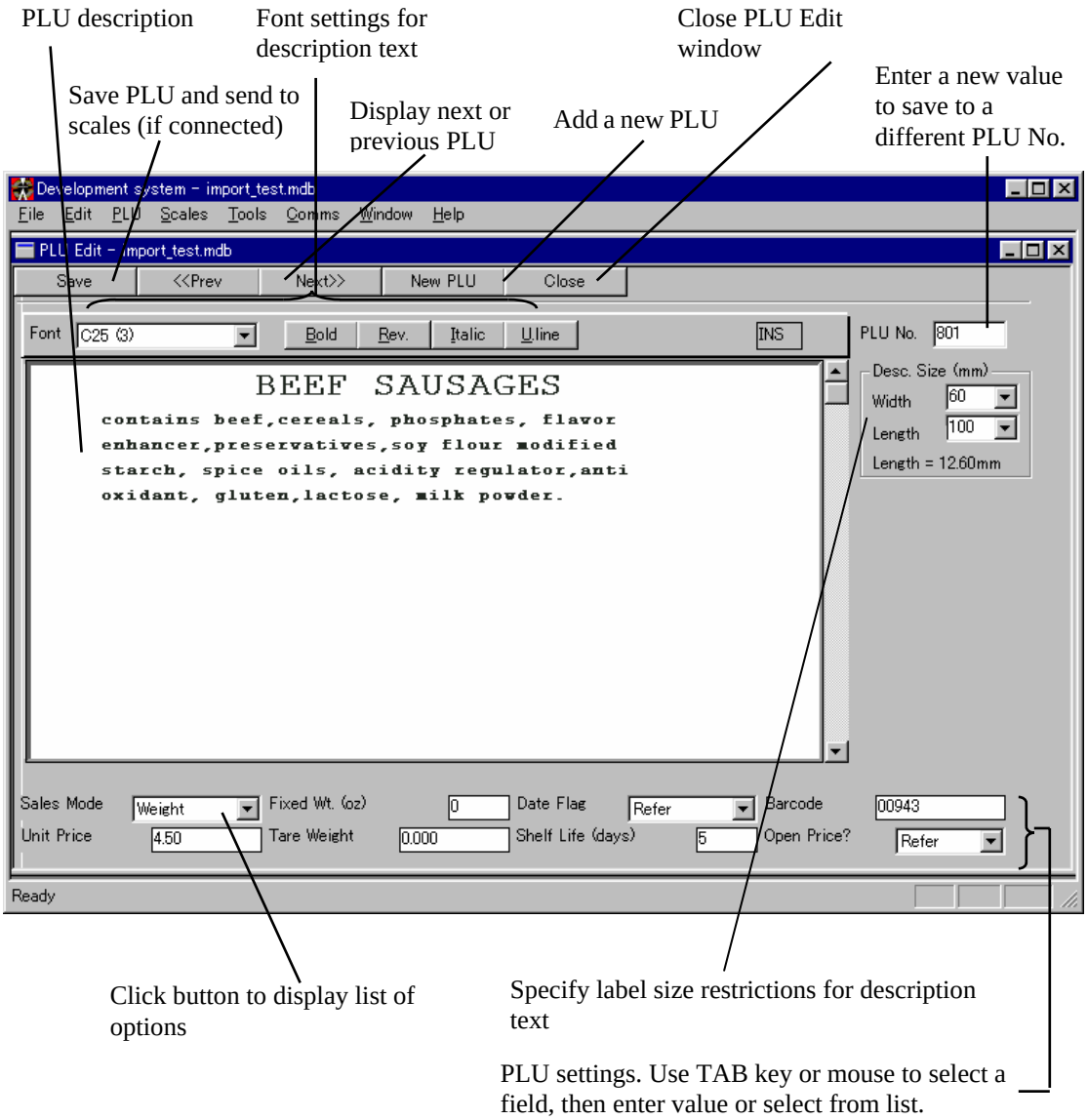
Click the **Nutrition** button in the PLU Search window (or select **Nutrition** in the **PLU** menu) to open a dialog for editing the nutrition information for the selected PLU. Enter the data then click the **OK** button to save and, if connected, send the nutrition information to the scales.

To delete the nutrition information for the selected PLU, select **Delete Nutrition** in the **PLU** menu.

Using the PLU Edit Window

The following are some quick tips to get you started using the PLU Edit window. See Chapter 6 *Creating and Editing PLUs* for a full explanation.

The appearance of the PLU Edit window depends on how your system is configured. The figure below shows an example.



Entering the PLU description

The large field in the middle of the PLU Edit window contains the PLU description. Click on the field to set the input focus to the field and use the mouse or arrow keys to move the cursor. Practice using the operations described below to enter or modify the description text.

Operation	Explanation
Insert text	Position the cursor at the desired location and enter text from the keyboard. The font and label width determine how many characters are displayed per line. Press the INS key to switch between insert and overwrite mode.
Select text	Drag with the mouse or hold down the shift key and use the left or right arrow key to move the cursor over the desired text. The selected text appears highlighted.
Change line font	A different font can be set for each line. Position the cursor in the line and select the desired font from the **Font** field. You can also press Ctrl+F to step through the available fonts.
Change font type	Characters can be displayed bold, reversed, in italic, and/or underlined. Select some text and click the buttons above the description field to turn each character type attribute on or off for the selected text.
Change label size	Set the **Desc. Size Width** field to the actual label width to be used for this PLU. This updates the description field to only display as many characters as will fit on the label. Set the **Length** field to the maximum length for the description text in the label, including any extra message. The actual length (including any extra message) is displayed beneath the **Length** field. A warning message is displayed when you try to save the PLU if the actual length is too long.
Cut, Copy or Paste	Use the Edit menu or the standard Windows keystrokes to cut, copy or paste description text.

Entering the PLU settings

The lower half of the window displays the various PLU settings. Which fields are displayed depends on how your system is configured.
Use the mouse or TAB key to move to a field, then enter or select the desired value. An error message appears if you try to move to another field when the value of this field is outside the allowed range.

You can only enter digits. None of the PLU fields accept letters or punctuation symbols.

Changing the PLU number

The PLU number field is on the mid-right of the Edit window. You can change the value to save the displayed data with a different PLU number. In this case, a warning message appears if a PLU with the specified number already exists. Saving the PLU data to a new PLU number does not delete the old PLU number and leaves the data for the old PLU unchanged.

Saving your changes

Click the **Save** button. This saves the PLU in the database and sends the PLU to the scales (if

connected).

Changing the displayed PLU
Click the **Next>>** or **<<Prev** buttons to display the data for the next or previous PLU number. (A warning message appears if you have not saved your changes to the current PLU.) Alternatively, click on the PLU Search window, select the PLU you wish to display, then click the **Edit** button or double-click on the PLU in the list to display that PLU in the PLU Edit window.

Adding a new PLU
To add a new PLU, click the **New PLU** button. This opens a PLU Search dialog to specify the number of the new PLU. Enter the new PLU number then press Return. This resets all fields in the Edit window to their default values. The new PLU is not saved until you click the Save button.

Closing the PLU Edit window
Click the **Close** button to close the PLU Edit window. (A warning message appears if you have not saved your changes to the current PLU.)

Editing Other Scales Data

ScaleLink Pro allows you to edit a range of other scales data such as campaigns, messages and keyboard presets. Use the **Scales** menu to open dialogs for editing these data.

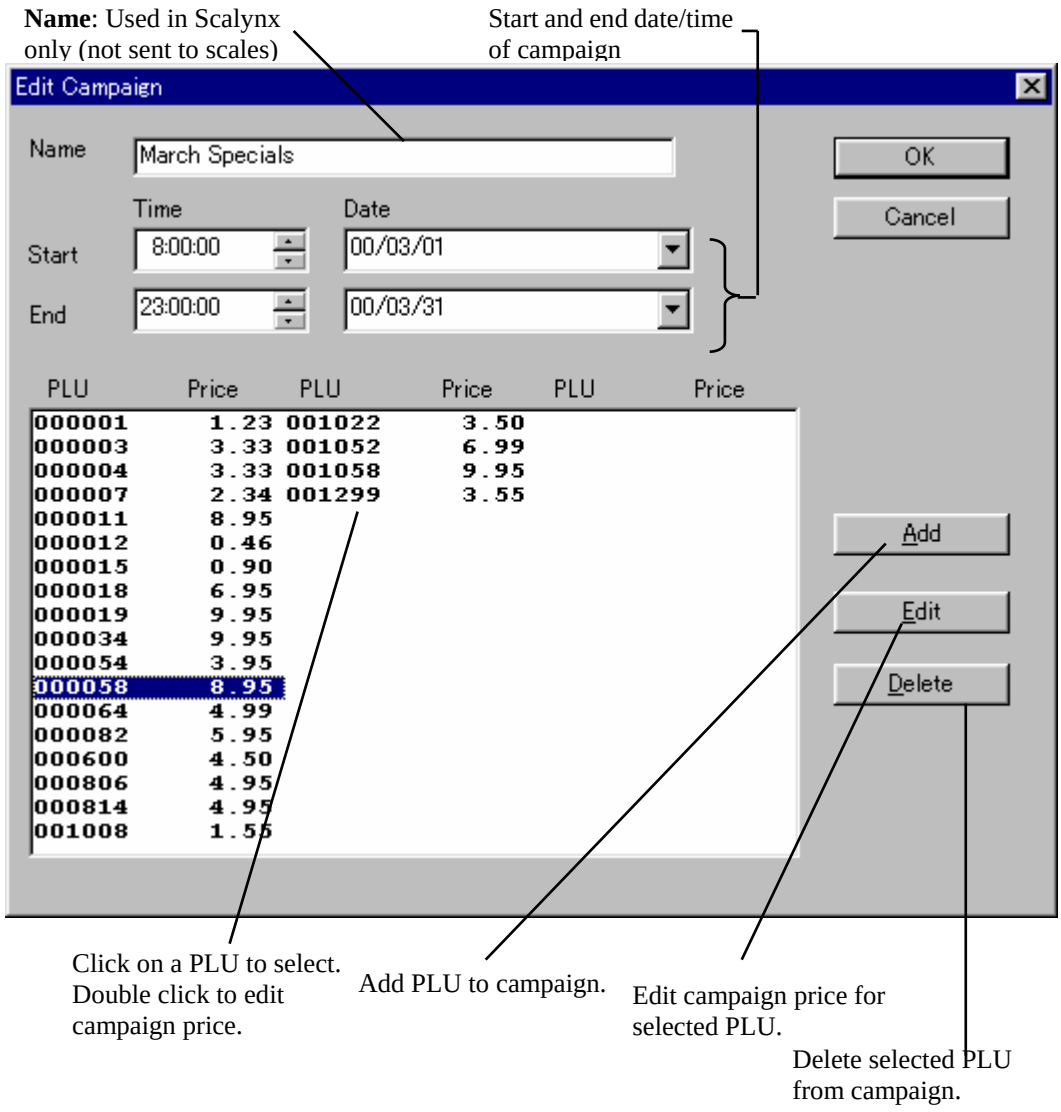
Editing a campaign

NOTE

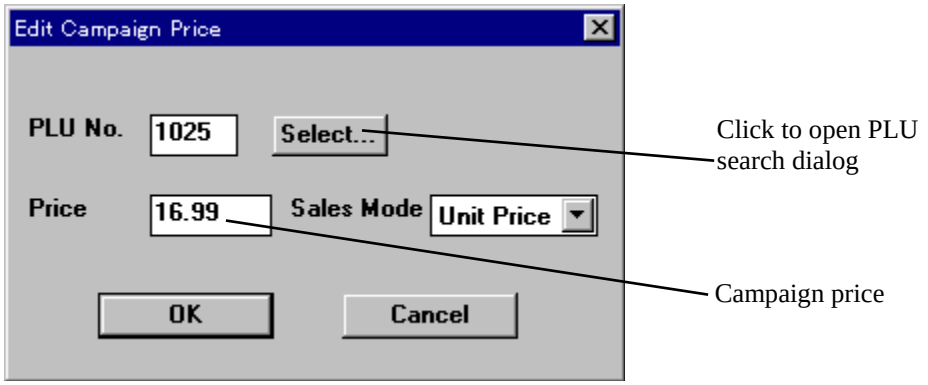
Campaigns are not supported by the AstraXT and EMZ series of scales.

Click **Campaigns** in the Scales menu. This opens a selection dialog listing the available campaigns. Unused campaigns are indicated by “Spare”. Click on a campaign to select, then click the **Edit** button to open a campaign edit dialog (or simply double-click on the campaign).

The figure below shows an example campaign edit dialog.



Enter the campaign name and start and end times. Use the buttons on the bottom right to add, edit, or delete PLUs in the campaign. For example, clicking the **Add** button opens a dialog for adding a PLU to the campaign and setting the campaign price.



Click the **Select** button to select the PLU number. This opens a PLU selection dialog which operates in a similar way to the PLU Search window (described above).

See Chapter 10 *Campaigns* for more details about creating and editing campaigns.

Exception! The AC-2000/Master system only supports one campaign. If your copy of ScaleLink Pro is configured for an AC-2000/Master system, clicking **Campaigns** in the Scales menu takes you directly to the campaign edit dialog.

Editing advertising messages

NOTE Advertising messages are not supported by the AstraXT series of scales.

Click **Advertising Messages** the Scales menu. This opens a selection dialog listing the available messages. Unused messages are indicated by "Spare". Click on a message to select it then click the **Edit** button to open a message edit dialog (or simply double-click on the message).

Editing ingredient and other messages

A range of different messages can be programmed depending on the type of scale you are using. On the AC-series scales, these typically include extra messages and coupon messages. The general operation is the same for each type of message.

Clicking the menu item corresponding to the message in the **Scales** menu opens a selection dialog listing the currently defined messages.

Click the **Add** button to create a new message, or click on an existing message to select, then click the **Edit** button to edit the message (or simply double-click on a message). In either case, a dialog opens to edit the message text.

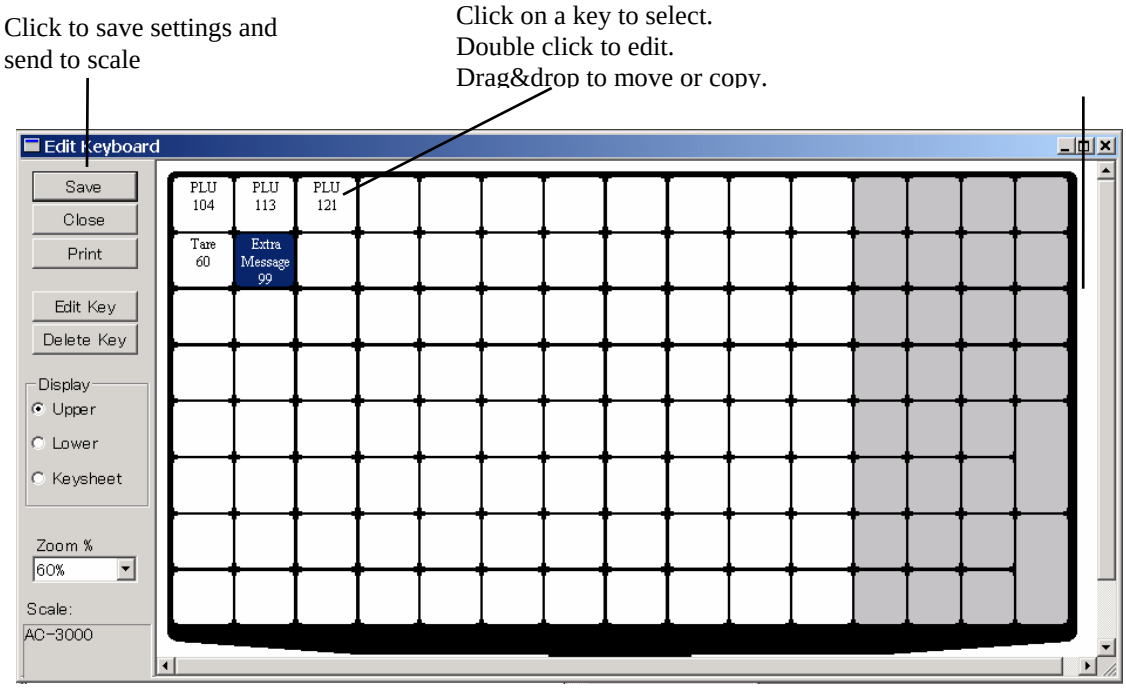
Editing keyboard presets
Click **Keyboard Presets** in the Scales menu.

NOTE **Keyboard Presets** are not available for EMZ-series scales.

If your system is configured for a single scale only, clicking **Keyboard Presets** in the Scales menu takes you directly to the keyboard window. Otherwise a selection dialog opens listing all scales in your system. Select the scale for which to define keyboard presets, then click the **Select** button to open a keyboard window.

A separate keyboard preset definition can be defined for each scale in the system.

The figure below shows an example keyboard preset window for an AC-3000 system.



Ishida scale keyboards have a shift key. The “lower” preset key definitions specify the key meaning when the shift key is pressed.

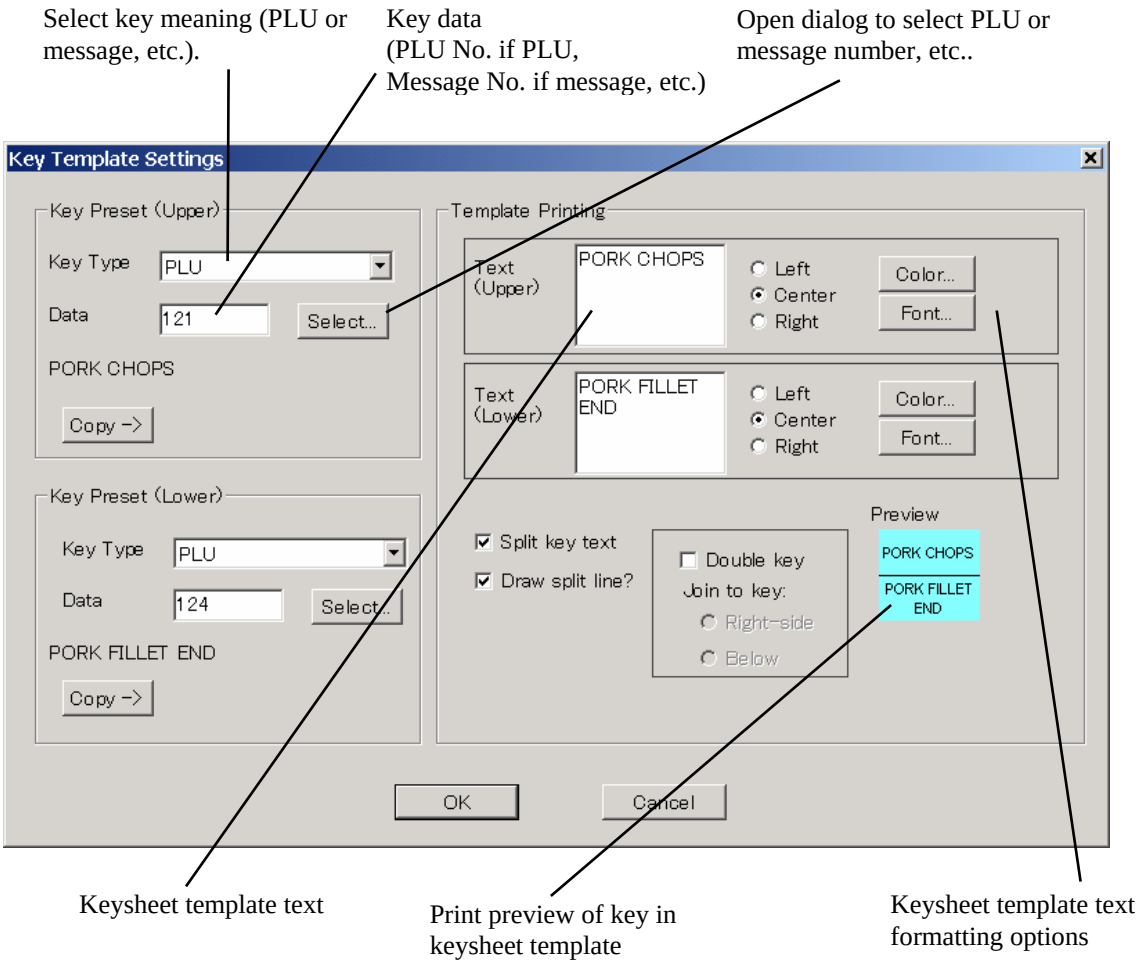
The keyboard window also allows you to create a keysheet template which you can printout and use as an overlay on the scale keyboard. Click the **Keysheet** radio button to change the display to keysheet template mode.

You can also copy keyboard definitions from other scales. Select **Copy Keyboard** from the **Keyboard** menu.

Click on a key to select, then click the **Edit Key** button or press Enter. Alternatively, simply double-click on the key. This opens a dialog (shown below) for defining the meaning of the key and specifying the keysheet template format.

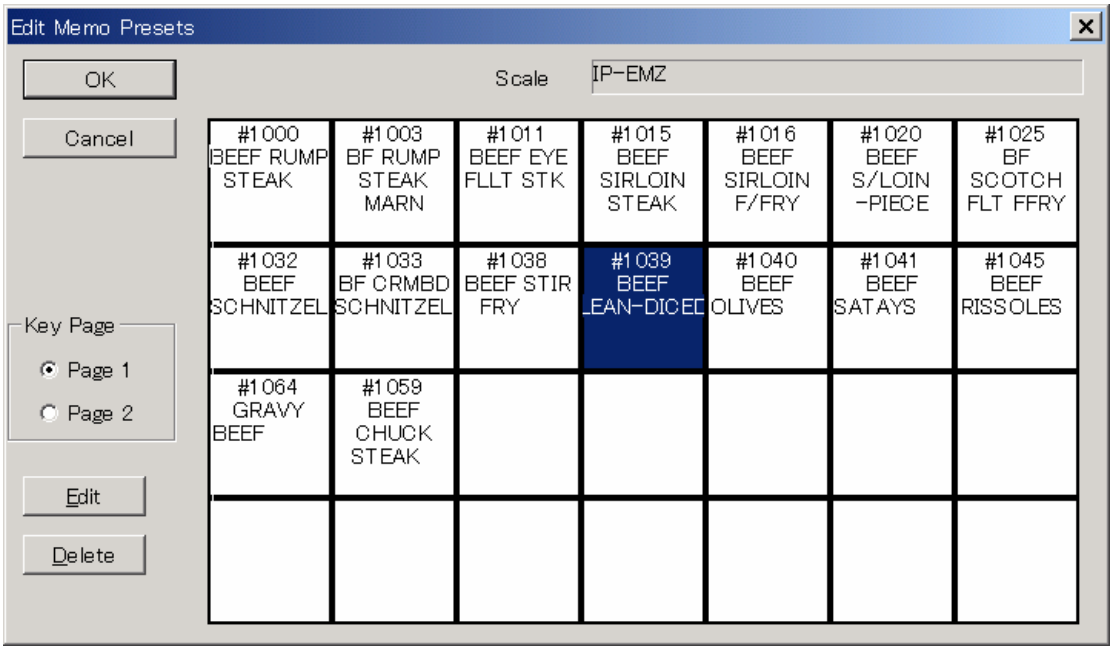
Similarly, you can remove a key definition by selecting the key and clicking the **Delete Key** button.

Switch between upper Delete definition Edit selected key.


Select key meaning (PLU or message, etc.).
Key data (PLU No. if PLU, Message No. if message, etc.)
Open dialog to select PLU or message number, etc..
Key Template Settings
Key Preset (Upper)
Key Type
PLU
Data
121
Select...
PORK CHOPS
Copy ->
Key Preset (Lower)
Key Type
PLU
Data
124
Select...
PORK FILLET END
Copy ->
Template Printing
Text (Upper)
PORK CHOPS
Left
Center
Right
Color...
Font...
Text (Lower)
PORK FILLET END
Left
Center
Right
Color...
Font...
Split key text
Draw split line?
Double key
Join to key:
Right-side
Below
Preview
PORK CHOPS
PORK FILLET END
OK
Cancel
Keysheet template text
Print preview of key in keysheet template
Keysheet template text formatting options

Memo/SR-2000 presets *(EMZ and SR-series scales only)* ***and Index presets*** *(EMZ-series scales only)*
EMZ scales have two types of programmable keys: memo presets and index presets. Both provide a way of quickly calling up PLUs from the touch screen on the scale.
Memo presets define quick keys for calling up a particular PLU.
Index presets define keys that call up a list of PLUs, specified by a range of PLU numbers.
The SR-2000 has a function similar to the EMZ memo preset function, except that the presets are divided into pages.

Click **Memo Presets** or **Index Presets** in the Scales menu. This opens a dialog listing all EMZ scales defined in the system. Only one set of memo and index presets can be defined for each scale.
Select the scale to edit, then click **Edit**. This opens a dialog for editing the key settings. The example below is for EMZ memo presets.

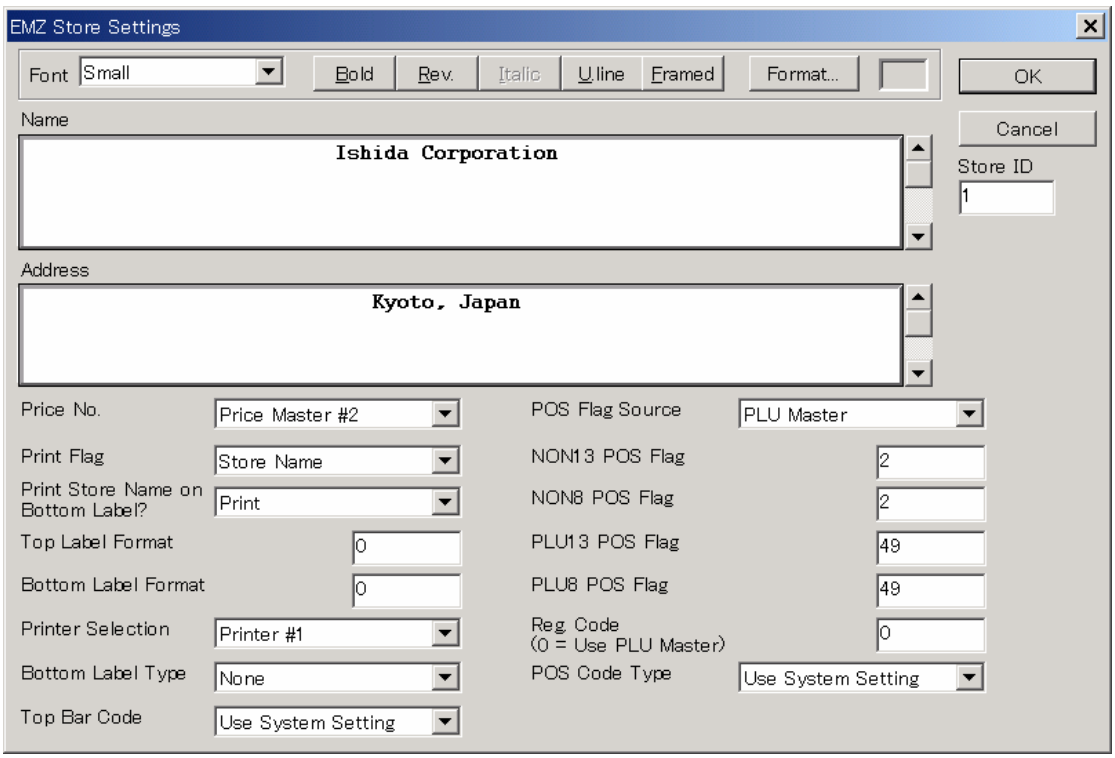


To assign a PLU to a key, select the key and click **Edit** (or double click on the key). Similarly, to remove a PLU from a key. select the key and click **Delete.**
Note that the scale has a **Shift** key to switch between to pages of preset keys. Use the **Key Page** buttons to select which page to program.

The operation of **Index Presets** is similar, except that you can select up to eight ranges of PLU number per key instead of a single PLU.

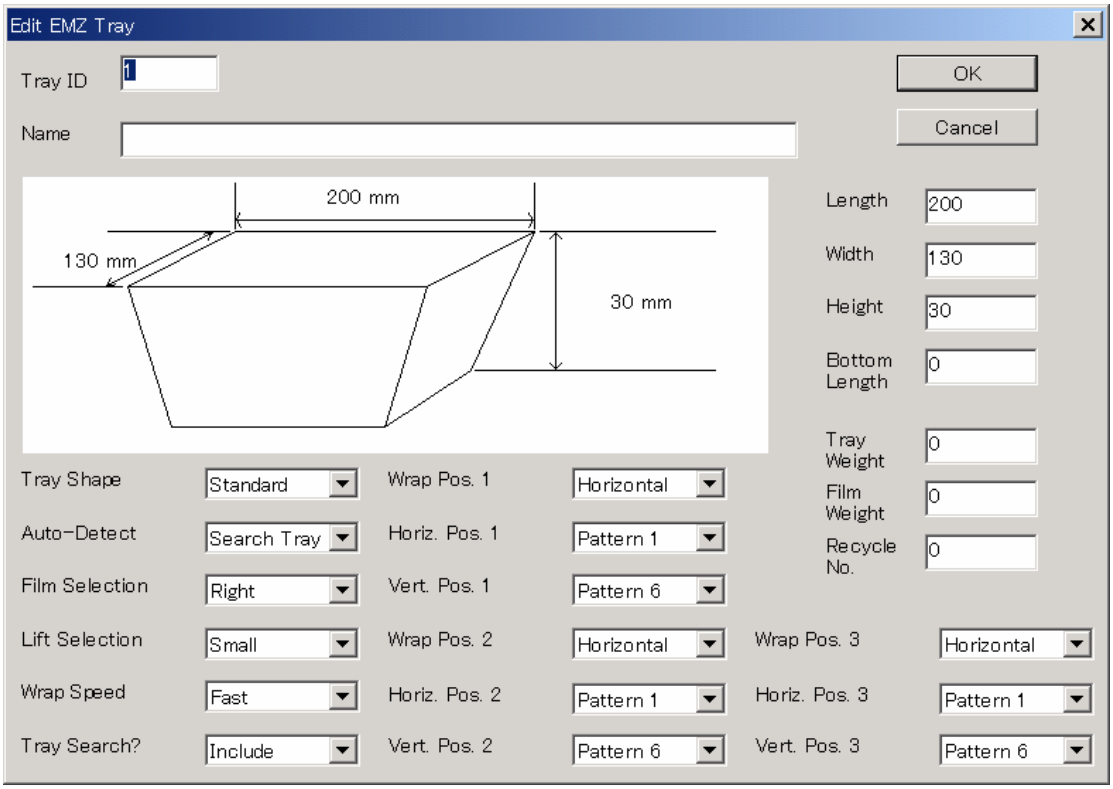
Editing the store name and address
Click **Store Name/Address** in the Scales menu. This opens a dialog for editing the store name and address. Enter the desired text and click the **OK** button to save.
This setting is not used on EMZ-series scales.

Editing store settings *(EMZ-series scales only)*
Click **Store Settings** in the Scales menu. This opens a dialog listing the store definitions. Use the **Add**, **Edit**, and **Delete** buttons to add, edit, or delete store settings.
For example, select a store setting in the list and click **Edit** to open the dialog shown below for editing the store data.



Specify the desired settings, then click **OK** to save.

Editing tray settings *(EMZ-series scales only)*
Click **Tray Settings** in the Scales menu. This opens a dialog listing the tray definitions. Use the **Add**, **Edit**, and **Delete** buttons to add, edit, or delete tray settings.
For example, select a tray in the list and click **Edit** to open the dialog shown below for editing the tray data.



Specify the desired settings, then click **OK** to save.

Other Features

The above sections have given you a quick introduction to the main ScaleLink Pro operations. The following lists additional features of ScaleLink Pro and where to look in the manual for an explanation.

Feature	Description	Manual Chapter
Reports	Prints or displays reports listing the PLUs, messages, or production data uploaded from the scales	⇨ See Chapter 7 *Reports*
Data Save	Communicates with the Data Save function on the scales	⇨ See Chapter 3 *Communicating with the Scales*
IF21FD	You can use an IF21FD backup unit to transfer data between ScaleLink Pro and the scales	⇨ See Chapter 4 *Using an IF21FD*
Price Changes	A quick method of updating PLU prices	⇨ See Chapter 6 *Creating and Editing PLUs*
Change Database or Department	Selects which database to edit	⇨ See Chapter 5 *The PLU Database*
PLU Active/Inactive	PLUs can be designated as "inactive". An inactive PLU still appears in ScaleLink Pro screens but is not sent to the scale.	⇨ See Chapter 9 *Advanced Features and Utilities*
PLU Profile	A PLU profile specifies the range of PLU numbers that are relevant to a particular copy of ScaleLink Pro. PLUs excluded from the profile do not appear in ScaleLink Pro screens but remain in the database.	⇨ See Chapter 9 *Advanced Features and Utilities*
Text File Data Import and Export	Data can be loaded from or saved in text file format.	⇨ See Chapter 8 *Importing and Exporting Data*
Database Import	Data can be loaded from an ODBC data source.	⇨ See Chapter 8 *Importing and Exporting Data*
Batch Mode	Allows changes to be made off-line, then loaded into the scales and database at a latter time.	⇨ See Chapter 9 *Advanced Features and Utilities*
Price Zones	In a multi-store configuration, different PLU settings such as price can be set for each store	⇨ See Chapter 9 *Advanced Features and Utilities*

Feature	Description	Manual Chapter
Scheduler	ScaleLink Pro operations such as loading data from a text file can be set to execute at a specified time..	⇨ See Chapter 9 *Advanced Features and Utilities*
Automation	ScaleLink Pro supports ActiveX automation. This means ScaleLink Pro operations can be controlled from scripting languages such as Visual Basic or Java script.	⇨ See Chapter 9 *Advanced Features and Utilities*
ScaleLink Pro Setup	Configures ScaleLink Pro for your scales system	⇨ See Appendix A *Installing ScaleLink Pro at a New Store*

3. Communicating with the Scales

ScaleLink Pro provides two different methods of communicating with the scales.

On-line communication

On-line communications requires a master scale control unit (MSCU) or a scale with communications hardware (a “master board”). The main features are:

- Connects to the scales via the serial port on the PC (RS232C) or via the LAN (TCP/IP).
- Changes made on ScaleLink Pro can be sent to the scales immediately, even if the scales are in use.
- Operation is fully automatic.

Data Save: (AC-3000, WM-3000)

The Data Save function is primarily provided on the scales as a means of data backup and restore. The main features are:

- The Data Save function saves or restores a complete set of scale data at a time. The backed up data can be stored on the PC and modified by ScaleLink Pro.
- Available on AC-3000 scales and WM-3000 series wrappers. (Operation is different for each model.)
- Requires a special adapter (RS-232C to RS-485 converter) to connect to the serial port on the PC.
- Data transfer is initiated manually: using the menu in ScaleLink Pro and using Test Mode on the scales.

Astra/AstraXT serial communication

Similar to the Data Save function, this is primarily provided as a means of data backup and restore. The main features are:

- A complete set of scale data is sent or received at a time. Data is received or sent into or out of the ScaleLink Pro database.
- Applicable to Astra and AstraXT scales.
- The connection to the scale uses the serial port on the PC.
- Data transfer is initiated manually: using the menu in ScaleLink Pro and using Registration Mode on the scales.

Your copy of ScaleLink Pro should have been configured for one or more methods when installed. If unsure, consult with the person responsible for installing.

You need to know which communication method to use as the operation of ScaleLink Pro differs depending on the method used. The following explanation assumes that you have decided which system you are going to use, the appropriate cabling is installed, and ScaleLink Pro is configured correctly. See Appendix A *Installing ScaleLink Pro at a New Store* or consult with your Ishida agent for further information.

If you have an Ishida IF21FD backup unit, it is also possible to use ScaleLink Pro without a communications link to the scales. In this case, you use the **Import IF21FD** and **Export IF21FD** commands in the File menu to read and write data on the floppy disk.

3.1 On-Line Communications

This method operates in the background and changes you make in the ScaleLink Pro database are sent to the scale immediately. If the scale is off-line (for example if the power is turned off or the network connection is down), the data is stored and automatically resent when the scale comes back on-line.

If your copy of ScaleLink Pro is not configured to use on-line communications. “Scale Comms: Off-Line” appears at the right-hand end of the status bar.

Establishing Communications with the Scales

ScaleLink Pro establishes the communications link to the scales automatically when the program starts.

Look at the right-hand end of the status bar at the bottom of the ScaleLink Pro screen. This displays the current status of scale communications, including whether communications is enabled and whether any data is waiting to be sent to an off-line scale.

Select **Comms Link Status** in the Comms menu for a more detailed view of the communications status for each scale. Use the **Enable/Disable** and **Test Link** buttons to set links on or off and check whether the links are currently connected.

Sending Data to the Scales

If the scales are connected, ScaleLink Pro sends the updated data to the scales whenever you make a change (when you click the Save button in the PLU Edit window or the OK button in one of the scales data dialogs, for example).

Accordingly, it is recommended that you always perform editing with the scales connected. This keeps the data in the PC database and scales synchronized. If you do wish to make changes without sending them to the scales immediately, use batch mode to make the changes off-line then load all the changes at once at the desired time.

When you open a Data Save file or import from an IF21FD floppy disk, however, the loaded data is not sent automatically. In these cases, use **Transmit/Receive Scale Data** in the **Comms** menu (described below) to send the database contents to the scales.

Sending a Range of Records to the Scales

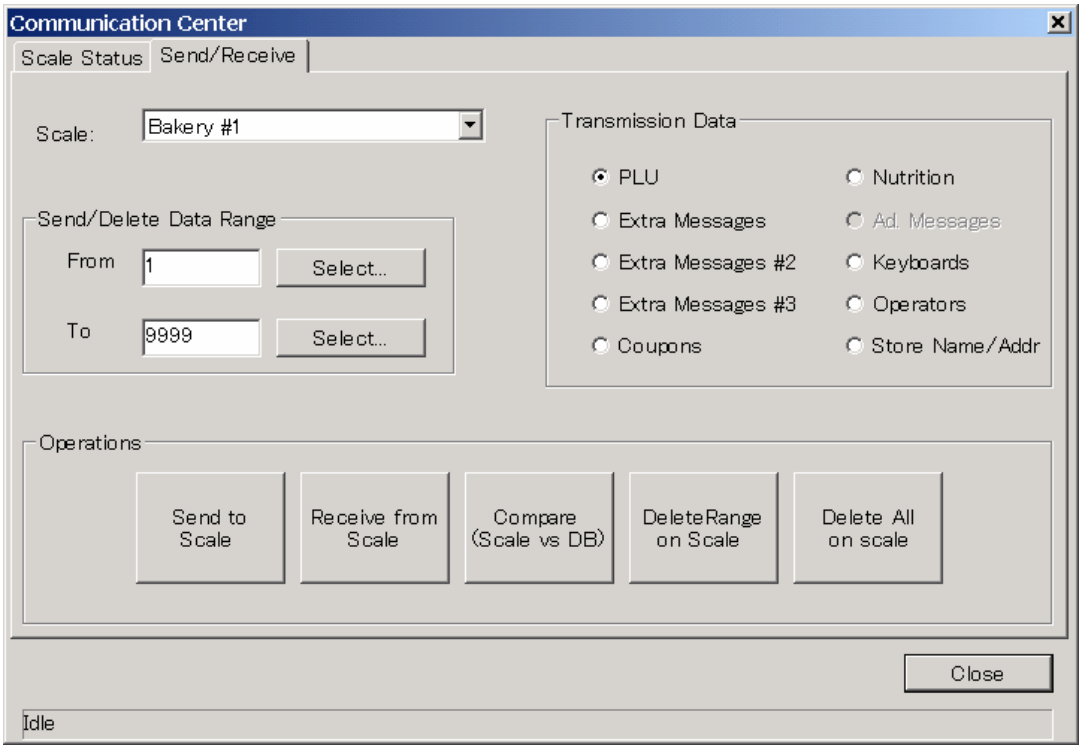
Click **Transmit/Receive Scale Data** in the Comms menu to open the Communication Center dialog shown below. This dialog provides a range operations for sending and receiving scale data, as described below.

The operation of the dialog is as follows:

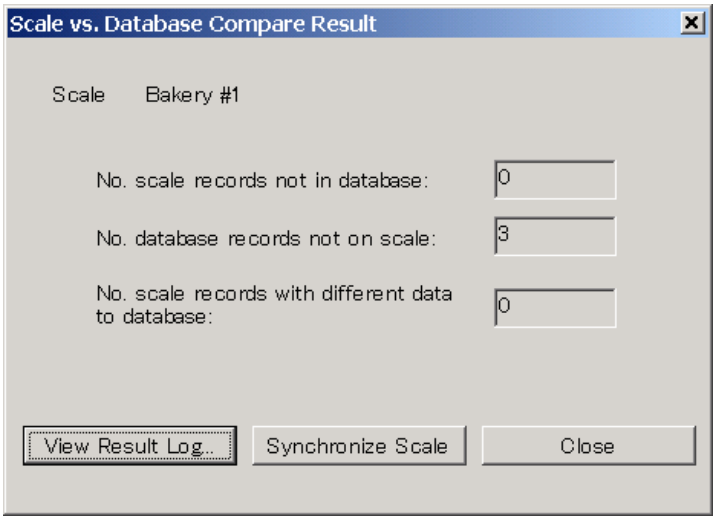
1. Select the type of data to send or receive using the radio buttons on the top right..
2. Specify the scale to send to or receive from (or specify “All Scales” to send to all scales).
3. If sending or deleting data, enter the range of records numbers to send or delete. use the **Select** buttons to select from a list of the data in the database.
4. Click on the desired operation button at the bottom of the screen to start communications with the scale. The operations are described below.

   The status bar at the bottom of the dialog displays the communication progress.

If one or more of the Transmission Data options appears dimmed (for example, “Ad Messages” below), this indicates that the currently selected scale does not support this type of data. Similarly, if one or more of the operation buttons at the bottom of the dialog appear dimmed, this indicates that the operation is not supported for the selected “Transmission Data” and scale.



Operation	Explanation
Send to Scale	Sends the specified range of records to the selected scale, or to all scales. If data is not sent successfully (a scale is off-line, for example), the unsent data is saved and automatically resent when the scale comes back on-line. (See *Off-Line Operation* below.)
Receive from Scale	Receives all data of the selected "Transmission Data" type from the selected scale. You can only receive data from one scale at a time.
Compare (Scale vs. DB)	Receives data from the scale and compares with the data in the database. If differences are found, the results are displayed in a dialog like that shown below. Click the **View Result Log** button to view a detailed log of the differences found. (Details of any differences are logged for each scale in the file *CompareResultsScaleXXX.txt*, where XXX is the scale ID number.) Click the **Synchronize Scale** button to automatically send or delete data on the scale so that it matches the database.



Operation	Explanation
Delete on Scale	This deletes a range of records on the scale only. Data is not deleted from the database. (To delete data from the database, use the various delete commands for each type of data.) Note that this command only deletes scale records that also exist in the ScaleLink Pro database. Use **Delete All on Scale** to clear all records from a scale.
Delete All on Scale	This deletes all records of the selected data on the scale only. Data is not deleted from the database. This command is the same as **Delete on Scale**, except that operation is faster as it uses a single scale command to delete all data rather sending deletion commands to the scale one at a time.

Filtering Data Sent to the Scales

Filters can be defined for each comms link defining the range of record numbers (PLU numbers, etc.) that can be sent via that link. See Appendix A *Installing ScaleLink Pro at a New Store* for details.
This is useful when you have multiple comms links and wish to avoid sending unwanted PLUs to particular scales (avoid sending bakery PLUs to the produce department scales, for example).

Disabling the Communication Link

If you wish to disable all communications with the scales, click **Options** in the Setup menu to open the Options dialog. Set **Enable On-Line Comms?** off and click **OK** to save. Note, however, that the automatic accumulate + resend feature (see **Off-Line Operation** below) does not operate if **Enable On-Line Comms?** is off.

Use the same procedure to re-enable communications.

If using multiple communication links, you can use **Show Comms Status** in the Comms menu to disable individual communication links as described below.

Enabled vs. Connected

SLP communication links have “enabled” and “connected” flags. These flags indicate the current status of the link and are displayed in the Comms Status dialog.

A. Enabled/Disabled

If a comms link is disabled, it is ignored by all communications operations. Within ScaleLink Pro, however, the scale is treated as if it exists. The scale keyboard presets can still be edited, for example, although any changes will not be sent to the scale. A scale is typically disabled if it will be out of service for a long period of time.

To enable or disable a scale, select **Show Comms Status** in the Comms menu. Select the desired scale, then click the **Enable/Disable** button.

B. Connected/Not Connected

The “connected” status of a comms link basically indicates whether or not the most recent attempt to communicate with the scale was successful. If a communication attempt fails due to the scale not responding, the scale status is set to “not connected” and no further data send/receive operations are attempted for that scale. However, send requests are still saved in the request queue for resending when the scale comes back on-line. A “not connected” comms link becomes “connected” again when a communication attempt to the scale is successful. Communication attempts to a “not connected” scale can be initiated manually by clicking the **Test Link** button from the Comms Status dialog or automatically at preset intervals (currently 60seconds) if data is waiting to be sent to the scale.

The following section describes the operation for disabled or “not connected” scales.

Off-Line Operation

If one or more scales are out of service for some reason, you can continue to edit scale data in ScaleLink Pro as usual. ScaleLink Pro saves the data that would have been sent to the off-line scale and automatically sends this data when the scales come back on-line.

ScaleLink Pro automatically checks the link to off-line scales that have data waiting at periodic intervals. The checking operates in the background. If an off-line scale if detected again, any outstanding data for that scale is sent automatically.

However, automatic resending can be disabled by the "**Disable auto-resend of unsent data when scale off-line**" setting in the **Options** dialog. As Scalelink Pro only does an automatic check to detect when a scale comes back on-line if the scale has data waiting to be sent, the scale status is not set back to on-line in the scale status dialog automatically. However, the status of the scale is updated the next time you send data to the scale or test the link status manually.

3.2 Data Save Communications

This method communicates with the Data Save function on the scales. Unlike ID-ENQ, communications with the scales must be initiated manually.

The basic flow of operations when using Data Save communications is as follows:

1. Receive the Data Save file from the scales.
2. Open the received file in ScaleLink Pro
3. Use ScaleLink Pro to edit the file data
4. Save the Data Save file and transmit to the scales.

On both the AC-3000 and WM-3002, the Data Save function is accessed via Test Mode. If you are not familiar with the operation, refer to the scales operating manual.

Managing Data Save Files (AC-3000)

A Data Save file contains a complete set of scales data, of which the data managed by ScaleLink Pro is only a subset. Accordingly, ScaleLink Pro cannot create a Data Save file from scratch. Instead, you open an existing file to import into the ScaleLink Pro database, make the required changes, then save the results back to the original Data Save file. Saving back to the Data Save file overwrites the data managed by ScaleLink Pro (PLU and messages, etc.) but leaves the other contents of the file unchanged. (Other data stored in a Data Save file may include label formats and general scales setup parameters.)

Accordingly, you need to decide how to manage the Data Save files. Two methods are possible

1. Receive a fresh copy of the Data Save file from the scales each time you perform editing.
   This ensures that the file is up to date. This method is recommended.
2. Receive a copy of the Data Save file from the scales once and store on the PC hard disk. Transmit the file back to the scales after performing editing.
   This method saves you the time of receiving a fresh copy of the Data Save file each time you perform editing. However, care is required because the Data Save file contains a complete set of scales data. Transmitting the file back to the scales not only updates the changes you made in ScaleLink Pro but also resets other data (such as general scales setups) to their states when the original copy of the Data Save file was received from the scales.

Managing Data Save Files (WM-3002)

For the WM-3002, ScaleLink Pro stores data received from the scale in a subdirectory called ***ScaleData***. The data is stored in the same format as it would be on an IF21FD floppy disk - that is, each type of data (PLUs, messages, etc.) is stored in a separate file with the extension 00x, where x is a digit. All files with the same extension (e.g. *.001) belong to the same set of data.

Note that, you must first receive data from the WM-3002 before you can send data back. This is a restriction imposed by the way the Data Save function works on the WM-3002.

Operation (AC-3000)

Receiving a Data Save File from the Scales

The following procedure receives the Data Save file from an AC-3000 series scale.

1. Connect the PC to the scale via an RS-485 to RS-232 converter. Consult your Ishida agent if you do not know the correct cabling requirements.
2. Turn on the scales and set to Test Mode.
3. Use the Test Mode menu to select DATA SAVE/LOAD.
4. Select TRANSFER FILE, enter the IF21 FILE NO. (enter 1) and press the Enter key twice.
5. Use the → key to select SEND: MASTER FILE(*).
   Leave the scales in this state and move to the PC. **Do not start sending the file yet**.
6. Click the Comms menu and select **Receive (Data Save)**. A dialog appears indicating that ScaleLink Pro is ready to receive data from the scales.
   If an error message appears, it is possible that another application is using the serial port. (The serial port is specified in **Comms (ID-ENQ)** in the Setup menu.) Close all other applications and try again.
7. Press the PRINT key on the scales to start the data transfer. A message appears on ScaleLink Pro when the transfer completes.
   If an error message appears, check that the cable is plugged into the correct connectors.
8. If the transfer was successful, a dialog opens for you to specify the file name. Enter an appropriate name and click **OK**. Next, another dialog opens asking whether to open the received data. Click **Yes** to open the received file (see below for more details).

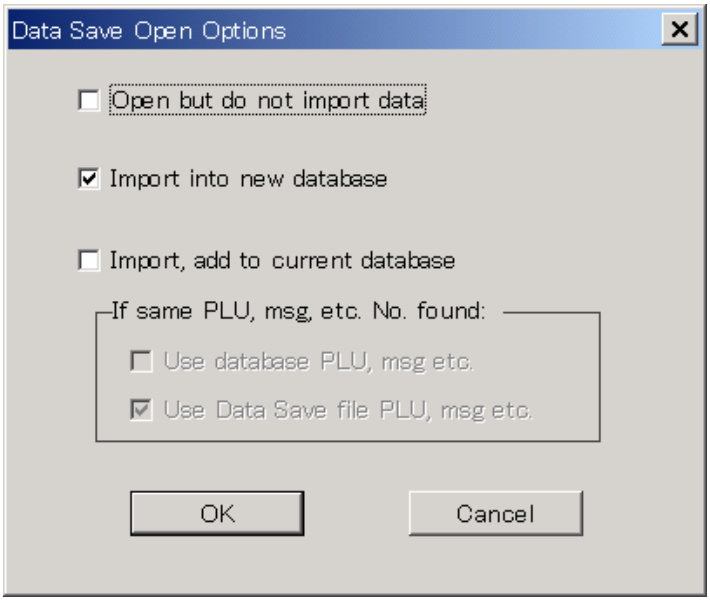
Opening the Received File in ScaleLink Pro

If you did not open the Data Save file after receiving it from the scales, or if you have exited and restarted ScaleLink Pro in the meantime, you must open the file before starting editing.

ScaleLink Pro can open a Data Save file in three different ways:

- Open file but do not import data.
  This selects the specified file but does not import the file contents into the database. Clicking **Save (Data Save)** in the File menu writes the database data into the specified file.
- Import into new database.
  This closes the current database, creates a new empty database and imports the data from the specified Data Save file. The database is assigned the same file name as the Data Save file. e.g. If the Data Save file is *backup.dsv*, the database is created as *backup.pld*. If *backup.pld* already exists, it is overwritten.
- Open file and import into current database.
  This imports the file contents into the currently open database. In this case, you can specify what to do if the same PLU No., message No. or other scale data ID is found in both the Data Save file and database. That is, you can specify whether to overwrite the database PLU etc. or leave the database PLU etc. unchanged.

The default operation is defined at installation. However, if your system is so configured, the following dialog appears when you open a Data Save file for you to select which of the above methods to use.



The overall procedure for opening a Data Save file is as follows:

1. Click **Open (Data Save)** in the File menu, specify the file name and click **OK**.
2. A File Open dialog appears for you to select the file to open.
3. If your system is configured to display a Data Save Open Options dialog when opening Data Save files, the dialog appears. Select the desired options and click OK to open the file.
   If the dialog does not open, the Data Save file is opened using the default options.

Editing the Data Save File Data

Once you have opened the Data Save file, edit the scale data in the same way as normal. All editing changes are saved in the ScaleLink Pro database.

Saving the Data Save File and Transmitting to the Scale

When you have finished editing the scale data, click **Save Data Save File** in the File menu to save your changes.

To transmit the updated data to the scales, select **Send (Data Save)** in the Comms menu. This opens a dialog asking whether to send the current database or to specify a file:

Transmit Current Database	This saves the database contents in the currently open Data Save file and transmits the file to the scales. If no Data Save file is currently open, a File Open dialog appears for you to specify the file name. Transmission requires manual operation at the scales: see below for details.
Select a Data Save File	This option allows you to specify a Data Save file to transmit. A File Open dialog opens for you to select the file. Select a file and click OK to start transmission. Transmission requires manual operation at the scales: see below for details.

The following procedure transmits a Data Save file from the PC to an AC-3000 series scale.

1. Connect the PC to the scale via an RS-485 to RS-232 converter. Consult your Ishida agent if you do not know the correct cabling requirements.
2. Turn on the scales and set to Test Mode.
3. Use the Test Mode menu to select DATA SAVE/LOAD.
4. Select TRANSFER FILE, enter the IF21 FILE NO. (enter 1) and press the Enter key

twice.

5. Use the → key to select RECEIVE: MASTER FILE(*).
   Leave the scales in this state and move to the PC. **Do not start receiving the file yet**.

6. Click the Comms menu then select **Send (Data Save).** A dialog opens, click the **Transmit Current Database** or **Select a Data Save File** button. If necessary, a File Open dialog opens for you to specify the file to transmit.
   If an error message appears, it is possible that another application is using the serial port. (The serial port is specified in **Comms (Data Save)** in the Setup menu.) Close all other applications and try again.

7. Press the PRINT key on the scales to start the data transfer. A message appears on ScaleLink Pro when the transfer completes.
   If an error message appears, check that the cable is plugged into the correct connectors.

Operation (WM-3002)

Receiving a Data Save File from the Scales

The following explanation assumes that the IF21 communications have been setup correctly. In particular the **scale type must have been set to "WM-3002".**

The following procedure receives the Data Save file from a WM-3002 wrapper.

1. Connect the PC to the wrapper. Consult your Ishida agent if you do not know the correct cabling requirements.
2. Turn on the wrapper and set to Test Mode.
3. Use the Test Mode menu to select DATA SAVE/LOAD.
4. On ScaleLink Pro, click the Comms menu and select **Communicate with Scales (WM-3002)**. A dialog appears asking whether to save the current database in IF21 format. Select **No**.
5. A dialog appears asking you to specify the directory in which to save the received scale data. Specify the desired directory then click OK.
6. Use the Data Save screen on the wrapper to send all data to the PC. Refer to the wrapper manual for details.
7. During communications, ScaleLink Pro displays a dialog indicating the progress of the data transfer. When communications is complete, click the **Close** button in this dialog.
8. If the transfer was successful, a dialog opens asking you whether to open the received data. Click **Yes** to open the received file (see below for more details).

Opening and Editing the Received File in ScaleLink Pro

When data is received from the wrapper, it is saved in the directory specified in step 5 above. You can import this received data at any time by selecting **Import IF21FD** from the **File** menu. This imports the received data into the current database.

Once you have imported the received file, edit the scale data in the same way as normal. All editing changes are saved in the ScaleLink Pro database.

Transmitting to the Scale

When you have finished editing the scale data, use the procedure described below to transmit the data back to the wrapper.

1. Connect the PC to the wrapper. Consult your Ishida agent if you do not know the correct cabling requirements.
2. Turn on the wrapper and set to Test Mode.
3. Use the Test Mode menu to select DATA SAVE/LOAD.
4. On ScaleLink Pro, click the Comms menu and select **Communicate with Scales (WM-3002)**. A dialog appears asking whether to save the current database in IF21 format. Select **Yes** if you wish to send the current database.
   Select **No** if you wish to send previously received data back to the wrapper.
5. If you selected **Yes**, a dialog appears asking you to specify the directory in which to output the current database in IF21FD format. Specify the directory used when receiving data from the wrapper. Click OK when ready.
   * The operation of this dialog is described in *Chapter 4 Using an IF21FD*.
6. A dialog appears asking you to specify the directory containing the scale data. Specify the same directory as step 5 above, then click OK.
7. Use the Data Save screen on the wrapper to receive the desired data from the PC. Refer to the wrapper manual for details.
8. During communications, ScaleLink Pro displays a dialog indicating the progress of the data transfer. When communications is complete, click the **Close** button in this dialog.

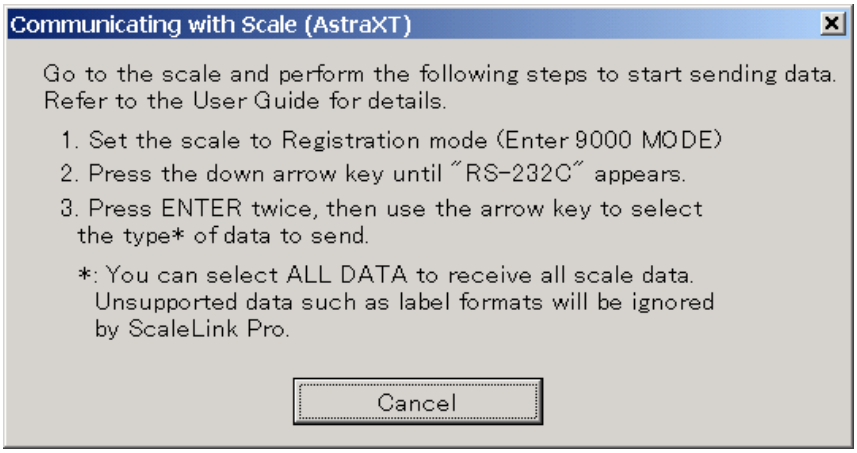
3.3 Astra/AstraXT Serial Communications

This method is used to transfer a full set of scale data at a time between the scale and ScaleLink Pro database. Communications uses the serial port on the PC and is initiated by manual operation on the scale.

Receiving Data from the Scale

The procedure is as follows. The example screens are for the AstraXT, but Astra operation is largely identical.

1. Click the **Serial Comms (Astra/AstraXT)** → **Receive (AstraXT)** (or **Receive (Astra)**).This displays the dialog show below.



NOTE The operation of the scale may vary somewhat from that described below, depending on which Astra model you are using. If in doubt, consult the Astra Operation Manual.

2. ScaleLink Pro is now ready to receive data from the scale. However, to start the transfer you need to perform the following operations on the scale.

   Remove any keysheet from the Astra keyboard to expose the programming keyboard.

3. On the Astra, enter **9000** using the numeric keys on the right, then press the **MODE** key. The scale display shows "registration" indicating registration mode.

4. Next, press the down arrow key a number of times until "communication" (Astra) or “RS-232C” (AstraXT) appears .

5. Press the **ENTER** key once to display "Send Data", again to display "All Data", then a third time to start sending data.

   Alternatively, when "All Data" is displayed, press the down arrow to select the type of data to send, then press **ENTER** to start sending data.

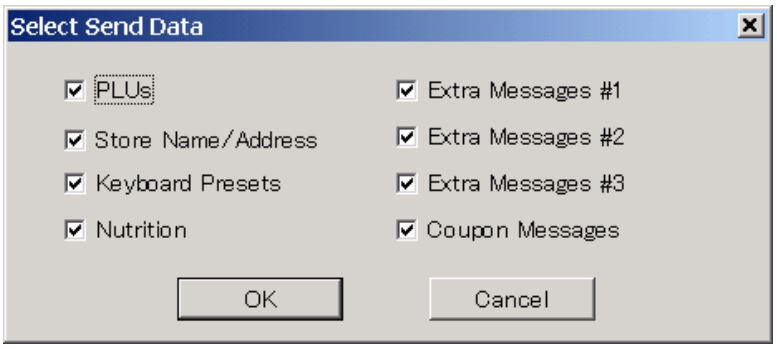
   If the data transfer is successful, the scale will display "Sending", then "Data Sent OK", then "All Data".

6. Go back to the PC. If the data transfer is successful, the received data will be updated in the database. If unsuccessful, an error message will appear.

Sending Data to the Scale

The procedure is as follows. The example screens are for the AstraXT, but Astra operation is largely identical.

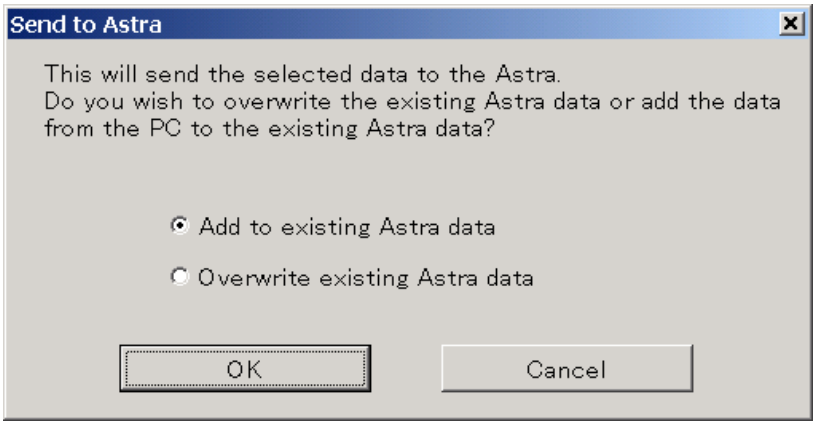
1. Click the **Serial Comms (Astra/AstraXT)** → **Send (AstraXT)** (or **Send (Astra)**).This displays the dialog show below.



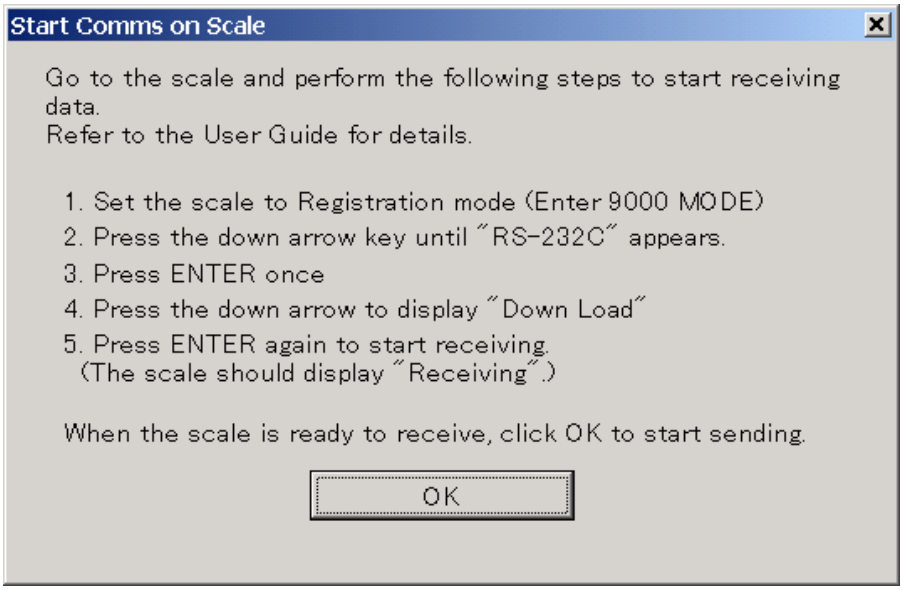
2. Select the data you wish to send, then click OK. If you selected keyboard presets and if there is more than one AstraXT defined in your system, a dialog opens asking which scale keyboard (in the ScaleLink Pro database) to send.

NOTE ScaleLink Pro does not support the Astra directly. However, the Astra and AstraXT keyboard layouts are the same so you can select an AstraXT keyboard to send to an Astra scale.

3. If sending to an Astra, a dialog opens asking whether to append the data being sent to the existing scale data or whether to overwrite the existing scale data. Select the desired option, then click OK.



3. Next, the following dialog appears with instructions on how to setup the scale to receive data.
Check that the cable connecting the PC to the scale is plugged in correctly.
Also, remove any keysheet from the Astra keyboard to expose the programming keyboard.
Turn on the Astra and set to REGISTRATION mode (on the Astra keyboard, enter **9000**, then press the **MODE** key).



4. Next, press the down arrow key a number of times until "communication" (Astra) or “RS-232C” (AstraXT) appears, then press **ENTER**, followed by the down arrow. The scale should display “Download” or "Receive Data".

5. Press **ENTER** again. The scale displays "Receiving" indicating that it is now ready to receive data.

6. Go back to the PC and click the **OK** button in the above dialog to start sending. A message appears when sending completes.

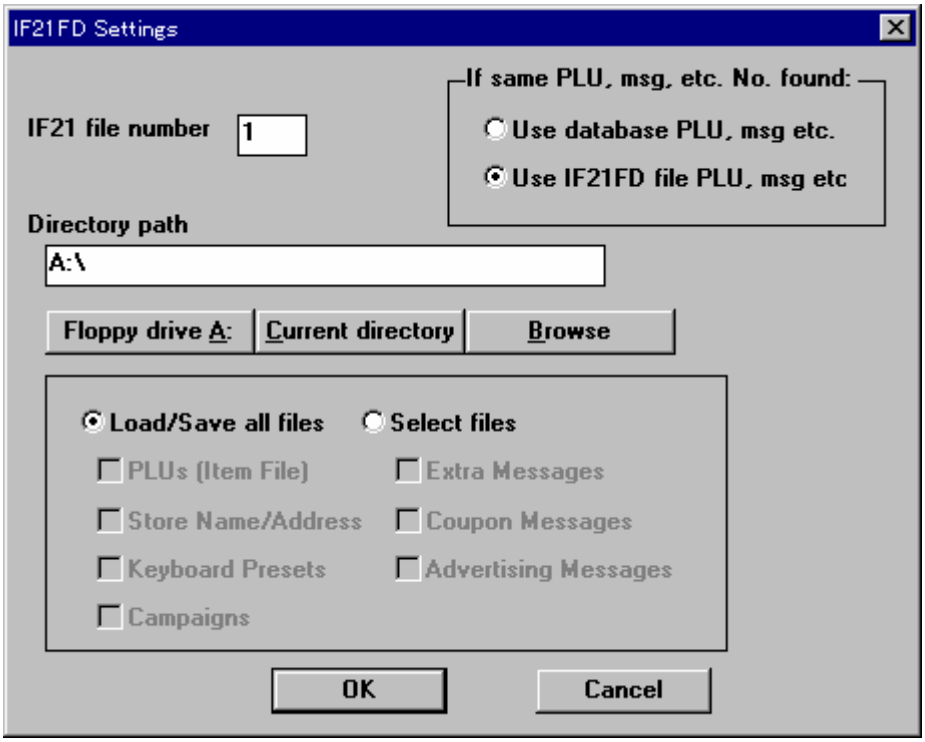
4. Using an IF21FD

An alternative to using a communications link to transfer data to and from the scales is to use the Ishida IF21FD backup unit. The IF21FD is used to backup and restore scales data onto a floppy disk. ScaleLink Pro can read and write the data on the floppy disk.

Using an IF21FD to Receive Data from the Scales

Use the following procedure.

1. Use the IF21FD to backup the scales.
2. Insert the IF21FD floppy disk in the PC's floppy drive, then select **Import IF21FD** from the File menu.
3. This opens the dialog shown below for you to specify which data to load.



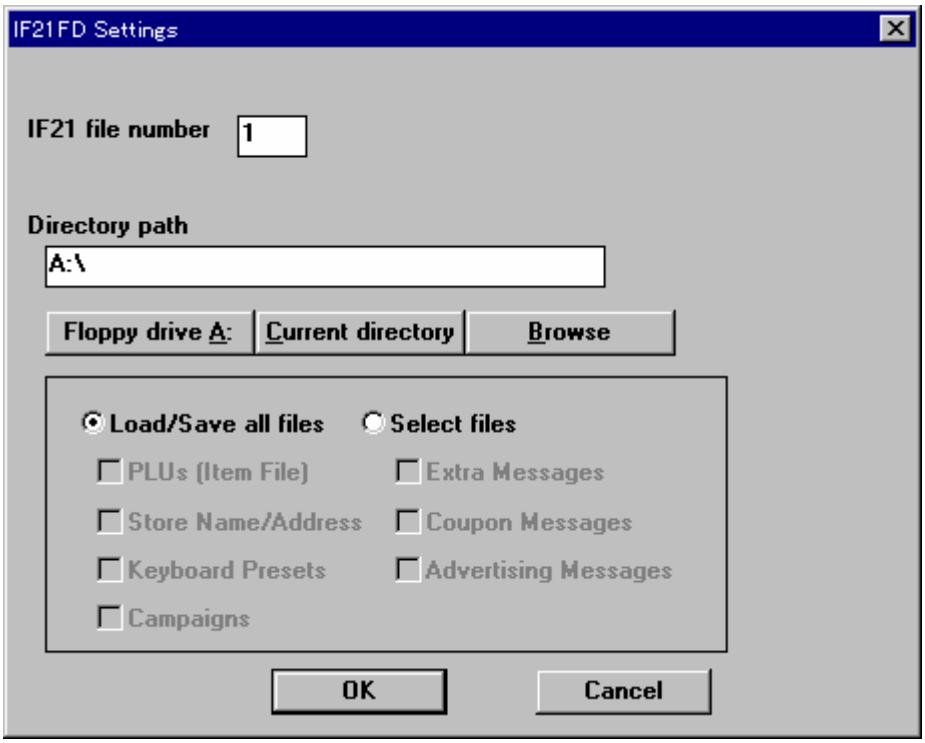
4. Enter the IF21 file number .
5. The buttons below the **Directory path** field allow you to specify where to read the files from without having to type in the full directory path.
   If you are importing data from a floppy disk, click the **Floppy drive A:** button.
   If importing from other than the A: drive, either enter the path in the **Directory path** field or use the **Browse** button to open a dialog for selecting the path.
6. If you do not wish to import all files, set the **Select files** button ON and check the boxes corresponding to the types of file you wish to import.
7. Use the buttons at the top right of the dialog to specify whether or not to overwrite existing data in the database.
8. Click the **OK** button to import the specified data from the floppy disk.

This imports the data from the floppy disk to the ScaleLink Pro database. You can now edit the data in the same way as normal.

Using an IF21FD to Transfer Data to the Scales

The following procedure describes how to use the IF21FD to setup the scales with the current database settings.

1. Use the IF21FD to backup the scales.
2. Insert the IF21FD floppy disk in the PC's floppy drive, then select **Export IF21FD** from the File menu.
3. This opens the dialog shown below for you to specify which data to save on the floppy disk.



4. Enter the IF21 file number .
5. The buttons below the **Directory path** field allow you to specify where to save the files without having to type in the full directory path.
   If you are exporting data to a floppy disk, click the **Floppy drive A:** button.
   If you wish to save the data on other than the A: drive, either enter the path in the **Directory path** field or use the **Browse** button to open a dialog for selecting the path.
6. If you do not wish to export all files, set the **Select files** button ON and check the boxes corresponding to the types of file you wish to export.
7. Click the **OK** button to export the specified data to the floppy disk.
8. Insert the floppy disk in the IF21FD and use to restore the data to the scales.

5. The PLU Database

ScaleLink Pro stores the scales data in a database. Whenever you change the scales data, whether by receiving data from the scales, importing a Data Save or IF21FD file, or using the ScaleLink Pro screens, ScaleLink Pro updates this database with the new data.

Database Formats

Two database file formats are available:

- Microsoft Access (*.MDB) format
- Ishida PLU database (*.PLD) format

The default database format can be specified at installation.

Microsoft Access format databases are accessed using the Microsoft Data Access Objects (DAO) software. An alternative version of Scalelink Pro is available that uses Microsoft Active Data Objects (ADO) instead of DAO. The ADO version uses a later version of the Microsoft Access (MDB) database file format that is compatible with Microsoft Access 2000. However, the **New Database** command in the File menu is not available in the ADO version.

Selecting the Database

When you start ScaleLink Pro, the program automatically loads the database that was open when you last exited. (Unless auto-loading of the database is set off in the setup. In this case, use the File menu to open a database or Data Save file.)

As most stores will keep all data in a single database, no further action is required and you can start editing scales data immediately.

However, in special cases such as when managing data for more than one store, you may use ScaleLink Pro to edit multiple databases. If you need to change the database, click **Change Database** in the File menu to open a dialog for selecting the new database file. Selecting a database file closes the current database and opens the new database. You can only have one database open at a time.

(If there is no currently open database, use **Open Database** in the File menu to open the desired database.)


NOTE

The operation is somewhat different if your copy of ScaleLink Pro is setup for multiple departments. In this case, use the **Change Department** command in the **File** menu to switch between departments. This automatically closes the current database and opens the database for the new department.


NOTE

Your user access settings can be set to restrict you to a specified database or department only. In this case, the **Change Database** or **Change Department** and other database access commands do not appear in the **File** menu.

Managing Databases

The following operations are available for creating and managing databases.

However, the following explanation is not applicable if your copy of ScaleLink Pro is setup for multiple departments. In this case, all databases are created when the departments are defined. (See *Appendix A.1 Setting Up ScaleLink Pro at a New Store*.)

Operation	Explanation
Create a new empty database	Click **New Database** in the File menu. This closes the current database then opens a dialog for you to specify the file name for the new database. Enter the file name and click **OK** to create and open the new empty database.
Copy current database	Click **Save As** in the File menu. This opens a dialog to specify the file name for the new database. Enter the file name and click **OK**. This copies the current database to the specified file name and makes this new database the current open database. The old database file remains unchanged.
Create database from Data Save file	Depending on how your copy of ScaleLink Pro is configured, you may also be able to create a new database by opening a Data Save file (by clicking **Open (Data Save)** in the File menu.)
Compact database	The performance of Microsoft Access (MDB) format databases deteriorates over time as unused data accumulates. It is recommended that you periodically compact the database (click on **Compact Database** in the **File** menu) to remove unused data. Compaction is not required for Ishida (PLD) format databases.
Restrict the range of displayed PLUs	ScaleLink Pro has an optional PLU range profile feature. This feature is used to restrict which PLUs appear in the ScaleLink Pro screens and reports. It is useful for multi-store operation where the same master file (PLU database) is used for all stores, but where not all stores carry the same products. See section *9.3 PLU Range Profile* for an explanation.

5.1 Microsoft Access Database Format

This is the standard Microsoft Access database format. ScaleLink Pro uses the Microsoft Data Access Objects software to perform database access.

Features and Restrictions

- Allows multi-user operation.*
- Can be linked to third party database management systems (DBMS) such as SQL Server or Oracle.
  Note: Configuring the link requires specialist expertise such as a database administrator. Contact your Ishida agent for details.
- Database contents can be viewed by third party software such as Microsoft Access. However, care is required as any changes made to the database may result in misoperation when the database is opened in ScaleLink Pro.

* See *5.3 Multi-User Operation* below for details.

5.2 Ishida PLU Database Format

This is a proprietary database structure that is backward compatible with version 1.0 of ScaleLink Pro (Scalynx). (You can open version 1.0 files in version 2.0, but not vice versa.)

Features and Restrictions

- Does not allow multi-user operation.
- Performance is general faster than the Microsoft Access format.

Cannot be opened using third-party software. Use the Text File Export function (or Save As to MDB format) if you need to transfer data to other software.

5.3 Multi-User Operation

Multi-user operation means that more than one user can access the same database at the same time. Here, a "user" can be another person running the main ScaleLink Pro program or the ScaleLink Pro scheduler program performing an automatic operation in the background.

Multi-user operation is only available on MDB format databases. If multi-user operation is OFF or if the PLD database format is used, ScaleLink Pro does not allow more than one user to access the database at one time. A message appears to notify you of a "database busy" error if you try to open a database that is already open by another user.

To allow multi-user operation, set the **Multi-user database access (MDB only)** check box ON in the Options dialog (see *Multi-User Installation* in *Appendix A.1 Setting Up ScaleLink Pro at a New Store*).

Normally, ScaleLink Pro operates by taking a snapshot of the database when it starts up, and writes changes to the database each time you save a record. When multi-user access is set ON, ScaleLink Pro reads the latest copy of PLU or other data records when you open the edit window or dialog for that record. This updates the record with any changes made by other users. However, any changes made by another user while you are editing a record do not appear on your screen. Saving a record updates the entire record in the database and overwrites any changes made previously by yourself or another user.

Note, however, that records added by other users are not visible until you close and reopen the database. Similarly, records deleted by other users do not disappear from ScaleLink Pro until you close and reopen the database.

6. Editing PLUs and Other Scales Data

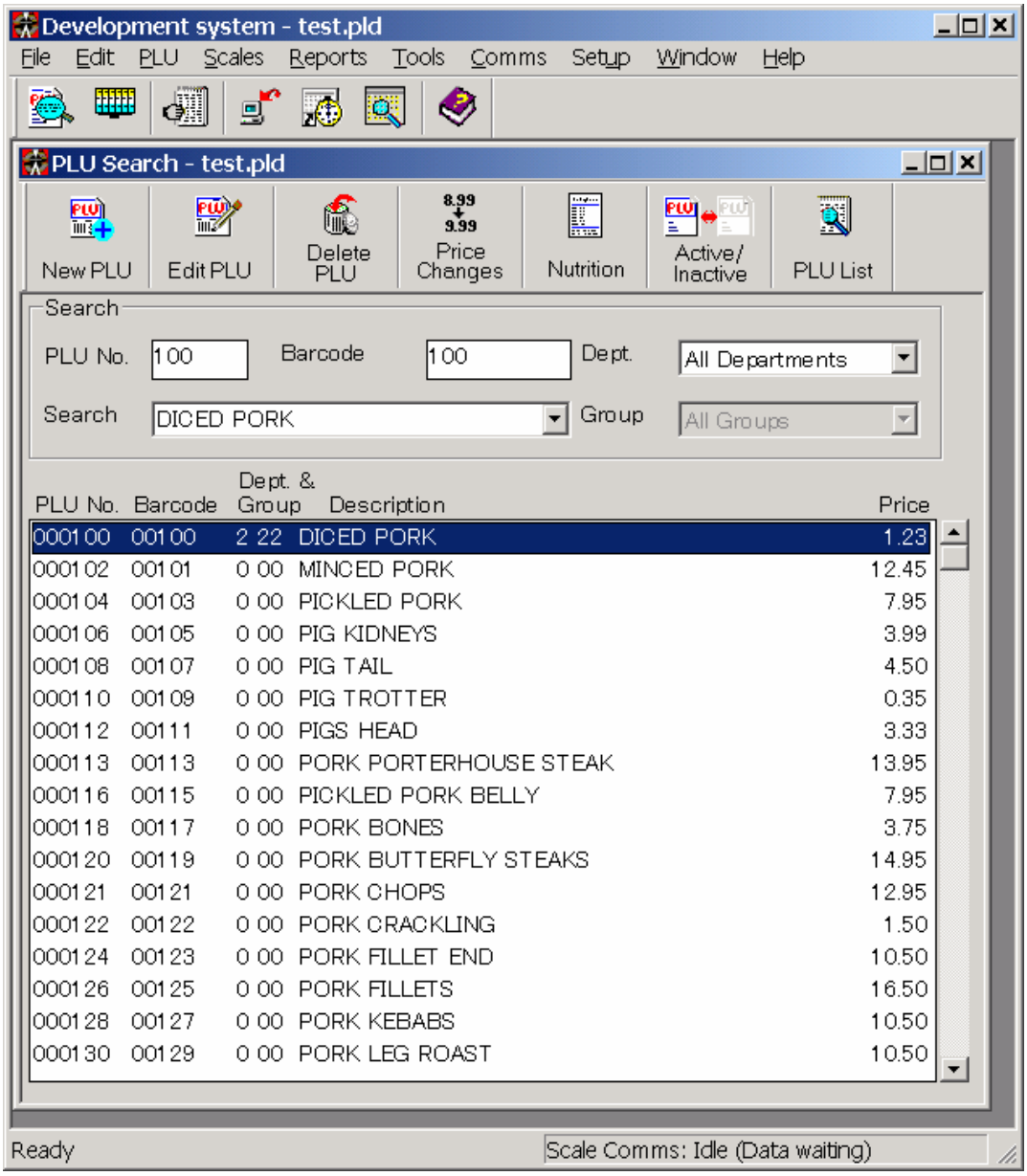
This section describes how to manage PLU data.

6.1 Using the PLU Search Window

The PLU search window opens automatically when you start ScaleLink Pro. Use the PLU Search window for the following operations.

Note: Screen appearance may differ depending on how your copy of ScaleLink Pro is configured.

- Finding a PLU
- Adding a new PLU
- Editing or deleting a PLU
- Deleting a range of PLUs
- Cutting and pasting PLUs
- Quick price changes
- Marking PLUs as active or inactive



Finding a PLU

If you know the PLU number
Enter the PLU number in the **PLU No.** field. The specified PLU appears selected in the PLU list.

If you know some or all of the PLU name
The PLU name is the first line of the PLU description that appears on the label. Enter the initial characters of the PLU name in the **Search** field. The PLU list displays only those PLUs with names that start with the entered text. For example, entering “BEEF” displays all PLU names starting with the word “beef”. (The search is not case-sensitive: entering “beef” is the same as entering “BEEF”.)
You can also use the wildcard characters (‘*’ and ‘?’) to specify a more detailed search condition. For example, entering “*BEEF” displays all PLU names containing the word “beef”.


NOTE

The search re-executes automatically each time you type a character. The response may be a bit slow on older computers. In this case, allow a few seconds for the list to update.

If you do not know the PLU number or name
When the cursor is in the **Search** field, the PLU list only displays those PLUs that match the search condition. Click the **PLU No.** field to clear the search results and display all PLUs in the PLU list.
Next, use the scroll bar, the up an down arrow keys, or the PageUp and PageDown keys to scroll the PLU list until you find the PLU you are looking for.

Searching by POS code (bar code)
Your copy of ScaleLink Pro may have been configured to allow you to search for PLUs by POS code (bar code). In this case a POS code field appears next to the PLU number field at the top of the window.
The operation is the same as for the PLU field.

Searching by department and group code
Your copy of ScaleLink Pro may have been configured to allow you to search for PLUs by department and group code. In this case, department and group fields appears next to the PLU number field at the top of the window.
The PLU list only displays PLUs belonging to the selected department and group.

Adding a New PLU

1. Click the **New PLU** button or select **New PLU** from the PLU menu. This opens a PLU Selection dialog for you to specify the PLU number. The next free PLU number appears as the default. Enter the PLU number then click OK.
   Next, the PLU Edit window opens displaying the data for the new PLU.
   The fields in the lower half of the window are set to their default values.
   The specified PLU number is set in the PLU number field, but you can change the number if desired. (A warning message appears if you try to save the PLU with the same number as an existing PLU.)
   The operation of the PLU Edit window is described in *6.2 Using the PLU Edit Window*.
2. Enter the PLU description and other data, then click the **Save** button. This saves the PLU in the database and sends the PLU to the scales (if connected).
3. Click the **Close** button to close the window and return to the PLU Search window. Use the procedure described in **Finding a PLU** above to check that the PLU has been added.

Editing or Deleting a PLU

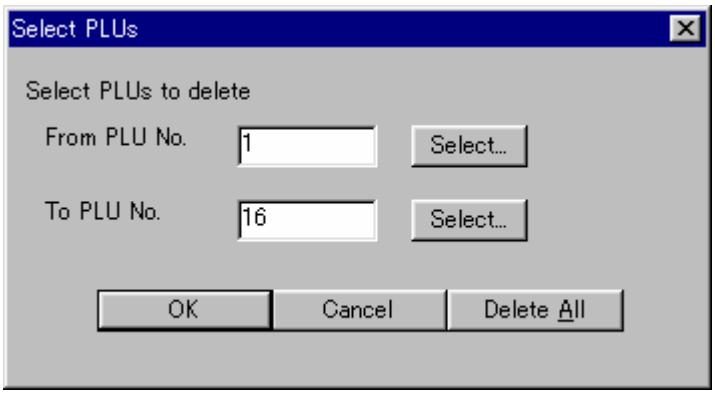
1. Use the procedure described in **Finding a PLU** above to find the PLU to edit or delete. Click on the PLU in the list to select.

2. To edit the PLU: click the **Edit PLU** button, select **Edit PLU** from the PLU menu, or double-click on the PLU in the list.
   This opens a PLU Edit window displaying the data for the selected PLU.
   The operation of the PLU Edit window is described in *6.2 Using the PLU Edit Window*.

3. To delete the PLU: click the **Delete PLU** button.
   A dialog opens asking you to confirm whether to delete the PLU. Take care as there is no means of undeleting a deleted PLU.
   Click **Yes** to delete the PLU from the database and, if connected, send a command to delete the PLU on the scales.

Deleting a Range of PLUs

1. Select **Delete PLUs** from the PLU menu. This opens a dialog for you to specify the range of PLUs to delete.



2. Enter the start and end PLU numbers or use the **Select** buttons to open a PLU selection dialog. The PLU selection dialog operates in the same way as the PLU Search window (see **Finding a PLU** above).

   Alternatively, click the **Delete All** button to delete all PLUs in the database and scales.

3. Click **OK** to delete the PLUs from the database and, if connected, send commands to delete each PLU on the scales.

Cutting and Pasting PLUs

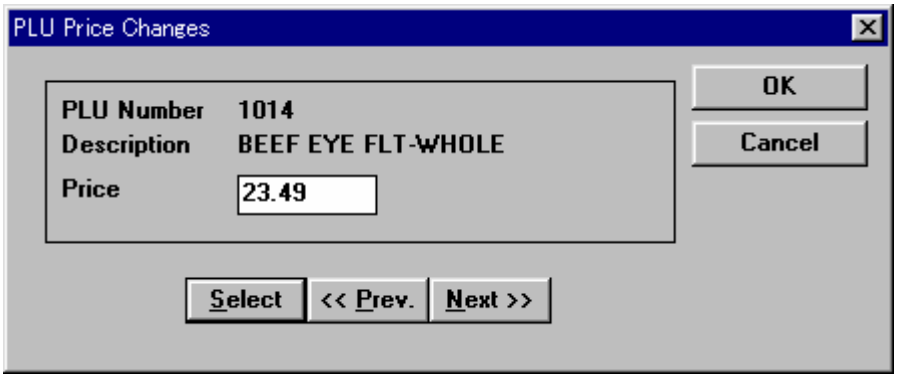
You can use the Edit menu or the standard Windows keystrokes to cut, copy and paste PLUs in the PLU list field of the PLU Search window.

When pasting a PLU, a dialog appears asking how to paste the PLU into the database (overwrite existing PLU or assign a new PLU number).

Quick Price Changes

This feature is provided to allow you to update prices quickly without editing the entire PLU. You can change either the standard price or the markdown price. The operation is the same in both cases.

1. To change standard prices, click the **Price Changes** button or select **Price Changes** from the PLU menu. To change markdown prices, select **Markdown Price Changes** from the PLU menu.
   This opens a price change dialog.



2. Enter the new price and press Enter. This saves the specified price and, if connected, sends the price change to the scales.
   A PLU search dialog opens automatically for you to select the next PLU number.
   This feature is useful if you have a list of PLU price changes to make that are not in sequential order.
   If Scalelink Pro is configured to have multiple prices per PLU, use the TAB key to move from one price field to the next, then press ENTER, as described above, to save the changes and move to the next PLU.
   The intention is to allow you to change a large number of prices with the minimum number of keystrokes.

3. If necessary, use the mouse to click the **<<Prev**, **Next>>**, or **Select** button to find the desired PLU number.
   Clicking the **Select** button opens a PLU selection dialog. The PLU selection dialog operates in the same way as the PLU Search window (see **Finding a PLU** above).

4. When finished, click the **OK** button (to save the currently displayed price change) or **Cancel** button (to close the dialog without saving).

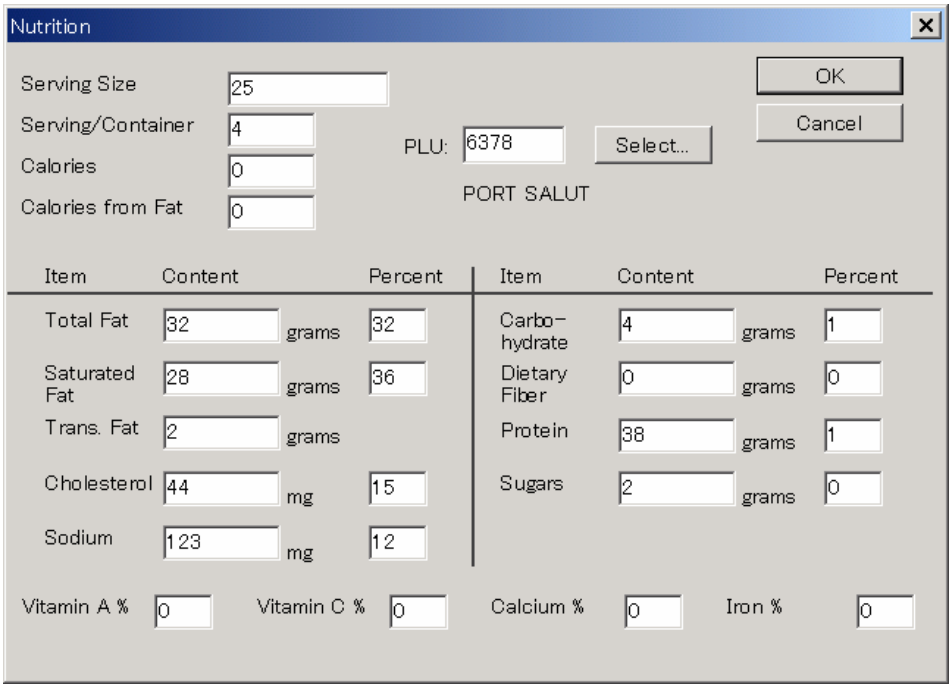
Nutrition

This feature edits the nutrition data for the selected PLU. Nutrition data is only used in some countries. The **Nutrition** button and menu item are only displayed if your copy of ScaleLink Pro is setup to use nutrition.

NOTE

Version 3 of ScaleLink Pro added a new option for handling nutrition data whereby the same nutrition data can be shared by multiple PLUs. Previously, each PLU had a separate nutrition data record. However, this feature is only supported by AstraXT scales and cannot be used in systems that contain older scale models.
If nutrition data sharing is enabled, the top right of the nutrition dialog displays a list where you can specify the PLUs to which to assign the nutrition data. The operation is described below.

1. Click the **Nutrition** button or select **Nutrition** from the PLU menu. This opens the nutrition edit dialog shown below. (The dialog below shows USA format nutrition. The appearance of the dialog may be different for other countries, but the operation is the same.)



2. Enter the information in each field, then click the **OK** button. This saves the nutrition information and, if connected, sends the information to the scales.

   To assign the nutrition data to a different PLU number, use the **Select** button to change the PLU, then click the **OK** button.

   To close the dialog without saving your changes, click the **Cancel** button.

Operation when Nutrition Data Sharing is Enabled

AstraXT and later scales allow the same nutrition data to be shared by more than one PLU. In this case, the top right of the nutrition dialog displays a list where you can specify the PLUs to which to assign the nutrition data. The following operations are available:

Operation	Explanation
Assign to PLU	Opens a dialog to select another PLU to which to assign the current nutrition data. If nutrition is already assigned to the PLU, the old assignment is cleared.
Remove from PLU	Clears the nutrition data from the selected PLU.
New Nutrition	Creates a new nutrition record with the current data and assigns to the selected PLU. The old nutrition record remains assigned to the other PLUs.

Changes to the PLU data are updated in the database and sent to the scale when you click the OK button. If the changes result in a nutrition record no longer being assigned to any PLU, it is deleted.

Ingredients

In some countries, ingredients information can be assigned to a PLU in a similar way to nutrition.

If Ingredients data is supported for your system, an **Ingredients** button appears at the top of the PLU Edit window. Click the button to open a dialog for editing the ingredients for the PLU.

The ingredients data is handled in the same way as extra messages in both Scalelink Pro and on the scales. Accordingly, the operation of the ingredients edit dialog is the same as for the extra message dialog. See *Editing the message text* in *6.5. Messages* for details.

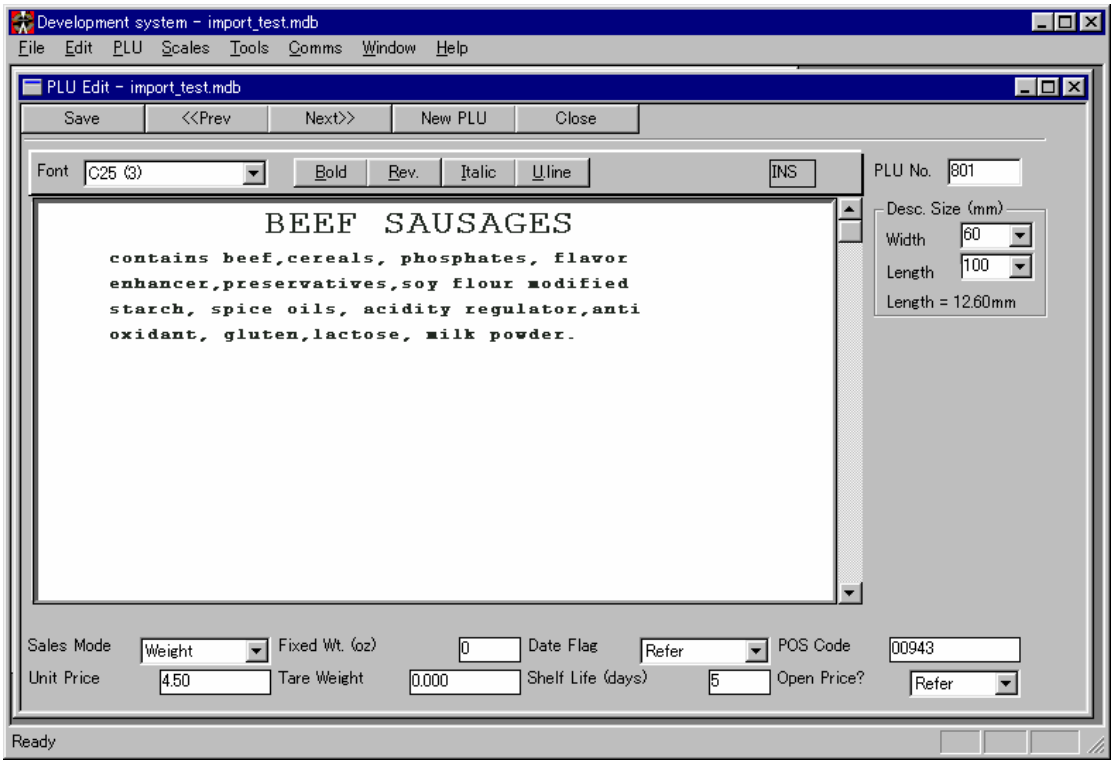
6.2 Using the PLU Edit Window

This section describes how to use the PLU Edit window.

The contents of the PLU Edit window depends on how your system is configured. The figure below shows an example.

NOTE

The operation of the PLU Edit window is somewhat different for ***EMZ series*** scales. The basic operation is the same as described in this section, but some additional functions are available. After reading this section, please refer to section *6.3 Editing Price Master Records*.



The main elements of the PLU Edit window are as follows:

Control Element	Explanation
PLU description field and associated controls	Located in the upper-left half of the window. The PLU description field consists of a row of controls for setting the font, font type and label width, and an edit area (with a scroll bar) for editing the description text. How to use this field is explained below (see *Editing the PLU description*).
PLU data fields	Located in the lower half of the window. These fields are used to set the various parameters, such as the price, that determine how the PLU is printed on the scales. The parameters to be displayed can be configured when ScaleLink Pro is installed. Your copy of ScaleLink Pro should only display those parameters that are relevant to your store. Use the mouse or TAB key to move the cursor to the desired field and enter a value or select an option from the list. A message appears if you enter a value outside the allowed range. If the price zone mode is "Head Office" (see *Price Zones*), asterisks indicate the price zone fields. Clicking the right mouse button on a price zone field opens a popup dialog for editing the values for each price zone. Depending upon how your copy of Scalelink Pro is configured, the PLU data fields may be split into a number of tab pages. In this case a tab bar appears at the bottom of the PLU Edit window. Click the tabs to display the corresponding pages of fields.
Save button	Located at the top left of the window. Click to save any changes you have made and send the PLU data to the scales (if connected).
Close button	Located at the top right of the window. Click to close the PLU Edit window. A warning message appears if you have any unsaved changes.
<<Prev and Next>> buttons	Located at the top of the window. Click to display the next or previous PLU number. A warning message appears if the current PLU has any unsaved changes. **NOTE**: You can also use the PLU Search window to change the displayed PLU. Click on the PLU Search window to make it the active window, select the desired PLU in the list, then click the **Edit** button.
New PLU button	Click to create a new PLU. A PLU search dialog opens for you to specify the new PLU number.
PLU No. field	Located on the right of the window. Enter a new PLU number if you wish to save the displayed data to a new PLU. A warning message appears when you click the **Save** button if a PLU with that number already exists. Saving the PLU data to a new PLU number does not delete the old PLU number and leaves the data for the old PLU unchanged.
Nutrition button	This button only appears if your copy of ScaleLink Pro is configured to use nutrition. Click to edit the nutrition for the PLU.
Ingredients button	This button only appears if your copy of ScaleLink Pro is configured to use ingredients. Click to edit the ingredients for the PLU.
Message, etc. Browse buttons	A **Browse** button appears to the right of some fields. Click this button to open a selection dialog listing the available settings for the field. Typically, a **Browse** button appears for fields such as messages that link to data specified elsewhere in Scalelink Pro.
Price Zone	Only appears if the price zone mode is "Head Office" (see *Price Zones*). Select the price zone you wish to edit. This refreshes the display with the data for the selected price zone.

Any changes to price zone fields (indicted by asterisks) are saved as price zone-specific data.

Control Element	Explanation
Sale or Campaign icon	A special icon appears to the left of the PLU No. field (in the description format bar) to indicate if the PLU belongs to a campaign or sale. Click the icon to edit the campaign or sale. Campaigns and sales are described in *6.6 Campaigns* and *9.9 Sale Wizard* respectively.

Editing the PLU description

The PLU description field consists of a row of controls for setting the font, font type and label width, and an edit area (with a scroll bar) for editing the description text.

Click on the edit area to select the field and use the mouse or arrow keys to move the cursor within the field. The following operations are available in the PLU description field.

Operation	Explanation
Insert text	Position the cursor at the desired location and enter text from the keyboard. The font and label width determine how many characters are displayed per line. Press the INS key to switch between insert and overwrite mode.
Select text	Drag with the mouse or hold down the shift key and use the arrow keys to move the cursor over the desired text. The selected text appears highlighted.
Change line font	A different font can be set for each line. Position the cursor in the line and select the desired font from the **Font** field. Alternatively, press Ctrl+F to step through the available fonts.
Change font type	Characters can be displayed bold, reversed, in italic, and/or underlined. Select some text and click the buttons above the description field to turn each character type attribute on or off for the selected text.
Desc. Size (mm)	Set the **Width** field to the actual label width to be used for this PLU. This updates the description field to only display as many characters as will fit on the label. Set the **Length** field to the maximum length for the description text in the label, including any extra message. The actual length (including any extra message) is displayed beneath the **Length** field. A warning message is displayed when you try to save the PLU if the actual length is too long. **NOTE**: These settings are only used within ScaleLink Pro. They have no effect on the actual label dimensions on the scales.
Cut, Copy or Paste	Use the Edit menu or the standard Windows keystrokes (listed below) to cut, copy or paste description text.

Keystroke	Operation
Ctrl+X or Shift+Del	Cut
Ctrl+C or Ctrl+INS	Copy
Ctrl+V or Shift+INS	Paste

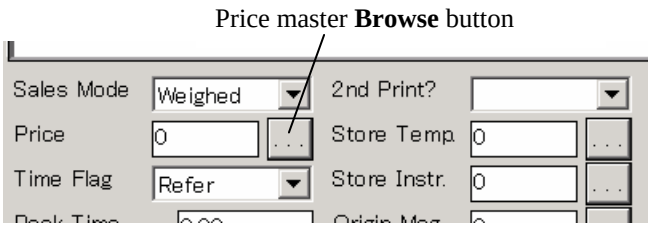
6.3 Editing Price Master Records (IP-EMZ only)

The IP-EMZ allows you to specify up to 5 *price master records* per PLU. Each price master record contains not just a price, but also a range of other settings such as bar code settings, logo, and tray. This is intended for use in processing center or similar environments where you are packing product for more than one store. Which price master to use is specified in the store settings for each store.

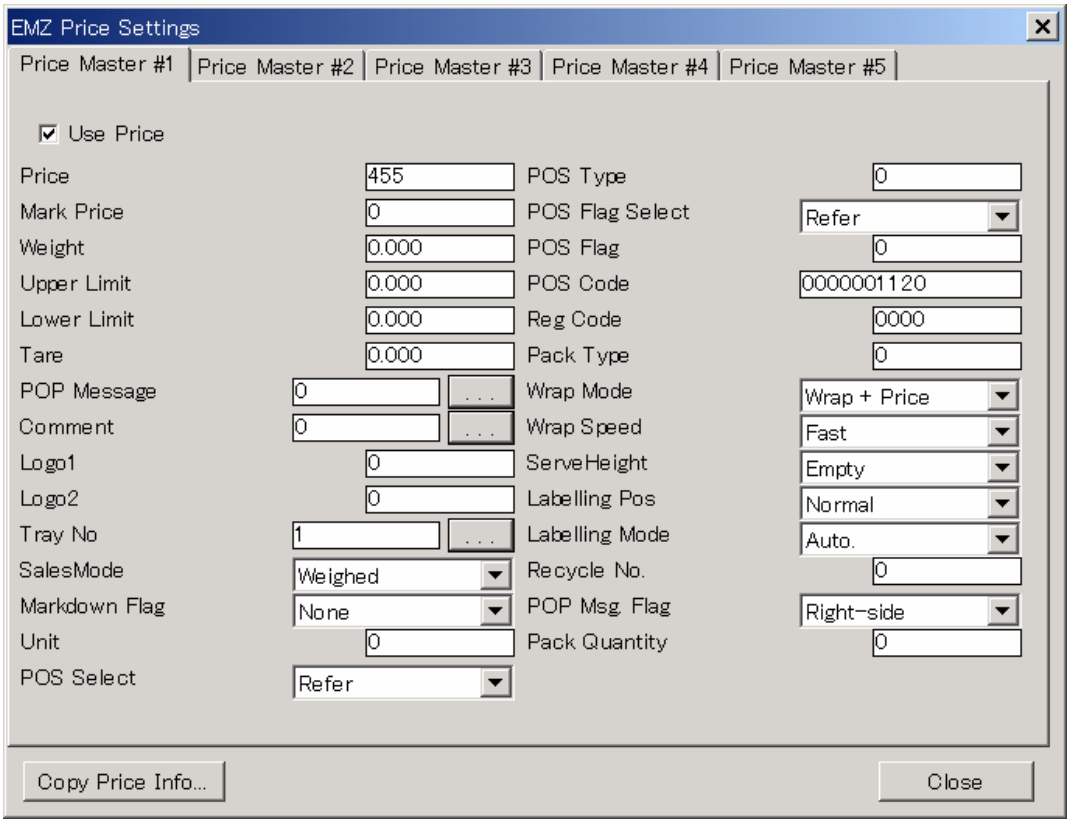
Support for multiple price master records can be disabled if you do not require it. In this case, the price and other settings that would have been specified on the price master screen are instead specified in the PLU Edit window, in the same way as other PLU data fields.
You do not need to read this section if the multiple price master function is disabled on your copy of Scalelink Pro.

Creating and Editing Price Master Records

If the price master feature is enabled, a **Browse** button appears to the right of the price field in the PLU Edit window as shown below.



1. Click the browse button to open the EMZ price settings dialog shown below.



Typically, your copy of Scalelink Pro will have been configured to only show the fields that you use. In this case, the dialog will appear somewhat different to that shown above.

2. Select the tab for the price master you wish to edit.

3. Set the **Use Price** check box ON or OFF, depending on whether you want to use this price master record.
   Note that at least one price master record must be enabled. Scalelink Pro will prohibit you from turning the **Use Price** check box OFF for all five records.

4. Enter values in the various fields, and then click the tab for the next price master you wish to edit, or click **Close** when you have finished

Note that any changes you make to the price master records are not saved or sent to the scale until you save the PLU.

6.4 Advertising Messages

This section describes how to create and edit advertising messages. You can define up to ten advertising messages in ScaleLink Pro. Which of these messages to display is set on the scale itself.

NOTE The AstraXT series of scales do not support advertising messages.

Creating and Editing Advertising Messages

1. Click **Advertising Messages** in the Scales menu. This opens a dialog displaying the available advertising messages. Unused messages are listed as “Spare”.
2. Click on a message to select it then click the **Edit** button to open a dialog to edit the message (or simply double-click on a message).

   The appearance of the dialog depends on the country and type of system you are using (AC-2000 or AC-3000, etc.). The examples below are for the AC-3000.

USA version

Non-USA versions

3. Enter the message and other settings.
4. When you have finished, click **OK** to save the message and, if connected, send the message to the scales.
5. This returns you to the advertising message selection dialog. Click the **Close** button to close the dialog.

Deleting an Advertising Message

1. Click **Advertising Messages** in the Scales menu. This opens a dialog displaying the available advertising messages. Unused messages are listed as “Spare”.
2. Click on a message to select, then click the **Delete** button. A warning message appears asking you to confirm deletion.

6.5. Messages

This section describes how to create and edit the various messages used on the scales. Which messages are available will depend on which messages are supported on the model of scale you are using.

The different types of message are listed below:

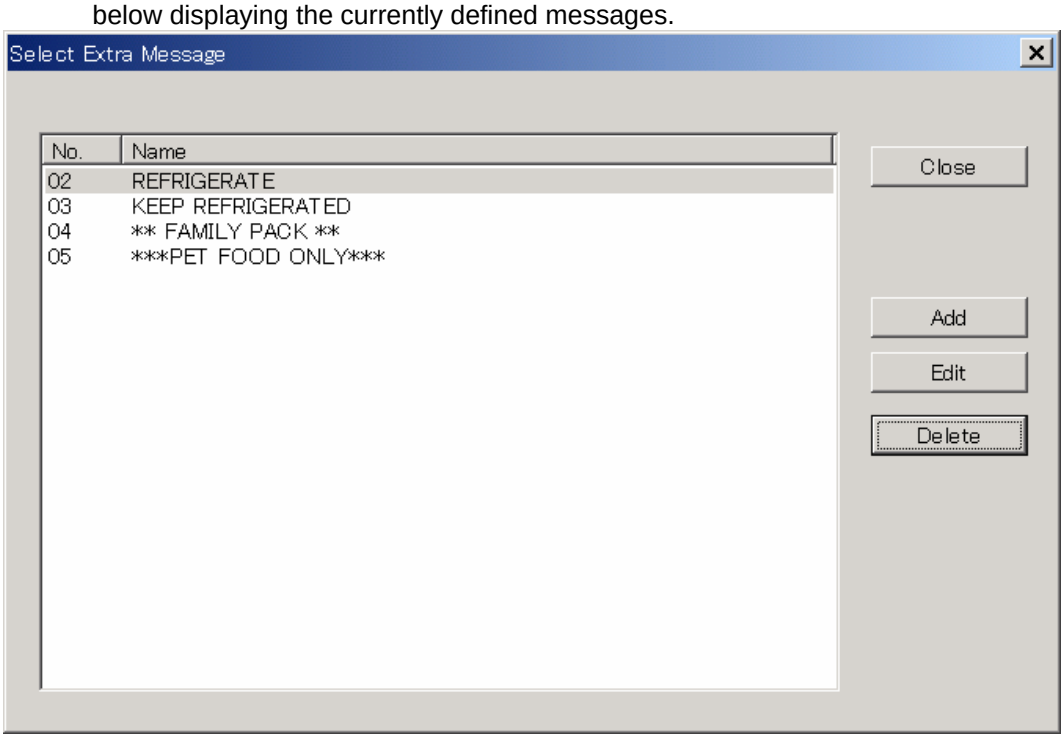
Name	Supported Scale Model
Extra messages	All AC series scales, AstraXT, SR series
Extra messages #2 and #3	AC-4000 and later AC series scales, AstraXT, SR series
Coupons	AC-3000, AC-4000 (excluding New Zealand), AstraXT, SR series
Ingredients	AC-3000 (New Zealand only), EMZ series
POP messages*	EMZ series, AC-4000 (Taiwan only), AstraXT (Taiwan only), SR series
Storage temperature, Storage instructions	EMZ series
Free messages #1 to #5	SR and EMZ series
Origin message	EMZ series
Comment message	EMZ series

* POP messages are available on all scale models. However, on most AC series and AstraXT scales, the messages are predefined in the scale memory and cannot be modified by Scalelink Pro.

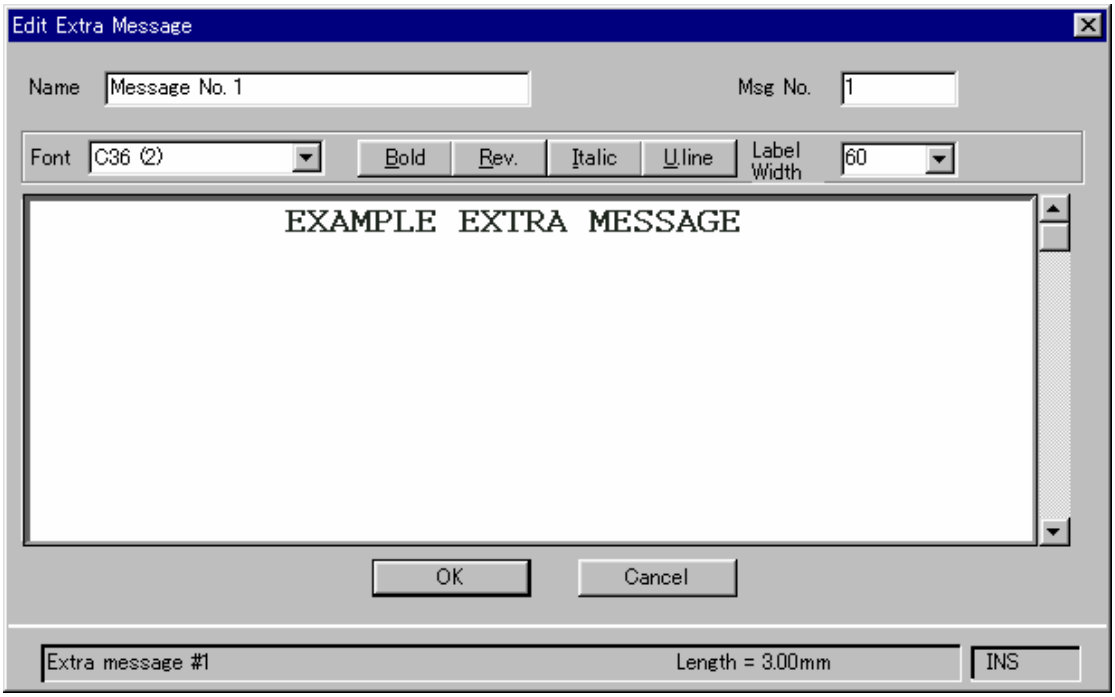
The operation is the same for all types of message.

Creating and Editing Messages

1. Click the appropriate command in the **Scales** menu to open a dialog like that shown below displaying the currently defined messages.



2. Click the **Add** button to create a new message, or click on an existing message to select, then click the **Edit** button to edit the message (or simply double-click on a message).
A dialog opens to edit the message.



3. Enter the message name. The name entered here appears in the message selection dialog (step 2 above).
4. Enter the message text. The operation of the message text field is described below.
5. Optionally, you can change the message number in the **Msg No.** field to save the displayed message with a different number. A warning message appears when you click the **OK** button if a message with that number already exists.
6. When you have finished, click **OK** to save the message and, if connected, send the message to the scales.
This returns you to the message selection dialog. Click the **Close** button to close the dialog.

Editing the message text

The message text field consists of a row of controls for setting the font, font type and label width, and an edit area (with a scroll bar) for editing the message text.

Click on the edit area to select the field and use the mouse or arrow keys to move the cursor within the field. The following operations are available in the PLU description field.

Operation	Explanation
Insert text	Position the cursor at the desired location and enter text from the keyboard. The font and label width determine how many characters are displayed per line. Press the INS key to switch between insert and overwrite mode.
Select text	Drag with the mouse or hold down the shift key and use the left or right arrow key to move the cursor over the desired text. The selected text appears highlighted.
Change line font	A different font can be set for each line. Position the cursor in the line and select the desired font from the **Font** field. Alternatively, press Ctrl+F to step through the available fonts.
Change font type	Characters can be displayed bold, reversed, in italic, and underlined. Select a section of text and click the buttons above the message field to turn each character type attribute on or off for the selected text.
Change label width	Set the **Label Width** field to the actual label width to be used. This updates the message field to only display as many characters as will fit on the label. **NOTE**: This setting is only used within ScaleLink Pro. It has no effect on the actual label width on the scales.
Cut, Copy or Paste	Use the standard Windows keystrokes (listed below) to cut, copy or paste message text.

Keystroke	Operation
Ctrl+X or Shift+Del	Cut
Ctrl+C or Ctrl+INS	Copy
Ctrl+V or Shift+INS	Paste

Deleting a Message

1. Click the appropriate command in the **Scales** menu. This opens a dialog displaying the currently defined messages.
2. Click on a message to select it then click the **Delete** button. A warning message appears asking you to confirm deletion.

6.6 Campaigns

This section describes how to create and edit campaigns. Campaigns allow you to change the price of specified PLUs for a fixed time period. The prices return to normal when the campaign has finished.

The number of campaigns you can define depends on the type of scales system you are connected to.

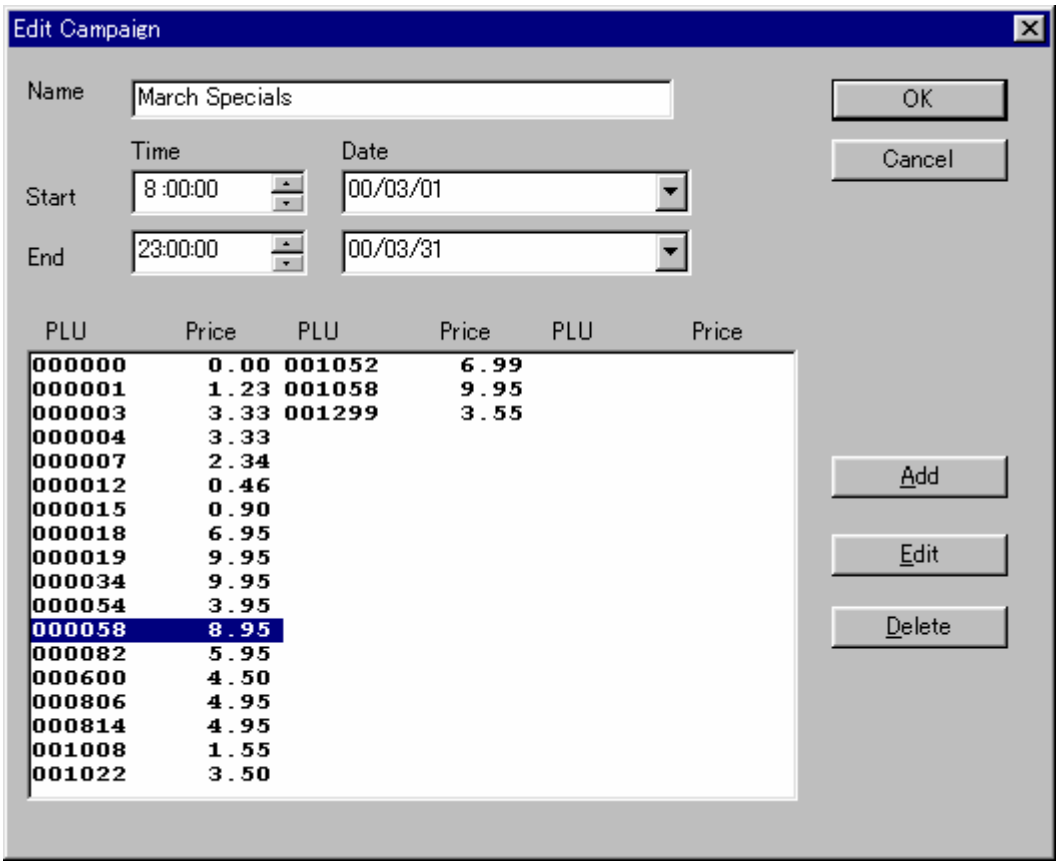
NOTE

The AstraXT series of scales do not support campaigns. See "*Sale Wizard*" in *Chapter 9 Advanced Features and Utilities* for details on how to use ScaleLink Pro to provide a similar function.

Creating and Editing Campaigns

1. Click **Campaigns** in the Scales menu.
2. *If your scales system supports more than one campaign at a time:*
   A dialog opens displaying the available campaigns. Unused campaigns are listed as "Spare".
   Click on a campaign to select it then click the **Edit** button to open a campaign edit dialog (or simply double-click on a campaign).

   If your scales system only supports one campaign at a time:
   A campaign edit dialog opens.



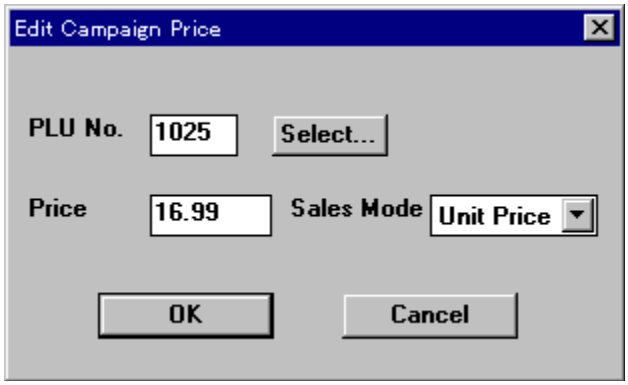
3. Enter the campaign name. The name entered here appears in the campaign selection dialog. (Step 2 above. Multi-Campaign systems only.)
4. Enter the start and end date and time of the campaign.

5. Enter the campaign PLUs.

   Click the **Add** button to add a PLU to the campaign. This opens a dialog (shown below) to specify the PLU number and price.

   Select a PLU in the list and click the **Edit** button to edit a campaign PLU. This opens a dialog (shown below) to specify the PLU number and price.

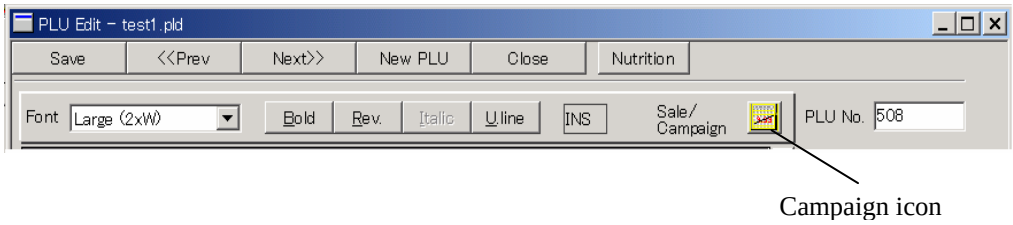
   Select a PLU in the list and click the **Delete** button to delete a PLU from the campaign.



6. When you have finished, click the **OK** button to save your changes and, if connected, send the campaign to the scales.

NOTE

An icon appears in the PLU edit window, as shown below, if the PLU is assigned to a campaign. Click on the item to edit the campaign settings (steps 3 to 5 above). The same icon also appears if the PLU is assigned to a Sale Wizard sale. However, the icon does not appear if the sale or campaign has already finished.



Deleting a Campaign

You can only delete campaigns if your scales system supports multiple campaigns. For single campaign systems, simply set the campaign end date to a date that has already passed. This disables the campaign.

For multi-campaign systems:

1. Click **Campaigns** in the Scales menu. This opens a dialog displaying the available campaigns. Unused campaigns are listed as “Spare”.
2. Click on a campaign to select it then click the **Delete** button. A warning message appears asking you to confirm deletion.

6.7 Keyboard Presets

Keyboard presets allow you to define the meaning of keys on the scale keyboard. Ishida scales have a shift key, so you can define two meanings for each key. Meanings that can be assigned to keys include PLU numbers, extra messages, and coupon messages.

You can also create a keysheet template which you can printout and use as an overlay on the scale keyboard. This is the same function that was previously provided as the *Ishida Keysheet Template* utility program.

A separate keyboard definition can be defined for each scale.

NOTE

Some printer drivers have a bug that causes them to print rotated text incorrectly. If you have trouble printing keysheet templates, try changing the **Bypass bug in printer driver?** setting (Select **Options** from the **Setup** menu and select the **General #2** page). If neither setting works, try changing the print orientation from portrait to landscape.

Managing Keyboard Data

A separate keyboard definition is assigned to each scale and stored in the site setup file along with the scale definitions.

If you are setting up a new site and wish to copy the existing keyboard definitions from an existing site, you should load the site setup file from the existing site and use this as the basis for setting up the new site.

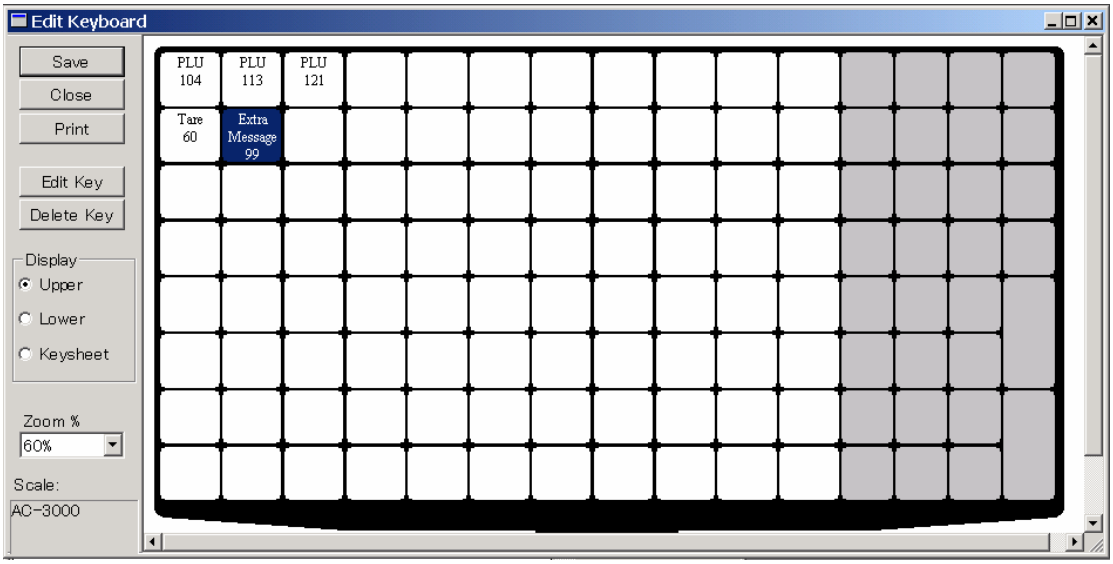
Unfortunately, there is no function for copying keyboard definitions from one site setup file to another.

Creating and Editing Keyboard Presets

1. Click **Keyboard Presets** in the Scales menu.
2. *If your system supports multiple scales:*
   A dialog opens displaying a list of the scales in your system.
   Select the desired scale and click the **Select** button (or simply double-click on a scale).
   This opens a keyboard edit window.

   If your system supports a single keyboard preset definition only:
   A keyboard edit window opens.

The figure below shows an example keyboard edit window for an AC-3000 scale.



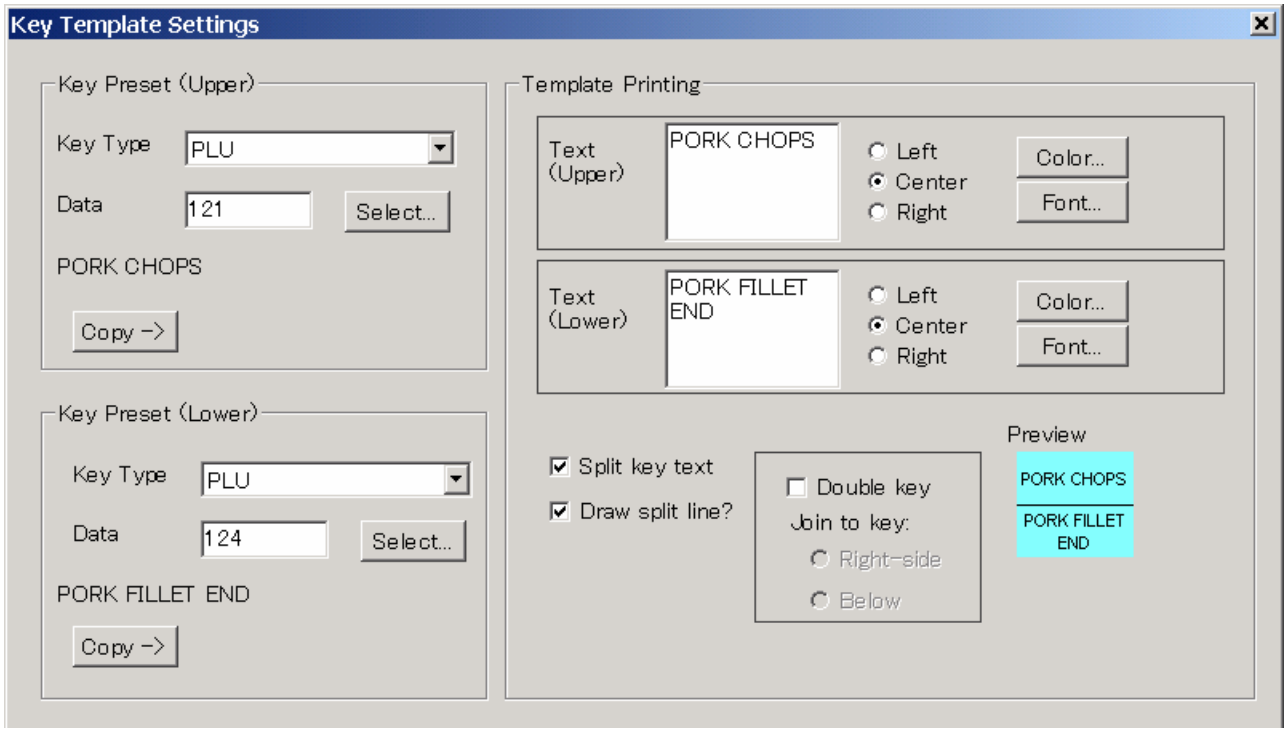
3. Edit the keyboard definition as described below.

4. When you have finished, click the **Save** button to save your changes and, if connected, send the keyboard definition to the scales. Click the **Close** button to close the window.

Editing the keyboard definition

The following operations are available:

Operation	Explanation
Save	Clicking the **Save** button saves the keyboard settings in the database and, if connected, sends the keyboard preset definitions to the scale.
Close	Clicking the **Close** button closes the keyboard edit window.
Print	Clicking the **Print** button prints the keysheet template.
Edit key	Double-click on a key, or click on the key then click the **Edit Key** button. This opens a dialog for specifying the key meaning and keysheet template format. Note that preset definitions cannot be made for the standard keys on the right of the keyboard (the keys that appear grayed in the keyboard edit window). The preset key settings in the dialog are disabled for these keys.



Edit key (cont..)

The **Key Preset** boxes on the left of the dialog specify the upper and lower key meanings. Click **Key Type** to specify the key meaning and enter the value (PLU number or message number, etc.) in the **Data** field.
For some key types, you can use the **Select** button to open a dialog listing the available values.

The **Template Printing** box on the right of the dialog specifies how to print the key in the keysheet template. Enter the text and format settings (background color, font, split key, etc.). A preview of the key format is shown in the bottom right of the dialog. The **Copy ->** keys on the left of the dialog copy the key meaning (PLU name, etc.) into the keysheet template text field.

The **Double Key** settings allow you to link the selected key to an adjacent key. The effective result is a single, larger key. This is used, for example, by the standard PLU and Print keys.

Delete key

Click on a key then click the **Delete Key** button to delete the definition for that key. This resets the key to the default settings.

Drag & drop keys

You can use the mouse to drag settings from one key to another. If you hold down the CTRL key when you release the mouse button, the settings are copied instead of being moved (that is, the settings are not removed from the source key).

Display mode

Click the **Upper**, **Lower**, or **Keysheet** buttons to select which type of information to display in the keyboard window.
Ishida scales have a shift key, so you can define two meanings for each key. The "*Lower*" key is the key meaning when the shift key is pressed.

Zoom

Set the display magnification.

Scale

Displays the scale name.

Set Default

Selecting **Set Default** from the **Keyboard** menu opens a key edit dialog to define the default key settings. The default key settings relate to the keysheet template only and specify the default background color and font, etc.

Clear Changes

Selecting **Clear Changes** from the **Keyboard** menu undoes any changes made to the keyboard since it was last saved.

Delete Keyboard

Selecting **Delete Keyboard** from the **Keyboard** menu deletes the keyboard from the database and deletes all preset key settings on the scale.

Copy Keyboard

Selecting **Copy Keyboard** from the **Keyboard** menu opens a scale selection dialog. Select a scale to copy all the key settings from that scale.
You can copy a keyboard from a scale with a different keyboard layout (e.g. AC-3000 to AstraXT), but you will need to rearrange the key positions manually after copying.

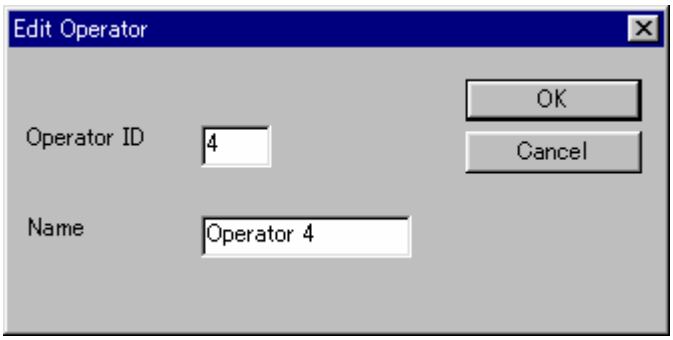
Import Keyboard Template

Select **Import Keyboard Template** from the **Keyboard** menu to import a keysheet template file created using the *Ishida Keysheet Template* utility program.

6.8 Operators

This defines the names of the scale operators. The names defined here are used in the operator totals report.

1. Click **Operators** in the Scales menu.
2. A dialog appears listing any existing operators.
   Click the **Add** button to add a new operator or select an operator in list and click the **Edit** button to edit that operator.
3. Enter the operator name and ID number in the dialog shown below, then click the **OK** button to save your changes and, if connected, send the operator data to the scales.



6.9 Store Name and Address (AC-3000, AstraXT, AC-4000, and SR-2000)

This defines the store name and address printed on PLU labels.

NOTE

1. The store name and address is stored separately for AC-4000 and other scale models. This is because the AC-4000 supports formatted text but the other scales do not. If your system includes both AC-4000 and other scale models, two separate menu commands will appear in the **Scales** menu for editing store data. In this case, you must enter your store name and address twice.

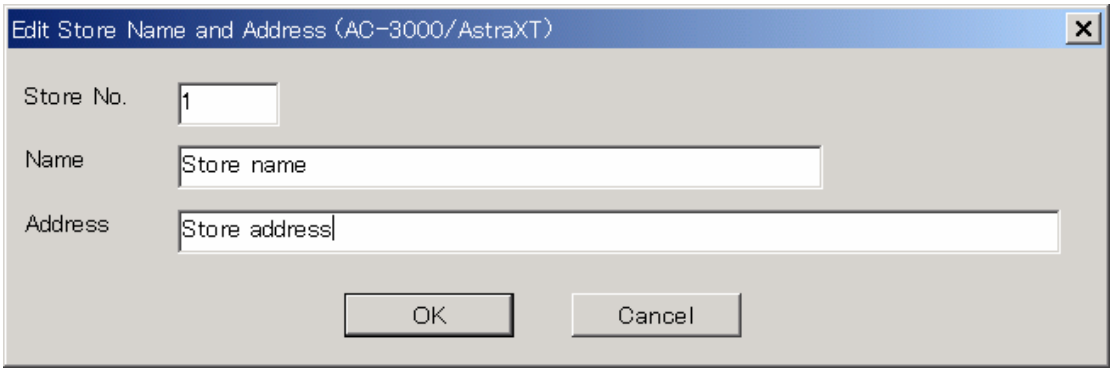
2. This function is not used on EMZ series scales. See section *6.10 Store Settings* for details of how to set the store name and address on an EMZ series scale.

1. Click **Store Name (AC-3000/AstraXT)** or **Store Name (AC-4000)** in the Scales menu.

2. *If your system supports multiple stores:*
   A dialog opens displaying a list of stores.
   Click on a scale ID to select then click the **Edit** button (or simply double-click on a scale ID).
   This opens a store name and address edit dialog.

   If your system supports a single store name and address:
   A store name and address edit dialog opens.

3. Enter the information for your store then click the **OK** button to save your changes and, if connected, send the store name and address to the scales.



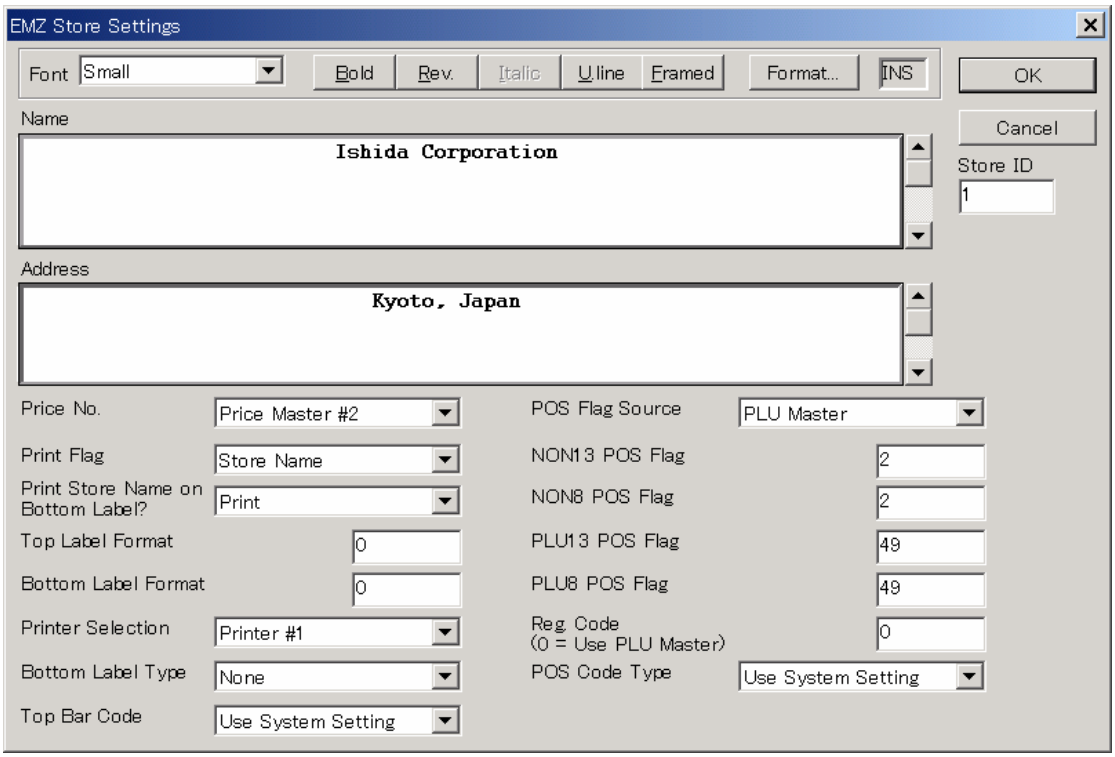
Note: The appearance of the AC-4000 dialog is different as it allows fonts to be specified. Otherwise the operation is the same.

6.10 Store Settings (EMZ series only)

In addition to the store name and address, this specifies a range of settings such as the label formats to use that allow you to print different labels for each store. The store setting function is primarily intended for processing center type applications where you are packing products for more than one store.

Creating and Editing Store Settings

1. Click **Store Settings** in the Scales menu. This opens a dialog listing all the stores defined in your system.
2. Click on a store to select then click the **Edit** button (or simply double-click on the store). Alternatively, click the **Add** button to add a new store.
   This opens an **EMZ Store Settings** dialog, as shown below.



3. Enter the store name and address and other store settings, then click the **OK** button to save your changes and, if connected, send the store settings to the scales.

Deleting Store Settings

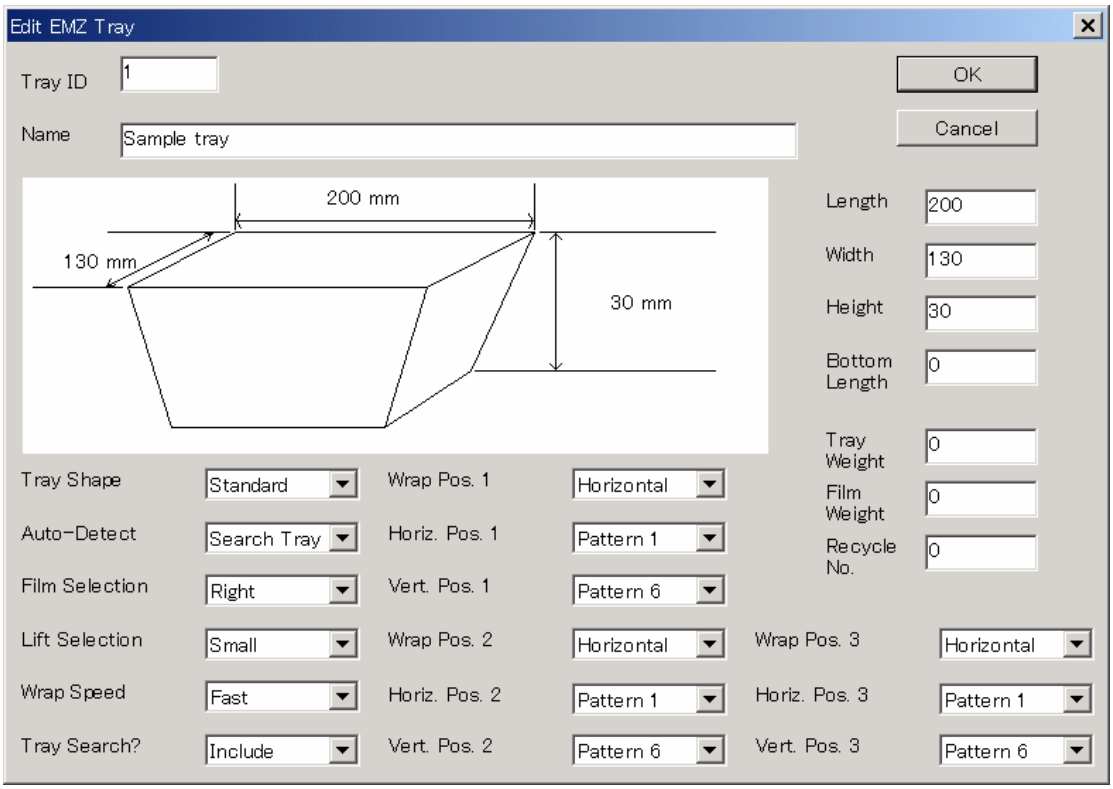
1. To delete a store from the system, click **Store Settings** in the Scales menu. This opens a dialog listing all the stores defined in your system.
2. Click on a store to select then click the **Delete** button.
   A confirmation dialog appears. Click **OK** to delete the store.

6.11 Tray Settings (EMZ series only)

This specifies the dimensions, weight, and various wrapper related parameters for each tray you use.

Creating and Editing Tray Settings

1. Click **Tray Settings** in the Scales menu. This opens a dialog listing all the trays defined in your system.
2. Click on a tray to select then click the **Edit** button (or simply double-click on the tray). Alternatively, click the **Add** button to add a new tray.
   This opens an **Edit EMZ Tray** dialog, as shown below.



3. Enter the tray size and other tray settings, then click the **OK** button to save your changes and, if connected, send the tray settings to the scales.

Deleting Tray Settings

1. To delete a tray from the system, click **Tray Settings** in the Scales menu. This opens a dialog listing all the trays defined in your system.
2. Click on a tray to select then click the **Delete** button.
   A confirmation dialog appears. Click **OK** to delete the tray.

6.12 Department and Group (AC-4000, SR-2000, and EMZ series only)

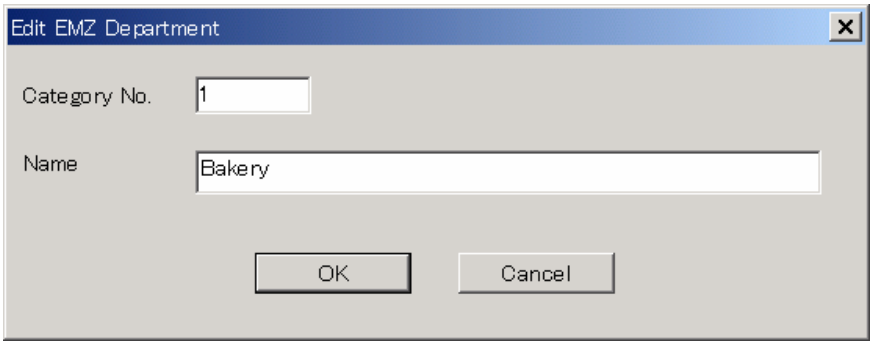
This specifies the department and group names to use on the scale.

NOTE

This function is not the same as the department and group codes used within Scalelink Pro. The Scalelink Pro department and group code function is intended for use with AC-3000 series scales, and is typically disabled when Scalelink Pro is used with EMZ series scales to avoid confusion between the two functions.
The Scalelink Pro department and group code function is described in the *Setting Up Department and Group Codes* section of *Appendix 1 Setting up Scalelink Pro at a New Store*.

Creating and Editing EMZ Department and Group Names

1. Click **Department** or **Group** in the Scales menu. This opens a dialog listing all the departments or groups defined in your system.
2. Click on a department or group to select then click the **Edit** button (or simply double-click on the department or group). Alternatively, click the **Add** button to add a new department or group.
   This opens an **Edit EMZ Department** dialog, as shown below.



3. Enter the department or group name and number, then click the **OK** button to save your changes and, if connected, send the settings to the scales.

Deleting EMZ Department and Group Names

1. To delete a department or group from the system, click **Department** or **Group** in the Scales menu. This opens a dialog listing all the departments or groups defined in your system.
2. Click on a department or group to select then click the **Delete** button.
   A confirmation dialog appears. Click **OK** to delete the department or group.

6.13 Memo and Index Presets (EMZ, WM, Omni and SR series only)

EMZ/WM/Omni and SR series scales have a touch screen which can be programmed by assigning functions such as calling up a PLU to regions of the screen ("keys").

The SR series has a single preset key function that can define multiple pages of preset keys.

EMZ/WM/Omni scales have two types of programmable keys: memo presets and index presets. Both provide a way of quickly calling up PLUs from the touch screen on the scale.

- Memo presets define quick keys for calling up a particular PLU.
- Index presets define keys that call up a list of PLUs, specified by a range of PLU numbers.

Note: Preset key definitions are stored in the site setup file along with the scale definitions.

SR Presets Overview

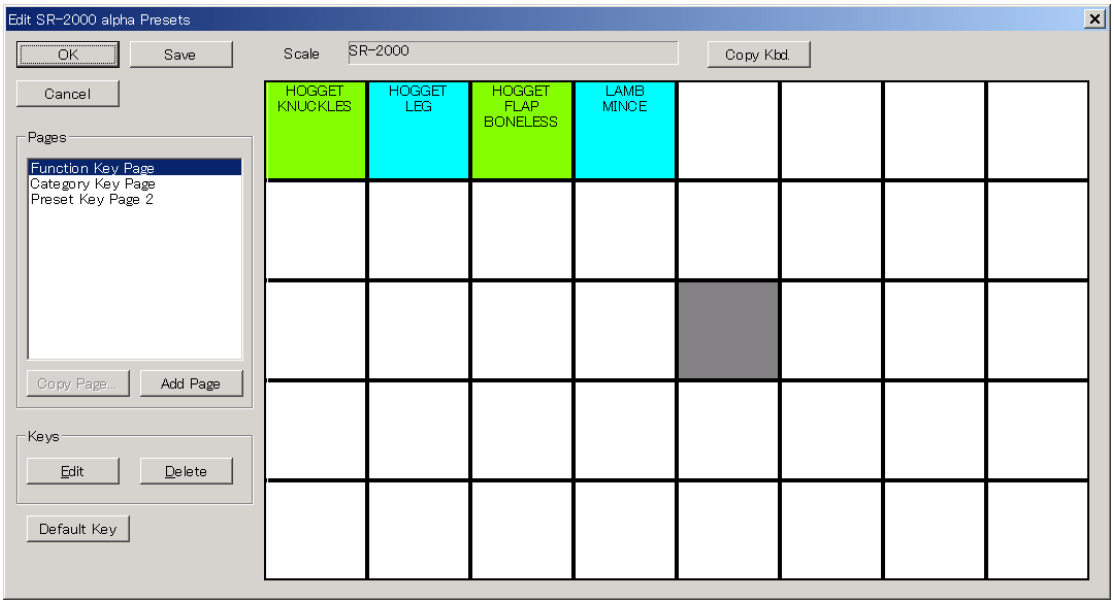
Preset keys on the SR-2000 alpha are divided into up to 99 pages. The three types of page are as follows:

Preset Page Type	Description
Function Key Page	One page only. This is the default page. All preset key functions such as PLU call up can be assigned to keys on this page.
Category Key Page	One page only. This page is used as an index to the preset key pages described below. Each preset key page can be assigned to a category ("group") and the category assigned to a preset key on the category key page. The user can then press the key on the category key page to jump to the first preset key page assigned to the associated category. The user can then press the PAGE key to scroll through all the preset key pages belonging to that category.
Preset Key Pages 2 to 99	The preset keys on these pages can be assigned to various functions such as PLU call up. Also a "group" key can be defined to specify the category ("group") to which this page belongs. This is used to scroll through pages in the same category as described in the Category Key page explanation above.

Creating and Editing SR Presets

1. Click **Memo/SR-2000 alpha Presets** in the Scales menu.
   This opens a dialog listing all EMZ and SR scales defined in the system. Only one set of presets can be defined for each scale.

2. Click on a scale to select then click the **Edit** button (or simply double-click on the scale).
   If you have selected an SR series scale, this opens an **Edit SR-2000 alpha Presets** dialog, as shown below.



3. SR series presets consist of multiple pages (the number of pages depends on the scale). The available pages are listed in the **Pages** list box on the left of the screen. As you can see from the example above, there are three types of page. The operation of each type is as follows:

   Function key page: Main page. PLU call-up and other functions can be assigned to each key.

   Category key page: This acts as a menu for opening the preset key pages.

   Preset key pages: PLU call-up and other functions can be assigned to each key on these pages.

   Click on a page in the **Pages** list box to display that page in the preset key area (right side of screen).

   To assign a function to a key, select the key and click **Edit** (or double click on the key). Similarly, to remove a function from a key. select the key and click **Delete**.

   You can use the mouse to drag settings from one key to another. If you hold down the CTRL key when you release the mouse button, the settings are copied instead of being moved (that is, the settings are not removed from the source key).

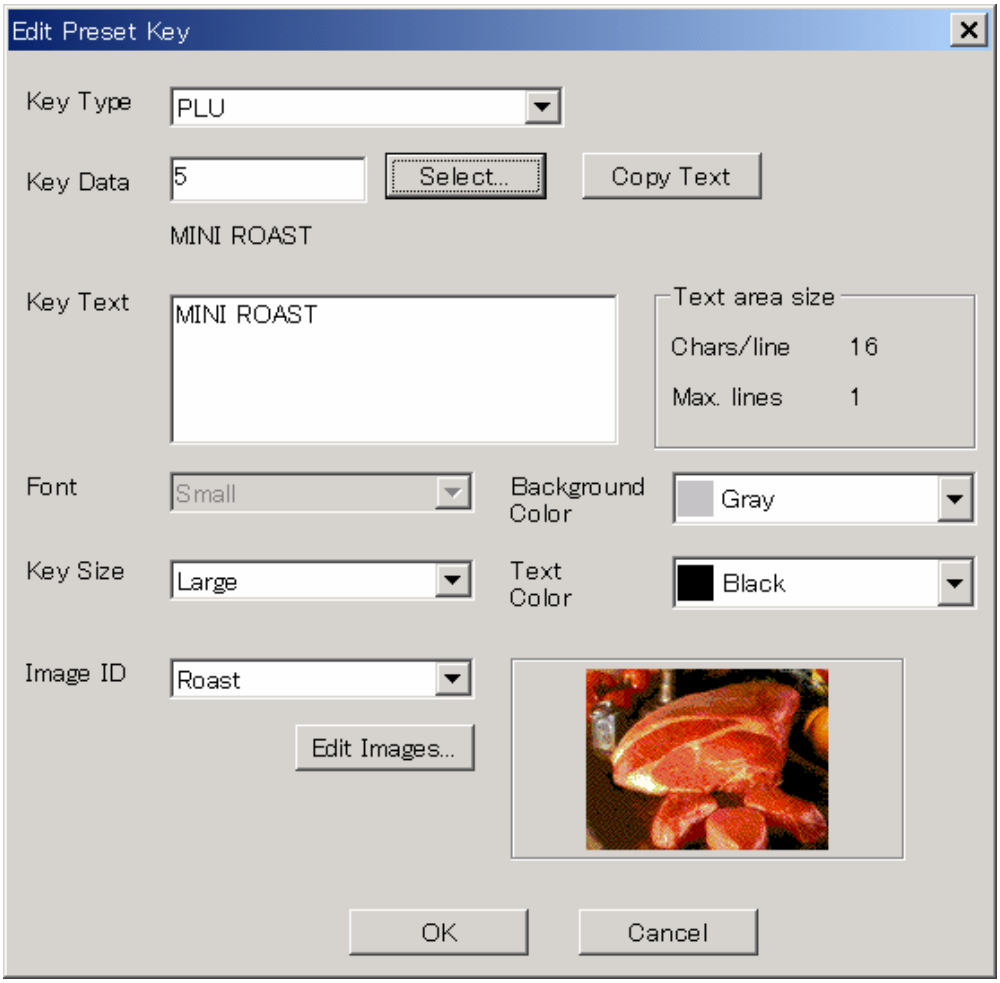
4. If more than one SR series scale is defined, you can use the **Copy Kbd.** button to copy the preset data from another scale.

   Similarly you can use the **Copy Page** button to copy settings from one preset key page to another.

5. You can use the **Default Key** button to set the default background and text colors and the default font. It is a good idea to set the defaults before you start creating a keyboard.

   The default settings apply to all pages.

6. Editing a key opens the **Edit Preset Key** dialog shown below.



Use this window to set the key meaning, text, colors, and key size. The key text permits carriage returns and the **text area size** (number of lines and number of character per line) depends on the selected key size and font.

You can assign a bitmap image to display in the key. In this case, select the image from the predefined list of images in the **Image ID** field. The selected image appears in the preview panel on the right.
The images are defined using **SR-2000 alpha Images** in the **Scales** menu. You can also go directly to the image edit window from this dialog by clicking the **Edit Images** button. The operation is described in *6.14 SR-2000 alpha Images*.
Note: You can only select images with the same size as the key (small, medium, or large). Changing the key size clears the image ID setting.

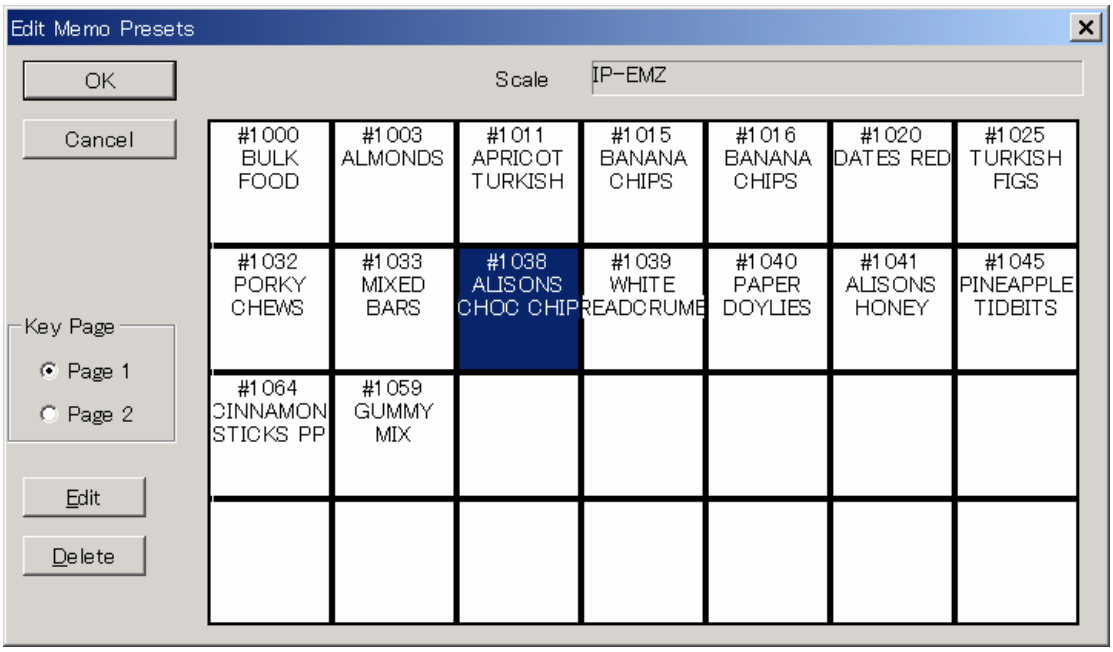
When finished, click **OK** to close the dialog and return to the **Edit SR-2000 alpha Presets** dialog.

5. When finished, click **OK** to save your changes and, if connected, send the settings to the scales.

Creating and Editing Memo Presets

1. Click **Memo Presets/SR-2000 alpha** in the Scales menu.
   This opens a dialog listing all EMZ and SR scales defined in the system. Only one set of memo presets can be defined for each scale.

2. Click on a scale to select then click the **Edit** button (or simply double-click on the scale).
   If you have selected an EMZ series scale, this opens an **Edit Memo Presets** dialog, as shown below.



3. To assign a PLU to a key, select the key and click **Edit** (or double click on the key). Similarly, to remove a PLU from a key. select the key and click **Delete**.

   You can use the mouse to drag settings from one key to another. If you hold down the CTRL key when you release the mouse button, the settings are copied instead of being moved (that is, the settings are not removed from the source key).

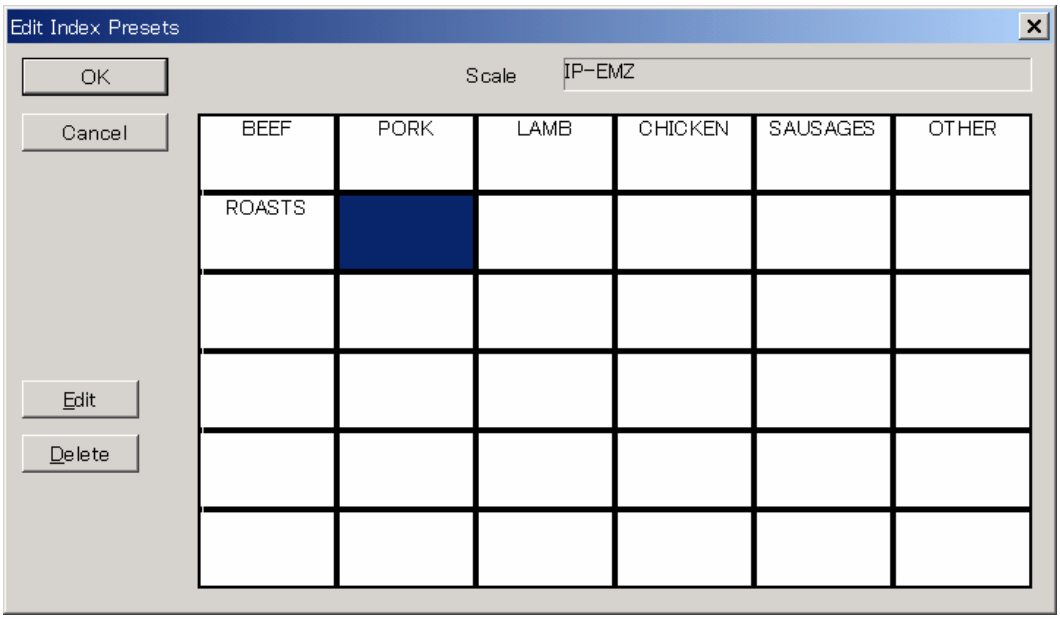
   Note that the scale has a **Shift** key to switch between to pages of preset keys. Use the **Key Page** buttons to select which page to program.

4. When finished, click **OK** to save your changes and, if connected, send the settings to the scales.

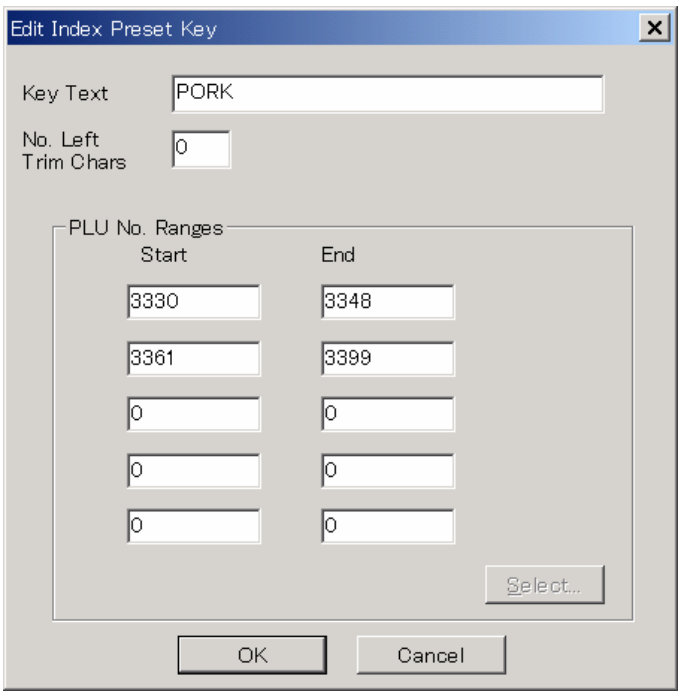
Creating and Editing Index Presets (Other than USA)

1. Click **Index Presets** in the Scales menu.
   This opens a dialog listing all EMZ or WM scales defined in the system. Only one set of index presets can be defined for each scale.

2. Click on a scale to select then click the **Edit** button (or simply double-click on the scale).
   This opens an **Edit Index Presets** dialog, as shown below.



3. To assign a series of PLU number ranges to a key, select the key and click **Edit** (or double click on the key). This opens an **Edit Index Preset Key** dialog, as shown below.



Either type the PLU numbers for each range into the edit fields, or click on the PLU

number field you wish to enter, and then click the **Select** button to open a dialog for selecting the PLU number.

Click OK when you have finished entering PLU number ranges to return to the **Edit Index Presets** dialog.

4. To remove the settings from a key. select the key and click **Delete**.

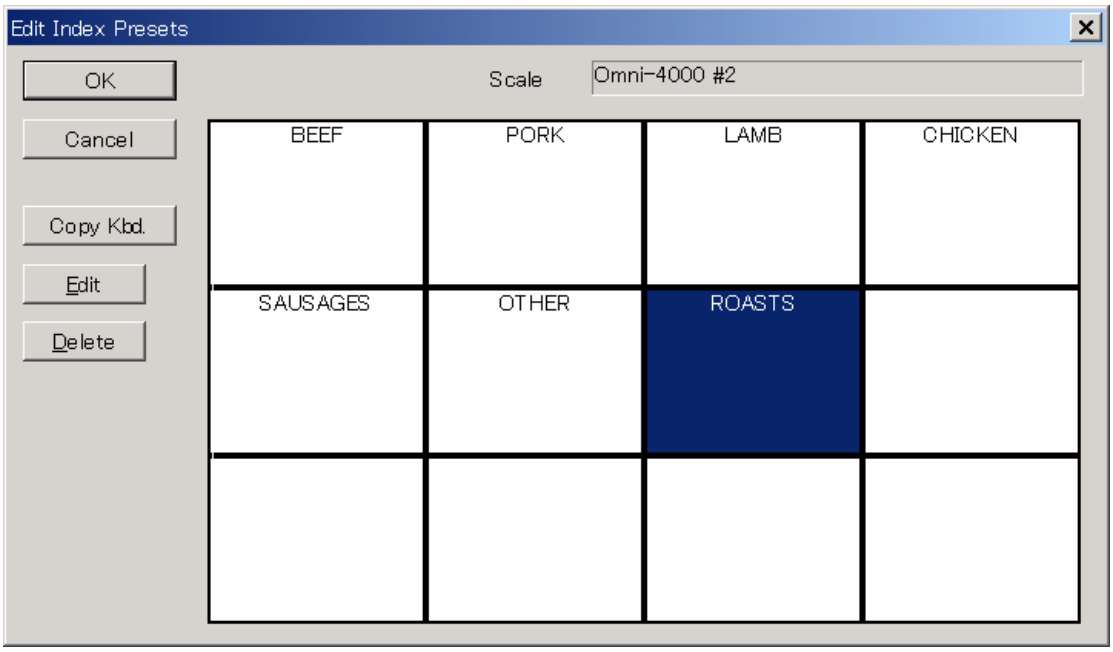
   You can use the mouse to drag settings from one key to another. If you hold down the CTRL key when you release the mouse button, the settings are copied instead of being moved (that is, the settings are not removed from the source key).

   When finished, click **OK** to save your changes and, if connected, send the settings to the scales.

Creating and Editing Index Presets (USA)

1. Click **Index Presets** in the Scales menu.
   This opens a dialog listing all Omni-4000 scales defined in the system. Only one set of index presets can be defined for each scale.

2. Click on a scale to select then click the **Edit** button (or simply double-click on the scale).
   This opens an **Edit Index Presets** dialog, as shown below.

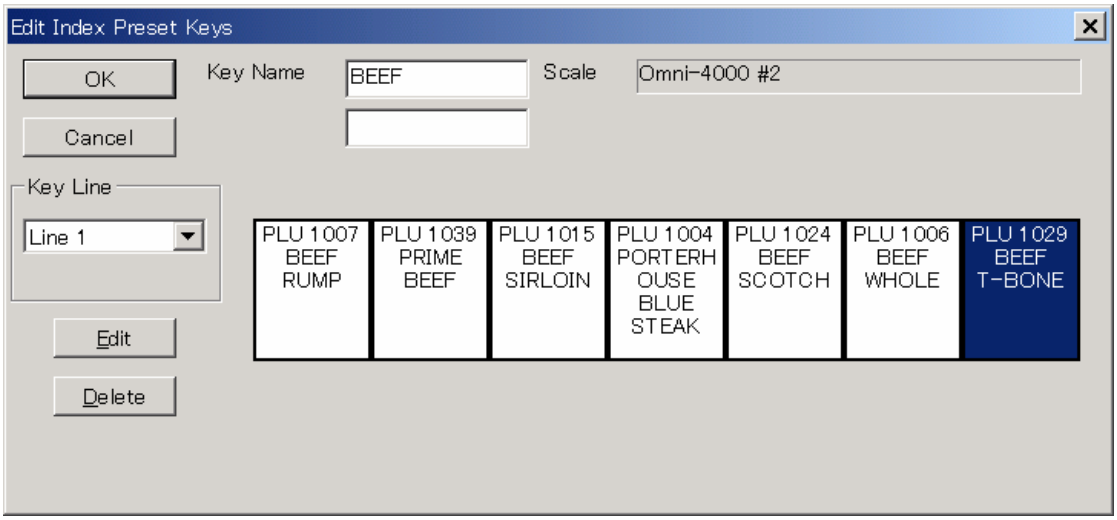


3. This shows the top level screen for the index presets. On the scale, the user can press these keys to drill down to a lower level preset key page.

   To assign PLU numbers to the lower level preset key page, select the key and click **Edit** (or double click on the key). This opens an **Edit Index Preset Keys** dialog, as shown below.

   You can also use the mouse to drag settings from one key to another. If you hold down the CTRL key when you release the mouse button, the settings are copied instead of being moved (that is, the settings are not removed from the source key).

   Similarly, you can copy a complete keyboard setting from another scale. Click **Copy Kbd.** and select the scale from which to copy in the popup dialog.



4. Enter the name to display in the top level screen in the **Key Name** field. The name can consist of two lines of up to eight characters.

5. Each preset key page consists of 15 lines of preset keys. Use the **Key Line** combo box on the left to select each line.

   To assign a PLU number to a key, select the key and then click the **Edit** button (or just double-click on the key), and then select the PLU number from the popup dialog.

   To remove a PLU from a key, select the key and click **Delete**.

   You can use the mouse to drag settings from one key to another. If you hold down the CTRL key when you release the mouse button, the settings are copied instead of being moved (that is, the settings are not removed from the source key).

   Click OK when you have finished entering PLUs to return to the **Edit Index Presets** dialog.

6. When finished, click **OK** to save your changes and, if connected, send the settings to the scales.

6.14 SR-2000 alpha Images (SR series only)

SR series scales have a touch screen which can be programmed by assigning functions such as calling up a PLU to regions of the screen ("keys"). You can also assign bitmap images to each key. This section describes how to define the bitmap images used in the touch screen preset keys.
How to setup the preset keys is described in *6.13 Memo and Index Presets*.

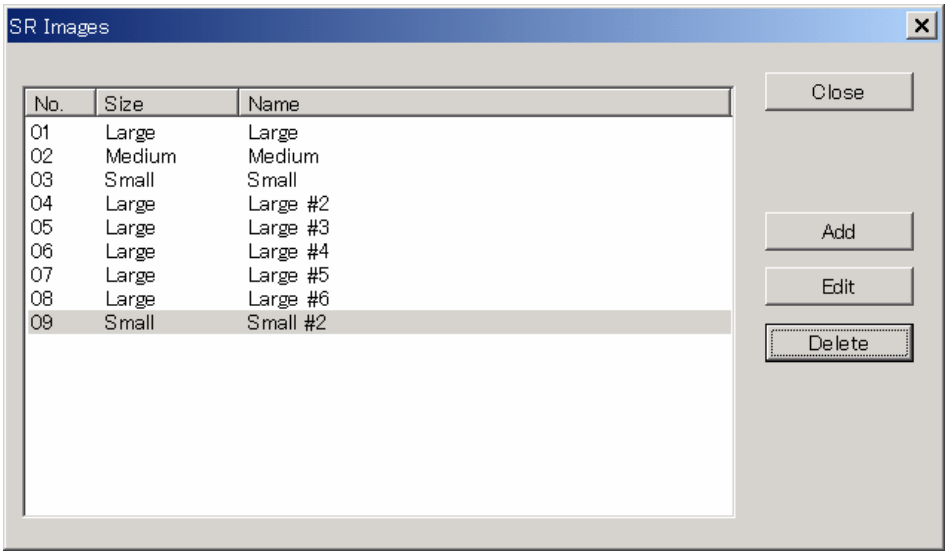
Image sizes
Only bitmap images in one of the following three sizes are permitted. These sizes correspond to the three preset key sizes.

Small	66(W) x 49(H) dots
Medium	135(W) x 49(H) dots
Large	135(W) x 101(H) dots

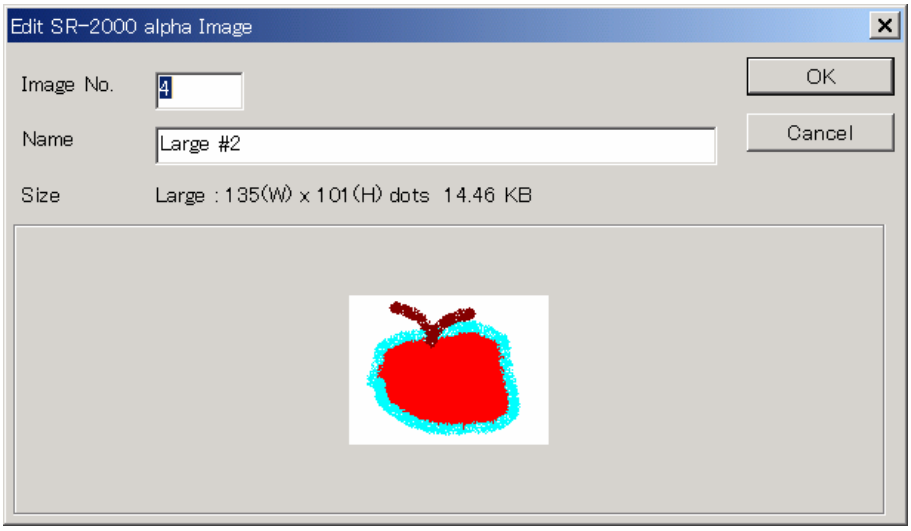
Note: SR-2000 images are stored in the site setup file along with the preset key and scale definitions.

Creating and Editing SR Images

1. Click **SR-2000 alpha Images** in the Scales menu.
   This opens a dialog listing the currently defined images, as shown below.



2. To add a new image, click the **Add** button. A **File Open** dialog appears for you to specify the bitmap file. Select the file and click **OK**.
   If you selected a bitmap that does not match one of the above three permitted sizes, a message appears to notify you of this and the bitmap image cannot be added to Scalelink Pro.
   If you selected a valid bitmap, the following dialog appears.



3. Enter the image number and a name for the image. When adding a new image, the image number defaults to the next unused number. The image name is used to select the image in the preset key setup dialog.
   Click **OK** when finished.

4. To edit an existing image, select the image and click the Edit button. To edit an existing image, select the image and click the **Edit** button. This opens the above dialog.
   Note that you can only edit the **Image No.** and **Name**.
   To change the bitmap image, delete the old image and use the above procedure to create a new image.

7. Reports

7.1 The PLU and Message Reports

These reports generate a list of the registered PLUs, messages, or other data in the database.

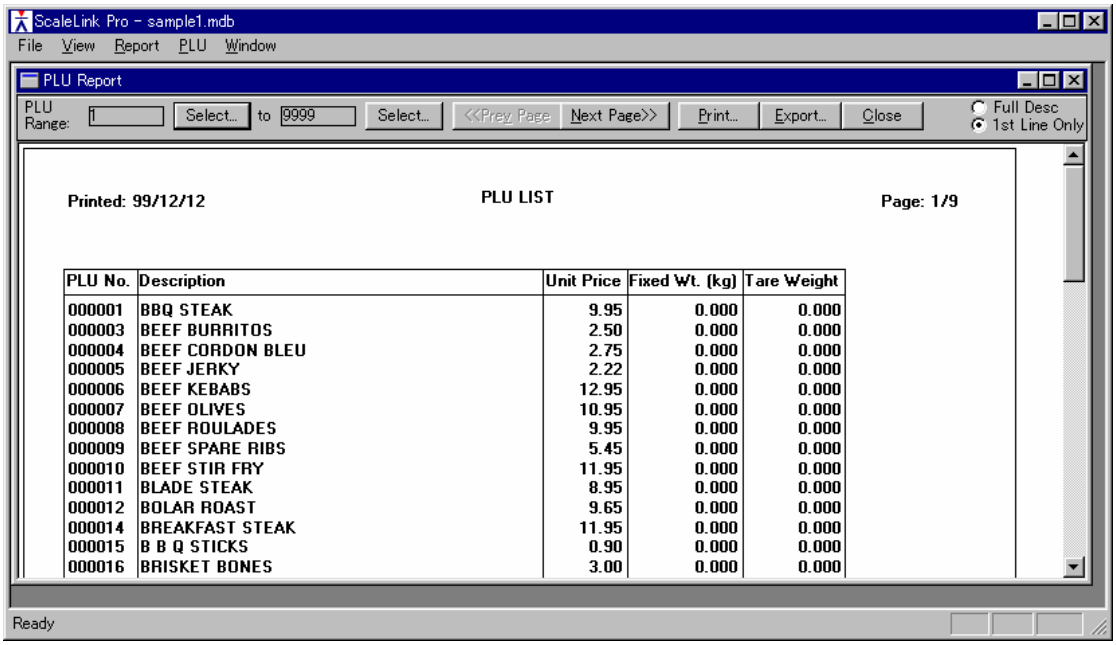
The PLU report lists the PLU number, PLU description, and a number of additional PLU fields such as the price. Which additional PLU fields are printed can be configured when ScaleLink Pro is installed, but only as many parameters are printed as will fit on a single line. (The line length adjusts automatically based on the size of the printer paper.) Accordingly, if you wish to include more fields in the report, it is recommended that you set your printer to landscape mode.

To set landscape mode, click **Print Setup** in the File menu to open a printer setup dialog. You must set the printer page size and orientation before opening the report window for the report size to adjust automatically. (Note, however, that not all printers support landscape printing.)

The message reports list the message text only.

The operation for each type of report is the same. The following describes the procedure in the case of the PLU report.

1. If necessary, click **Print Setup** in the File menu to check the printer settings.
2. Click **PLU List** in the Reports menu to open a PLU report window.



3. Use the **Select** buttons to specify the range of PLUs to print, then click the **Print** button to start printing.
4. When finished, click the **Close** button to close the PLU Report window.

Report Window Operations

The following operations are available using the tool bar at the top of the PLU Report window.

Operation	Explanation
Specify range of PLUs to print	Use the **Select** buttons to specify the start and end PLU or message numbers for the report.
View report on-screen	Use the **<<Prev Page** and **Next Page>>** buttons to step through the report pages on-screen. If necessary, use the scroll bars to scroll sections of the report page into view.
Preview printing	Click **Print Preview** in the File menu.
Start printing	Click the **Print** button or click **Print** in the File menu.
Export to text file	Click the **Export** button to open a File Save As dialog to specify the file in which to save. Click OK to output the report contents to the text file. Each line of the report is output with the fields separated by commas. **NOTE**: You can export the entire PLU database using the text file export function. (See *Chapter 8 Importing and Exporting Data*.)
Full desc/ 1st line only	Click these buttons to switch between displaying the full PLU description text or the first line only.
Show extra message text	Select the **Show Extra Message** and/or **Show Nutrition** command in the **Report** menu to specify whether or not to include extra message and/or nutrition text in the report. The text appears after the PLU description. **Note**: **Show Nutrition** is only available in Hong Kong.
Show price zone data	If price zones are enabled, select the **Show Price Zone Data** command in the **Report** menu to specify whether or not to include price zone values in the report. When turned on, this lists the value of price zone fields for each zone. When turned off, only the default value is listed.
Active or Inactive PLUs only	Select the **Show Active PLUs Only**, **Show Inactive PLUs Only**, or **Show Both Active and Inactive PLUs** commands in the **Report** menu to select which PLUs to include in the report.
Close window	Click the **Close** button.

7.2 Production Reports

The following production reports are available.

- PLU Production*
- Department and Group Production
- Daily and Weekly Totals*
- Operator Totals
- Operator Override Totals
- Hourly Totals

* For Hong Kong, these include rewrap and next day totals.


NOTE

Operator totals and hourly totals are not available for some scales versions. If not available, the **Operator Totals** and/or **Hourly Totals** commands do not appear in the Reports menu.

Accumulating Production Data Totals

Before you can display any production reports, you must load the production data from the scales (click on **Load Production Data from Scales** in the Comms menu).

The scales accumulate production data by PLU, by operator, and by hour. The totals on the scales are cleared each time they are read by ScaleLink Pro.

In other words, the scales do not accumulate daily and weekly PLU totals. If you require accurate hourly, daily and weekly reporting, it is important that you load the production data from the scales on a regular basis (at least once a day, preferably).

In this case, it is recommended that you use the Scheduler to automatically load the production data from the scales at preset intervals.

Production Data Files

The production data loaded from the scales is stored in a database. The database file name is the same name as the PLU database file, but the suffix "Prod":

Example: PLU database: Bakery.MDB ⇒ Production data database: BakeryProd.MDB

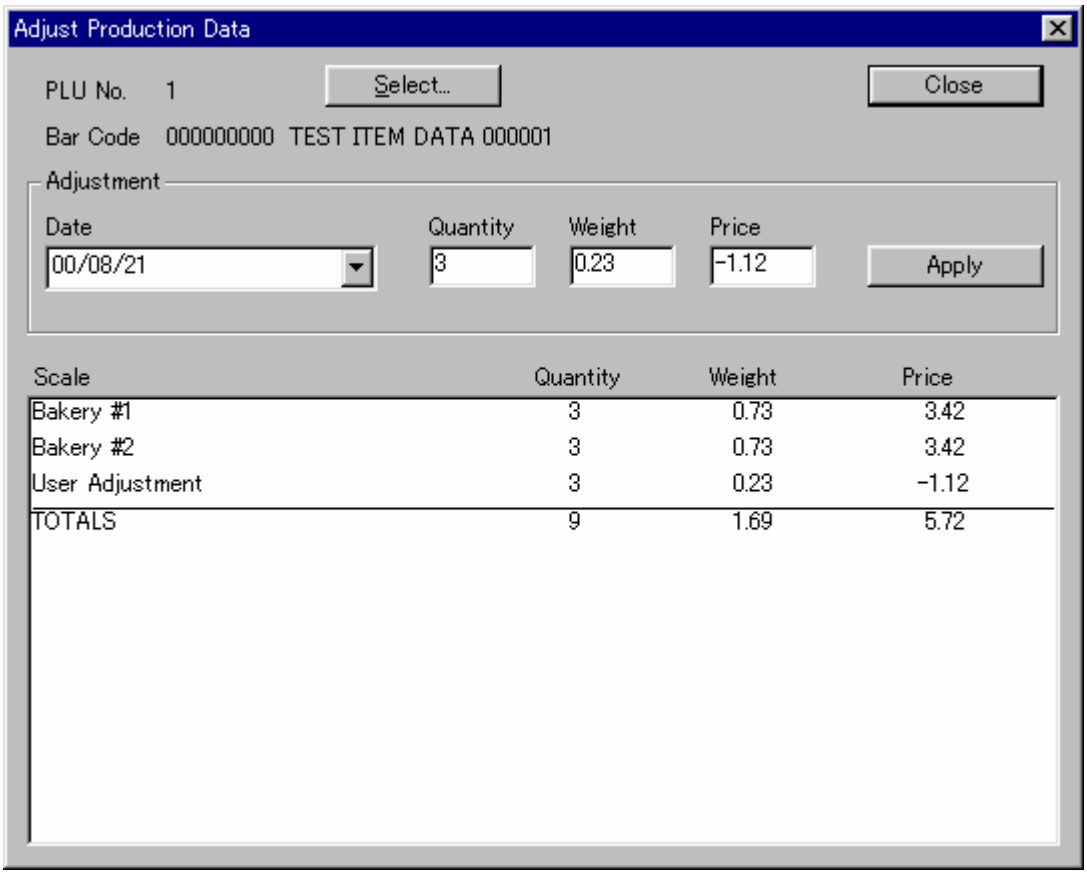
The following file operations are available:

- Production data is automatically deleted after a specified time. See Appendix A *Installing ScaleLink Pro at a New Store* for details.
- You can clear the production data totals at any time via the **Clear Production Totals on PC** command in the Comms menu.
- Production data can be exported to a text file. The exported data can be imported into other software packages such as Excel for more sophisticated reporting.
- Production data totals can be adjusted from within ScaleLink Pro. See *Adjusting Production Data Totals* below.

Adjusting Production Data Totals

A facility is provided to modify the received production data from within ScaleLink Pro. The procedure is as follows.

1. Click **Adjust PLU Production Data** in the **Comms** menu.
2. Click **Select** and select the PLU to modify.
3. Select the date to modify.
4. Each time you change the PLU or date selection, the lower half of the dialog updates with the production data from each scale for that PLU/date combination, including any existing user adjustments.
   Enter your adjustments in the **Quantity**, **Weight**, and **Price** fields, then click the **Apply** button to update the database.
   Your adjustments appear in the production data list in the row titled "User Adjustments".
5. Repeat steps 2 to 4 for each PLU/date to be adjusted.



The adjustments are treated as another scale in the production data reports and export functions.
When exporting production data, adjustments appear as scale ID = 32767.

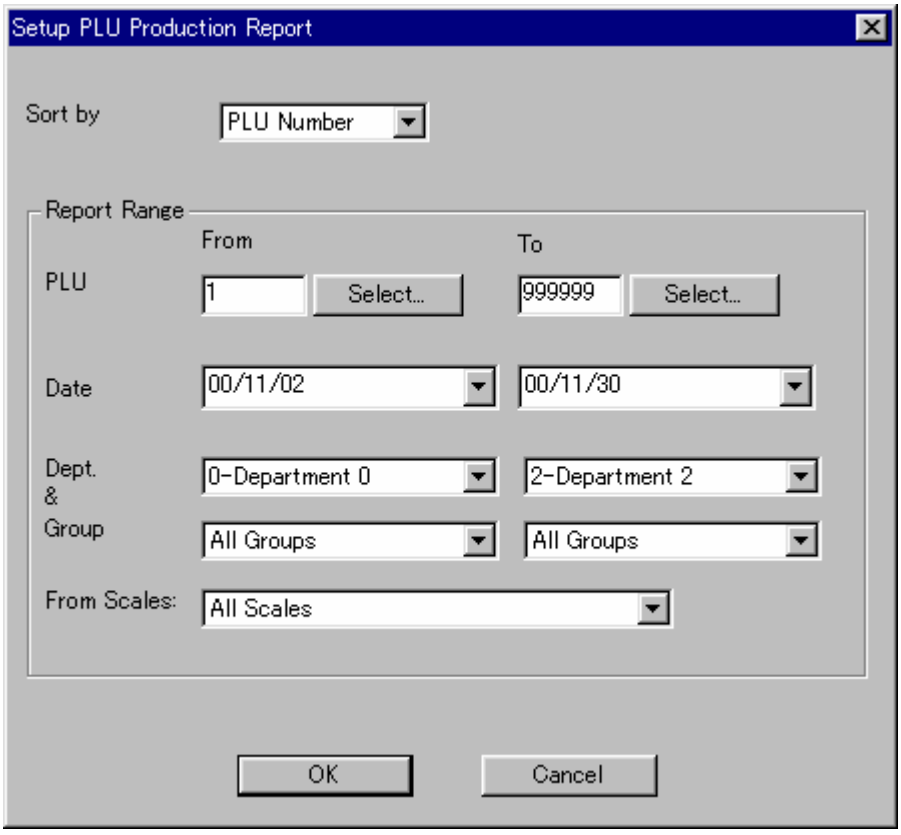
PLU Production Report

The PLU production report lists the production totals (quantity, total weight, and total value) for each PLU. You can control the report content as follows.

- The range of PLUs to display based on PLU number and/or department+group code.
- The date range for the PLU totals
- Calculate totals for a specified scale (comms link) only or for all scales.
- Sort PLU totals by PLU number, quantity, weight, or value.

The procedure for printing a PLU production report is as follows.

1. If necessary, click **Print Setup** in the File menu to check the printer settings.
2. Click **PLU Production** in the Reports menu to open a report setup dialog.
3. Select the various options from the dialog, then click OK to open the report window.



4. The operation of the report window is described below. If you wish to print the report, click the **Print** button.
5. When finished, click the **Close** button to close the report window.

Report Window Operations

The following operations are available using the tool bar at the top of the report window.

Operation	Explanation
Specify range of PLUs to print	Use the **Select** buttons to specify the start and end PLU numbers for the report.
View report on-screen	Use the **<<Prev Page** and **Next Page>>** buttons to step through the report pages on-screen. If necessary, use the scroll bars to scroll sections of the report page into view.
Preview printing	Click **Print Preview** in the File menu.
Start printing	Click the **Print** button or click **Print** in the File menu.
Export to text file	Click the **Export** button to open a File Save As dialog to specify the file in which to save. Click OK to output the report contents to the text file. Each line of the report is output with the fields separated by commas. **NOTE**: You can also use the text file export function to export the raw totals data to a file.
Close window	Click the **Close** button.

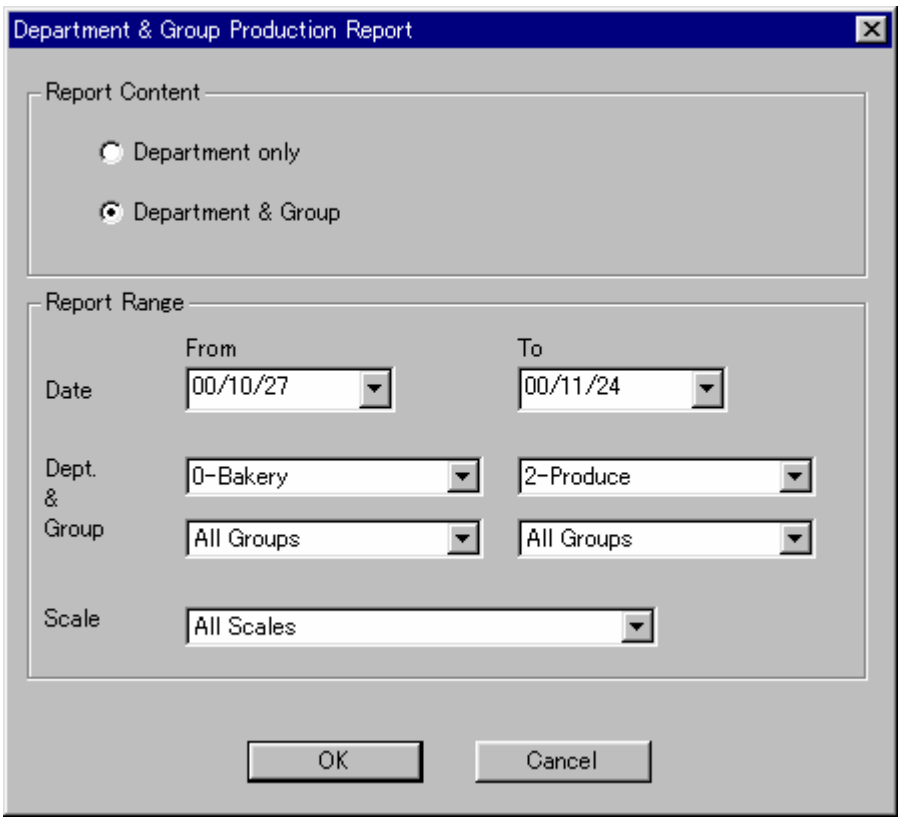
Department and Group Production Report

The Department and Group production report lists the production totals (quantity, total weight, and total value) for each department and group. You can control the report content as follows.

- Select totals by department only or by department and group
- The date range for the totals
- Calculate totals for a specified scale (comms link) only or for all scales.

The procedure for printing a Department and Group production report is as follows.

1. If necessary, click **Print Setup** in the File menu to check the printer settings.
2. Click **Dept. and Group Production** in the Reports menu to open a report setup dialog.
3. Select the various options from the dialog, then click OK to open the report window.



4. The operation of the report window is described below. If you wish to print the report, click the **Print** button.
5. When finished, click the **Close** button to close the report window.

Report Window Operations

The following operations are available using the tool bar at the top of the report window.

Operation	Explanation
View report on-screen	Use the **<<Prev Page** and **Next Page>>** buttons to step through the report pages on-screen. If necessary, use the scroll bars to scroll sections of the report page into view.
Preview printing	Click **Print Preview** in the File menu.
Start printing	Click the **Print** button or click **Print** in the File menu.
Export to text file	Click the **Export** button to open a File Save As dialog to specify the file in which to save. Click OK to output the report contents to the text file. Each line of the report is output with the fields separated by commas. **NOTE**: You can also use the text file export function to export the raw totals data to a file.
Close window	Click the **Close** button.

Daily and Weekly Totals Reports

The daily totals and weekly totals reports list the production totals (quantity, total weight, and total value) for a specified range of PLUs totaled by date (day or week).

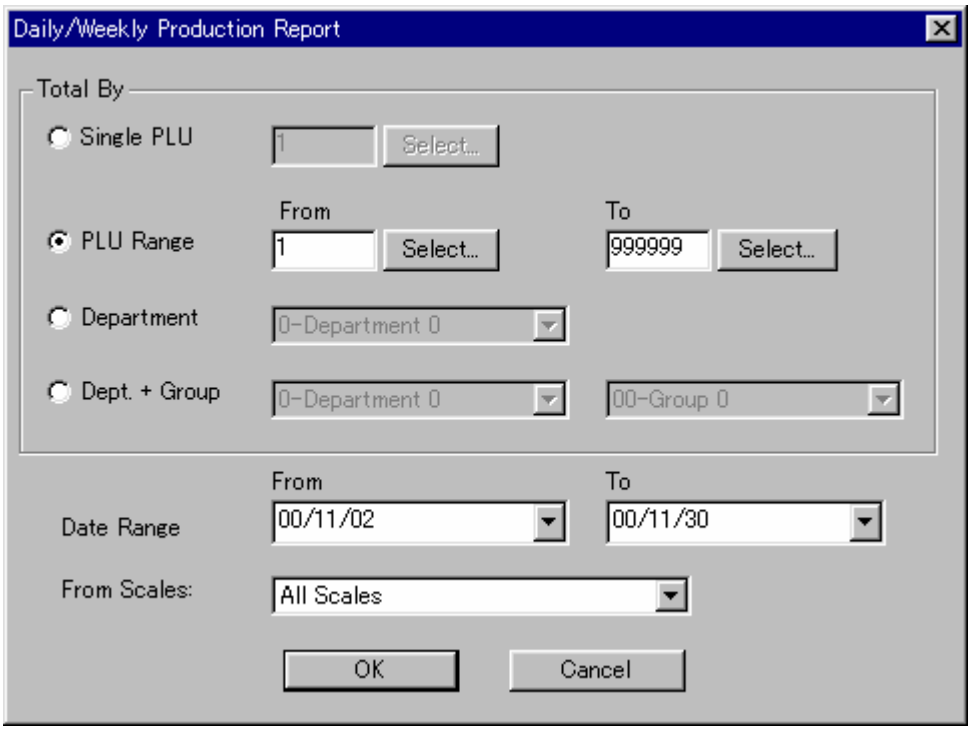
The following options are available for specifying the range of PLUs to total.

- List totals for a single PLU or a specified range of PLU numbers.
- List totals for all PLUs with a specified department* and group code.
- Calculate totals for a specified scale (comms link) only or for all scales.
- Specify the range of dates to list.

* The "department code" means the department field in the PLU. This is not the same as the *Departments* function (an optional function that may not be used on your copy of ScaleLink Pro).

The procedure for printing a daily or weekly report is as follows.

1. If necessary, click **Print Setup** in the File menu to check the printer settings.
2. Click **Daily Totals** or **Weekly Totals** in the Reports menu to open a report setup dialog.
3. Select the various options from the dialog, then click OK to open the report window.



4. The operation of the report window is the same as for the Department and Group production report described above. If you wish to print the report, click the **Print** button.
5. When finished, click the **Close** button to close the report window.

Operator Totals and Operator Override Totals Reports

The operator totals report lists the production totals (quantity, total weight, and total value) for each operator. The operator override report lists discounts and unit price overrides for each operator, but is only available on the AstraXT. Operators are identified by the operator number, but you can assign a name to each operator using the Operators function.

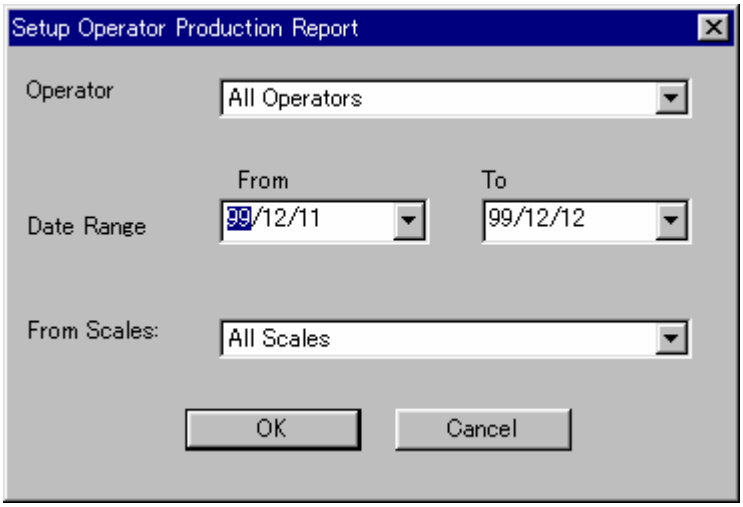
The operation is the same for both reports.

You can control the report content as follows.

- Specify the date range for calculating the operator totals.
- Calculate totals for a specified scale (comms link) only or for all scales.

The procedure for printing an operator totals report is as follows.

1. If necessary, click **Print Setup** in the File menu to check the printer settings.
2. Click **Operator Totals** or **Operator Totals (Overrides)** in the Reports menu to open a report setup dialog.
3. Select the various options from the dialog, then click OK to open the report window.



4. The operation of the report window is the same as for the Department and Group production report described above. If you wish to print the report, click the **Print** button.
5. When finished, click the **Close** button to close the report window.

Hourly Totals Report

The hourly production report lists the production totals (quantity, total weight, and total value) by hour. You can control the report content as follows.

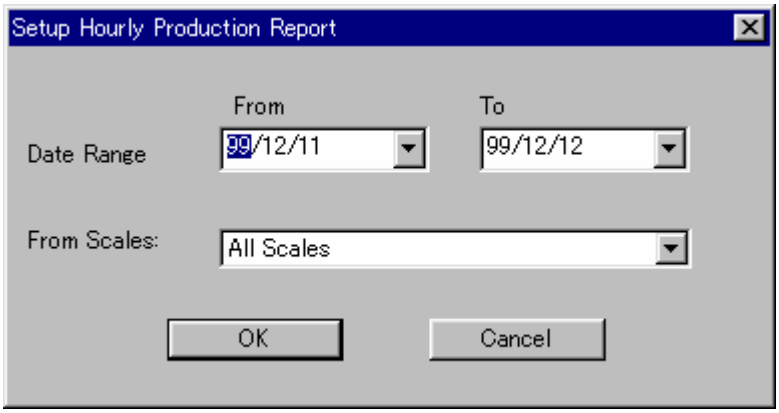
- Specify the date range for listing the hourly totals.
- List totals for a specified scale (comms link) only or for all scales.

NOTE

The scales continue accumulating hourly data indefinitely until the totals are read by ScaleLink Pro and cleared. This means that you must load the production data from the scales at least once a day to get meaningful hourly totals. If not, the hourly totals will include production from previous days.
The recommended method is to use the Scheduler to automatically load the production data from the scales at preset intervals.

The procedure for printing an hourly production report is as follows.

1. If necessary, click **Print Setup** in the File menu to check the printer settings.
2. Click **Hourly Totals** in the Reports menu to open a report setup dialog.
3. Select the various options from the dialog, then click OK to open the report window.



4. The operation of the report window is the same as for the Department and Group production report described above. If you wish to print the report, click the **Print** button.
5. When finished, click the **Close** button to close the report window.

7.3 SR-2000 alpha Image List Report

This report lists the SR-2000 alpha images. These are the images used in the SR-2000 alpha preset key function and are defined using **SR-2000 alpha Images** in the **Scales** menu.

To open the report window, select **Reports** -> **EMZ/SR** -> **SR-2000 alpha Images**. This opens a window listing all the images defined in the system.

The operation is the same as for the other reports described above. That is, use the **Next Page** and **Prev. Page** buttons to scroll through the report and click the **Print** button if you want to output the report to a printer. Click the **Close** button to close the window when finished.

8. Importing and Exporting Data

8.1 Text File Import

ScaleLink Pro has a flexible text file import function to allow data to be imported from other systems.

See *Appendix B Text File Formats and Operations* for a detailed explanation of the technical specifications of the standard text file format.

NOTE

Special custom formats may also be added from time to time for specific customers. These are not covered by the ScaleLink Pro documentation. Contact your Ishida agent if you require details.

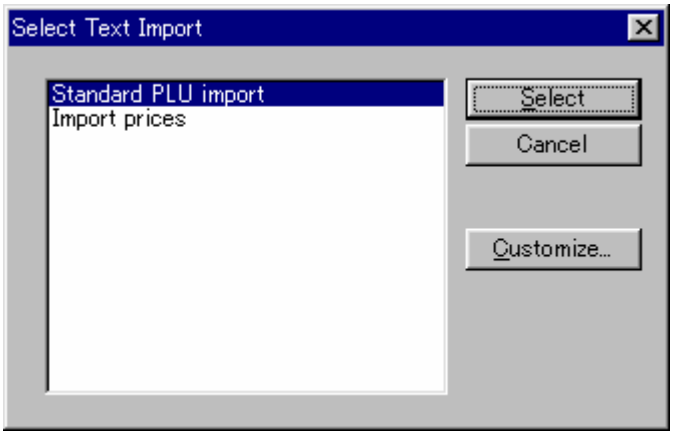
Using Pre-Defined Text File Import Operations

ScaleLink Pro has the ability to define standard text file import operations. This avoids the need to specify the import parameters each time you perform an import operation.

See *Setting Up Text File Import and Export* in Appendix A.2 for details on defining standard text file import operations.

The procedure for importing PLU and other scales data from a text file when standard text file import operations have been setup for your system is as follows.

1. Click on **Import from Text File** in the **Tools** menu.
2. A **Select Text Import** dialog opens listing the available import operations. Select the desired operation and click the **Select** button to start the import.
3. Alternatively, if you wish to specify the import settings directly, click the **Customize** button. Subsequent operation is described below.



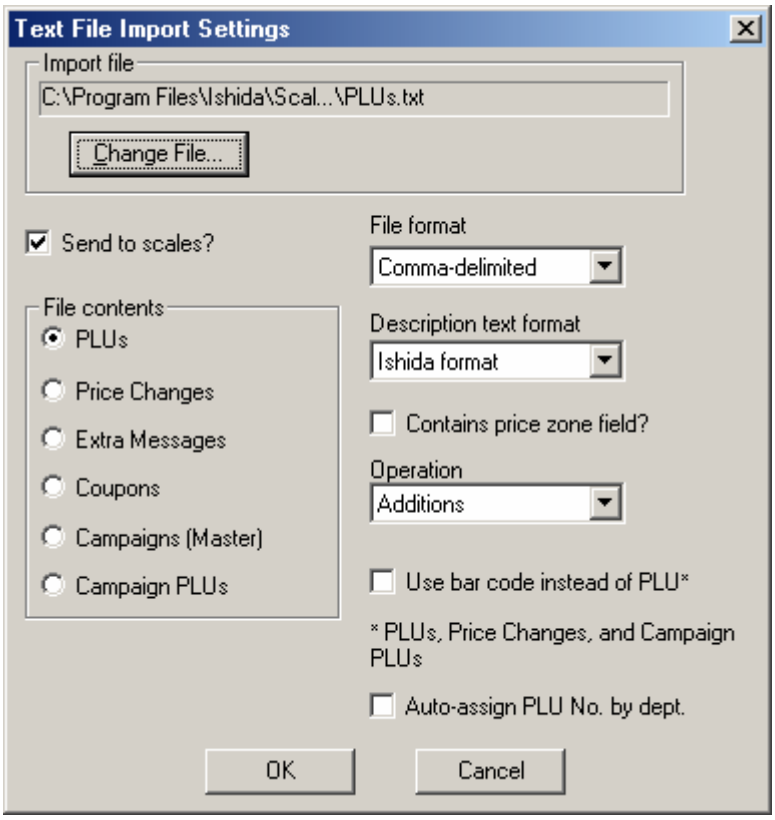
Specifying a Text File Import Operation Directly

If you clicked the **Customize** button in the above procedure, or if no standard text file import operations have been setup for your system, you can specify the import settings directly.

The procedure is as follows.

1. Click on **Import from Text File** in the **Tools** menu.
2. A **File Open** dialog appears for you to select the file to import.
3. Next the **Text File Import Settings** dialog opens for you to set the various import options.
   Select the type of data to import, the format and the operation.

   See *Appendix B Text File Formats and Operations* for details of the file format.



4. Click OK to start the import.

Text File Import Operation

ScaleLink Pro reads the data from the specified text file and updates changes in the database. If **Send to scales** is specified (and the scales are connected), changes are also transmitted to the scales.

For update operations, records are only sent to the scales if the data is modified. Records are not sent to the scales if the data in the text file is the same as in the database.

A price zone field can optionally be included for PLU and price change importing. The way the field is interpreted depends on how your copy of ScaleLink Pro is configured, as follows.

	ScaleLink Pro Mode		
	Price Zones Disabled	**Local Store Mode**	**Head Office Mode**
Price Zone Fields	**If price zone field = 0** Default values are updated **If price zone field ≠ 0** Not updated	**If price zone field = Local price zone** Price zone-specific values for local price zone are updated. **If price zone field ≠ Local price zone** Not updated	Price zone-specific values for specified price zone are updated.
Non-price Zone Fields	**If price zone field = 0** Default values are updated **If price zone field ≠ 0** Not updated	**If price zone field = Local price zone** Default values are updated. **If price zone field ≠ Local price zone** Not updated	Default values are updated.

Use Bar Code Instead of PLU

This option only applies to PLU, price change, and campaign PLU importing. It is ignored for other data. If selected, the PLU number field is assumed to contain a bar code (POS code). ScaleLink Pro searches its PLU database for a PLU with the same bar code and performs the PLU update or price change, etc. on that PLU.

Auto-Assign PLU Number by Department

This option only applies to PLU importing. It is ignored for other data. If selected, the PLU number field is ignored. Instead, ScaleLink Pro searches its PLU database for a PLU with the same bar code (POS code) as specified in the text file and updates that PLU. If no matching bar code is found (or if the text data does not contain a bar code field), the data is treated as a new PLU and a PLU number is assigned automatically based on the department. That is, the first unused PLU number in the range specified for the department is assigned (see *Setting Up Departments* in *Appendix A.2 Setting Up ScaleLink Pro*). If all PLU numbers in the specified range are already used, the first unused PLU number in the entire PLU number range is assigned and an error message displayed.

8.2 Text File Export

ScaleLink Pro can output PLU and other scales data to a text file. This is useful if you wish to transfer data to another software package such as Excel.

Text File Format

ScaleLink Pro provides two standard text file formats (comma-delimited and TAB-delimited). In both cases, all data from the specified database table is output one line per record with fields delimited by either comma or TAB characters.

An option is also provided to output a line containing the field names ("column titles") as the first line of the text file. These are useful for identifying the meaning of each column when the text file in imported into Excel, for example.
Column titles are also used by the text file import function to identify the order in which fields appear in the text file.

Special custom formats may also be added from time to time for specific customers. These are not covered by the ScaleLink Pro documentation. Contact your Ishida agent if you require details.

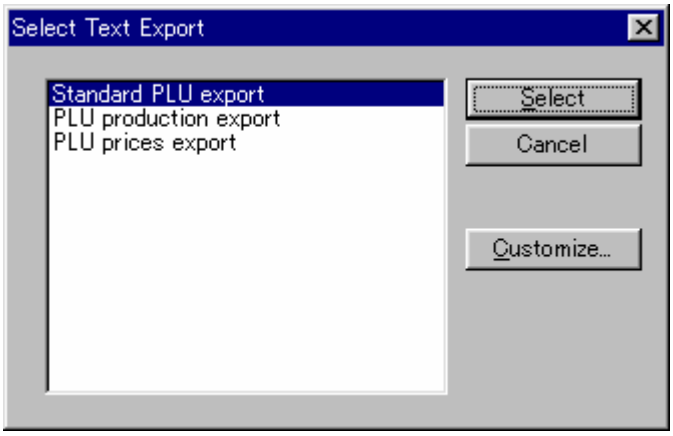
Using Pre-Defined Text File Export Operations

ScaleLink Pro has the ability to define standard text file export operations. This avoids the need to specify the export parameters each time you perform an export operation.

See *Setting Up Text File Import and Export* in Appendix A.2 for details on defining standard text file export operations.

The procedure for exporting PLU and other scales data to a text file when standard text file import operations have been setup for your system is as follows.

1. Click on **Export to Text File** in the **Tools** menu.
2. A **Select Text Export** dialog opens listing the available export operations. Select the desired operation and click the **Select** button to start the export.
3. Alternatively, if you wish to specify the export settings directly, click the **Customize** button. Subsequent operation is described below.



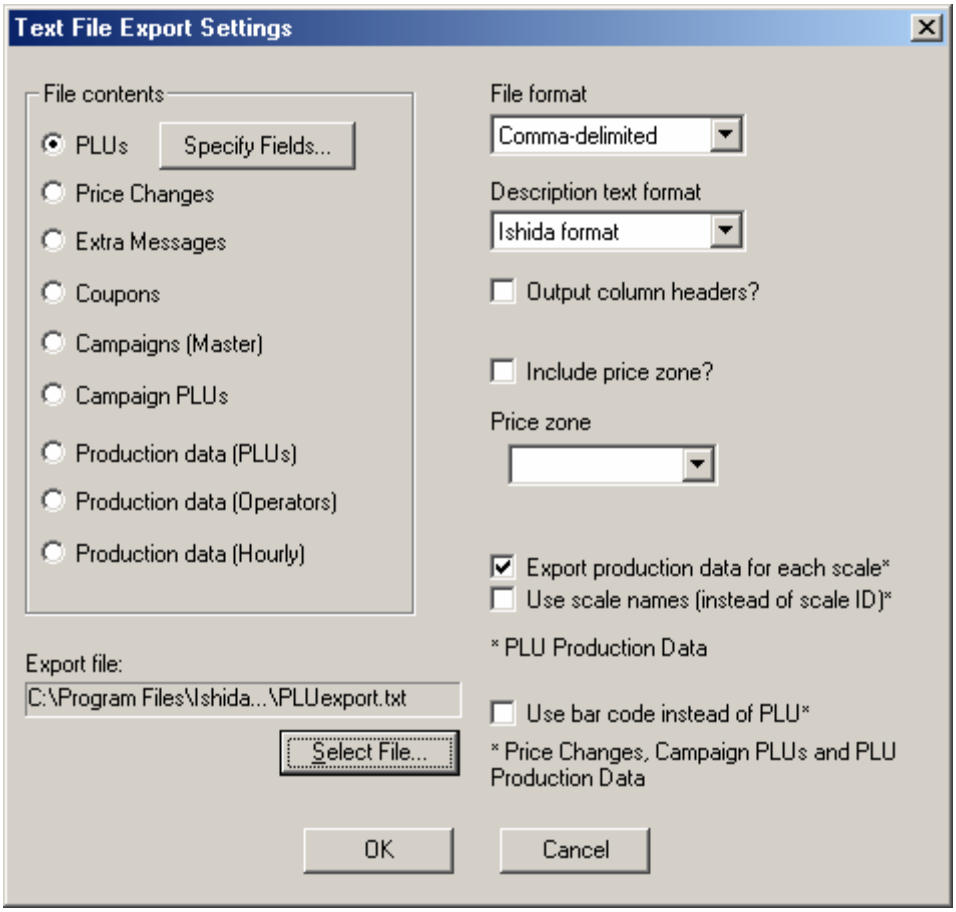
Specifying a Text File Export Operation Directly

If you clicked the **Customize** button in the above procedure, or if no standard text file export operations have been setup for your system, you can specify the export settings directly.

The procedure is as follows.

1. Click on **Export from Text File** in the **Tools** menu.
2. A **File Save As** dialog appears for you to select the output text file.
3. Next the **Text File Export Settings** dialog opens for you to set the various export options.
   Select the type of data to export, the file format, and whether to include a line of column titles. The **Specify Fields** button lets you select which fields you want to export and also to specify the sequence of fields in the output file (PLU export only).

   (See *Appendix B Text File Formats and Operations* for details of the export format.)



4. Click OK to start the export.

8.3 Database Import

ScaleLink Pro can import data from external databases using ODBC.

However, the database schema must use the table and column names expected by ScaleLink Pro. Contact your Ishida agent for details.

A feature of the database data format is that formatted text (PLU description and extra message text, etc.) is stored with each line's text and font information in separate fields. (ScaleLink Pro database files store the text using the proprietary Ishida format.)

Using Pre-Defined Database Import Operations

ScaleLink Pro has the ability to define standard database import operations. This avoids the need to specify the import parameters each time you perform an import operation.

The procedure for importing PLU and other scales data from an external database when standard database import operations have been setup for your system is as follows.

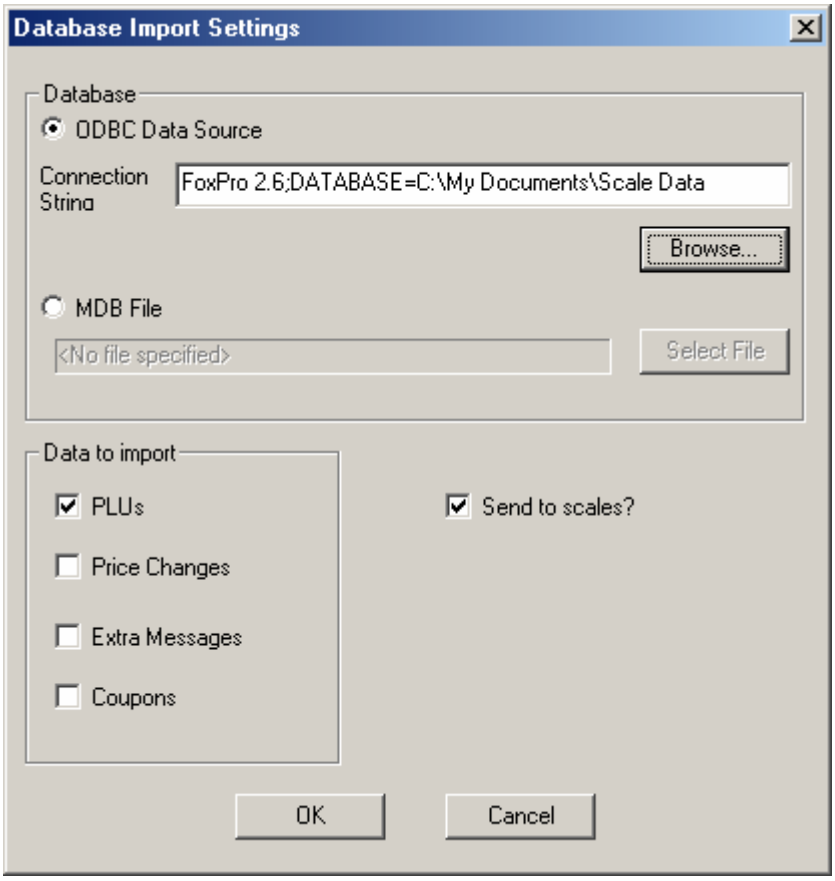
1. Click on **Import from Database** in the **Tools** menu.
2. A **Select Database Import** dialog opens listing the available import operations. Select the desired operation and click the **Select** button to start the import.
3. Alternatively, if you wish to specify the import settings directly, click the **Customize** button. Subsequent operation is described below.

Specifying a Database Import Operation Directly

If you clicked the **Customize** button in the above procedure, or if no standard database import operations have been setup for your system, you can specify the import settings directly.

The procedure is as follows.

1. Click on **Import from Database** in the **Tools** menu.
2. A **Database Import Settings** dialog appears for you to set the import parameters, as shown on the next page.
3. Select either an ODBC data source or a Microsoft Access (*.MDB) database file. If importing from an ODBC data source, enter the connection string. Leaving this field blank opens a dialog for you to select the data source.
4. In the lower half of the dialog, select the type of data to import (more than one type can be selected) and whether to send the data to the scales.
5. Click OK when ready to start the import.



Import Operation and Price Zones

The import operation loads the data from the external database and updates the current ScaleLink Pro database. New records are added and existing records are overwritten.

The PLU and price change tables include a price zone field. The way the field is interpreted depends on how your copy of ScaleLink Pro is configured, as follows.

	ScaleLink Pro Mode		
	Price Zones Disabled	**Local Store Mode**	**Head Office Mode**
Price Zone Fields	**If price zone field = 0** Default values are updated **If price zone field ≠ 0** Not updated	**If price zone field = Local price zone** Price zone-specific values for local price zone are updated. **If price zone field ≠ Local price zone** Not updated	Price zone-specific values for specified price zone are updated.
Non-price Zone Fields	**If price zone field = 0** Default values are updated **If price zone field ≠ 0** Not updated	**If price zone field = Local price zone** Default values are updated. **If price zone field ≠ Local price zone** Not updated	Default values are updated.

8.4 Loading PLUs and Other Data from the Scales

If you are using the on-line (ID-ENQ) communications link, you can load PLU and other scale data from a scale. Note, however, that available data differs depending on the scale model.

Procedure for Loading Data from the Scales (ID-ENQ)

This loads PLU data only from the scales.

1. Start ScaleLink Pro. If necessary, select **New Database** from the File menu to create a new empty database.
2. Select **Transmit/Receive Scale Data** from the Comms menu to open the Communication Center dialog. This dialog provides operations for sending and receiving scale data.
3. In the Communication Center dialog, select the scale to receive from and the type o data to receive, then click the **Receive from Scale** button.
4. The progress of the data transfer is displayed in the status bar at the bottom of the dialog. If successful, the received data is updated in the ScaleLink Pro database.

9. Advanced Features and Utilities

9.1 Event Logging

9.1.1 Event Log

ScaleLink Pro can generate an event log recording changes to the database and other significant operations. This can help you work out what happened in the event of problems.

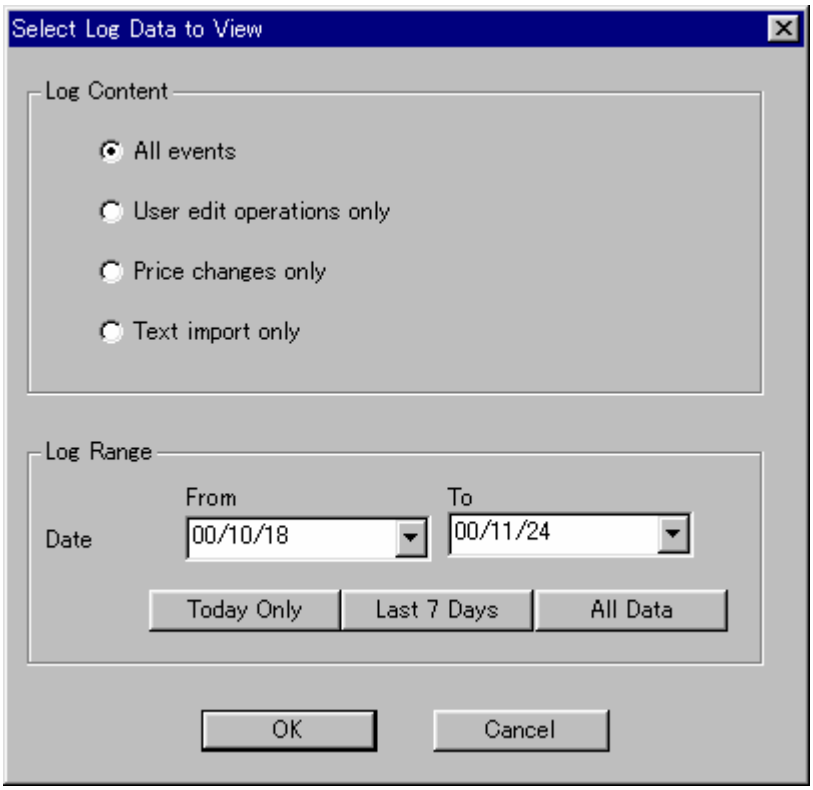
You can view the log by clicking **View Log** in the Tools menu.

Whether to generate an event log and related settings are specified as part of the general setup. (See Appendix A *Installing ScaleLink Pro at a New Store* for details.)

Viewing the Log

A number of different log display options appear under the **View Log** sub-menu in the Tools menu.

Selecting **Customize...** opens the following dialog for you to specify the range of the event log to display.



Select the type of events to display in the top half of the dialog, and specify the date range in the bottom half of the dialog.

Clicking **OK** outputs the selected data to a temporary text file and opens Notepad to view the file contents.

9.1.2 PLU Update and Exception Log

In addition to the general event log described above, two special logs are provided to record changes to PLU data (the *PLU Update Log*) and PLUs that are not successfully sent to a particular scale (*PLU Exception Log*). The file names and length of time that log entries are kept in the files are specified as part of the general setup. (See Appendix A *Installing ScaleLink Pro at a New Store* for details.)

For the PLU Exception Log, note that PLUs are not logged as unsent until you exit ScaleLink Pro. This is because ScaleLink Pro automatically attempts to resend data to off-line scales, so a PLU record is not considered to be unsent until automatic resending is abandoned (when you exit ScaleLink Pro).

Both the PLU Update Log and PLU Exception Log record PLU operations performed by the Scheduler as well as by the main ScaleLink Pro program.

No menu command is provided to view these log files. Instead, simply open the files in Windows Notepad or some other text editing or viewing program.

9.1.3 Scale Status Log

If enabled in the setup (See *Custom Log Settings* in Appendix A), this outputs the current status of each scale to a text file when logging is invoked. Logging can either be invoked manually by selecting **Update Scale Status Log** from the **Tools** menu or by clicking the icon in the toolbar. Alternatively, the scheduler can be used to invoke logging at periodic intervals.

This log is typically generated automatically using the scheduler and used as a quick way for the network administrator to check the current scale status without needing to start up the Scalelink Pro application.

A function is also available in the scheduler to e-mail the results of the scale status report to designated e-mail addresses. The addresses and other e-mail settings are specified by selecting **e-Mail Settings** from the **Tools** menu. The e-mail function is not available in all countries. Contact your Ishida agent for details.

9.1.4 Text File Import Logs

These logs store details of PLU text import operations. The content includes a summary of import operations performed, details of what data was updated in each PLU record, and details any errors (such as off-line scales) that occurred when sending the updated data to the scales.

The logs are provided for specific customers and the operation may vary depending on how your copy of Scalelink Pro is configured. Contact your Ishida agent if you require a similar logging function for your site.

9.1.5 Communication Log

A separate communications log function is also provided. This logs all traffic on the communication links and can be used to analyze any communication-related problems. Separate logs can be created for each communication link. The maximum log file size can be specified to prevent these files from becoming too large. In this case old data is deleted from the beginning of the log files each time ScaleLink Pro starts. (See *Setting Up ID-ENQ Communications* in Appendix A *Installing ScaleLink Pro at a New Store* for details.)

9.2 Departments

The departments feature is useful in stores where you wish to manage the PLU and other scale data separately for each department.

This *Department* feature is not the same as the department and group code used in the PLU data.

The feature works by storing the information for each department in a separate database.

The currently selected department is shown in the title bar of the PLU Search and Edit windows. All ScaleLink Pro operations including editing and displaying data only apply to that department. Similarly, data is only sent to or received from the department's designated master scale.

To change the selected department, click **Change Department** from the **File** menu and select the department from the displayed list.

See Appendix A *Installing ScaleLink Pro at a New Store* for details on how to define the departments for your store.

The *Departments* feature is optional. Also, the user access function gives the system administrator the option of restricting a user's access to a designated department only.
The Change Department command does not appear in the File menu if your copy of ScaleLink Pro is not configured for departments or if your user settings restrict you to a single department only.

9.3 PLU Range Profile

The PLU range profile function is used to restrict which PLUs are visible in ScaleLink Pro. It is intended for multi-store operation where the same master file (PLU database) is used for all stores, but where not all stores carry the same products.

The PLU range profile function specifies ranges of PLU numbers to exclude from all ScaleLink Pro screens and operations. In this way, ScaleLink Pro can be made to only show those PLUs that are actually used in the store, making searching for PLUs easier.

The PLU range profile is stored in a separate file (extension *.PRF), allowing a different profile to be used for each copy of ScaleLink Pro.

Also, a PLU profile file can be specified in your the user access settings.

Operation

Once the profile is loaded, no special operation is required. ScaleLink Pro functions as normal except that PLUs in the restricted range are no longer visible. Similarly, you cannot add a new PLU with a number in the restricted range. (This also applies to PLUs loaded from a text file, Data Save/IF21FD file, or directly from the scales. In this case, a message appears to notify you if PLUs have not been imported because they are excluded by the PLU range profile.)

The following table lists the operations for administering the PLU range profile.

Operation	Explanation
Setting the PLU range profile	Click **PLU Range Profile** in the **Setup** menu to open a dialog to edit the PLU profile. The dialog allows you to add, edit, or delete ranges of PLU numbers. PLU numbers in the specified ranges are excluded from all ScaleLink Pro screens and operations.

9.4 PLU Active/Inactive

This feature allows you to mark selected PLUs as inactive. This means the PLU is deleted from the scale, but remains in the database and appears on ScaleLink Pro screens.

Inactive PLUs appear red in the PLU Search window.

If this feature is enabled, the following methods are available to set the PLU active/inactive status.

- In the PLU Search window
  Select the PLU in the list, then click the Active/Inactive button in the toolbar.
- In the PLU Edit window
  Set the active/inactive status using the radio buttons at the top right of the PLU Edit window.

9.5 Batch Mode

Batch mode is used to make changes to the PLU and other scales data without updating the database and without sending the changes to the scales. Instead, the changes are stored in a batch file that can be loaded at a latter time.

This allows you to enter changes in advance, then load all the changes at once.

Another use for the batch mode feature is in a multi-store environment. You can use batch mode to make changes to a central database then distribute the resulting batch file to each store where it can be used to update the store's own copy of the database. To provide flexibility, the batch file load function allows the local store user to select which changes to load.

The key features of batch mode are:

- Changes made during batch mode do not update the database or scales.
- Changes are saved in a batch file that can be loaded at a latter time.
- All changes made during batch mode disappear when you exit batch mode (the database returns to the state when batch mode started)
- When loading a batch file, you can view the changes beforehand and exclude changes you do not wish to update.
- You can use the Scheduler to automatically load a batch file at a preset time.
- Batch mode changes made to one database can be loaded into a different database. (Useful for distributing updates in a multi-store environment.)
- A single batch file can contain changes for more than one department.

Using Batch Mode

The procedure for using batch mode is as follows

1. Select **Start Batch Mode** from the **Tools** menu.
2. Specify the name of the batch file in the Save As dialog. If you specify an existing file, ScaleLink Pro asks you whether to delete any existing data in the file.
3. Edit PLU or other scales data. Any operation that updates the database will be stored in the batch file instead.
4. When you have entered all the desired changes, select **End Batch Mode** from the **Tools** menu.
   This restores the database to the state when you started batch mode.

Batch Mode and Departments

If your copy of ScaleLink Pro is configured for multiple departments, you can save batch changes for more than one department in the same batch file. Just use **Change Department** in the File menu to switch between departments as usual.

If loading the batch file into a different system, data for a particular department is only loaded if the destination system contains a department with the same name. (Names are not case sensitive.)

Loading a Batch File

The procedure for loading a batch file is as follows

1. Select **Load Batch File** from the **Tools** menu.

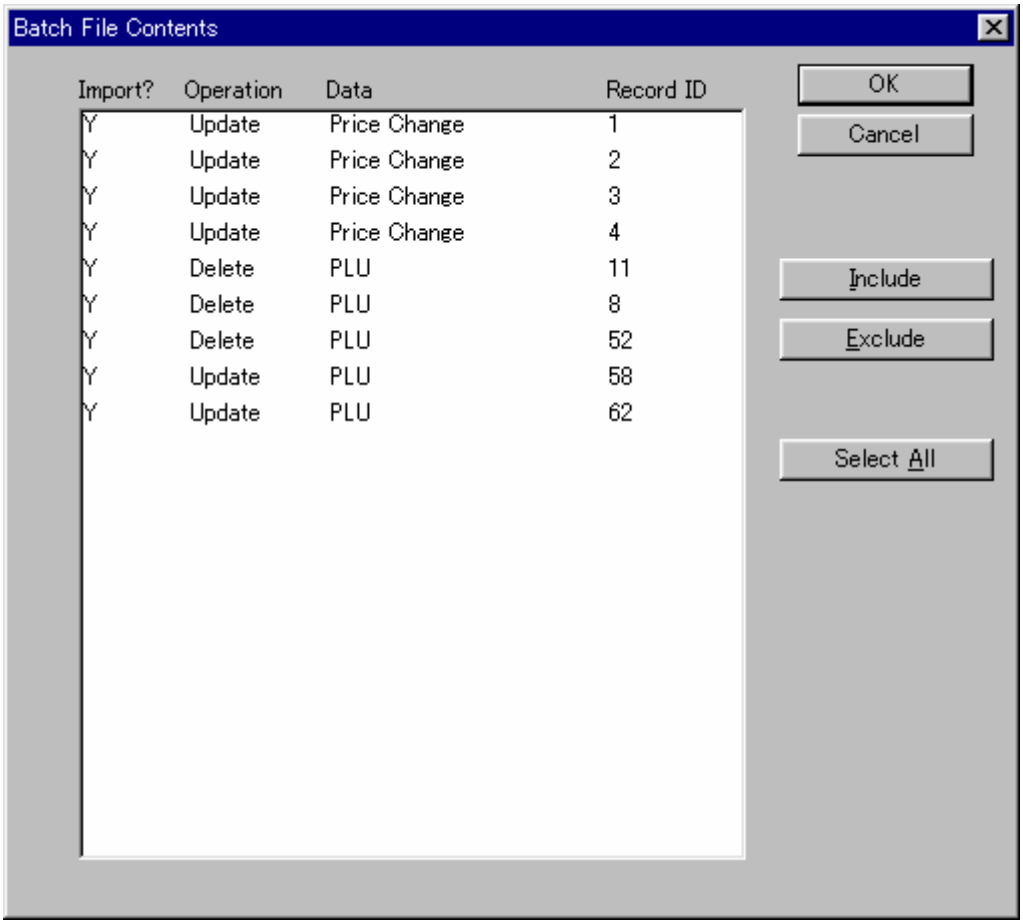
2. A dialog opens to select the batch file to load.
   Also, use the check boxes at the bottom of the dialog to specify whether to view the file contents before loading and whether to send the data to the scales.

3. If you selected **View File Contents**, a dialog opens listing all the changes in the batch file.
   The dialog content depends on how your system is configured

   Multiple Departments
   If the batch file contains changes for more than one department, the dialog lists the departments contained in the file. Use the **Include** and **Exclude** buttons to specify whether or not to load the data for each department. Use **View Records** to display the dialog (shown below) for viewing the individual records in the batch file.

   Single Department
   If your system is not configured for departments or the batch file only contains data for a single department, the dialog shown below appears immediately.

   Select records in the list and use the **Include** and **Exclude** buttons to specify whether or not to load each record.
   Click OK when finished.



4. The selected changes in the batch file are loaded into the database and (optionally) sent to the scales.

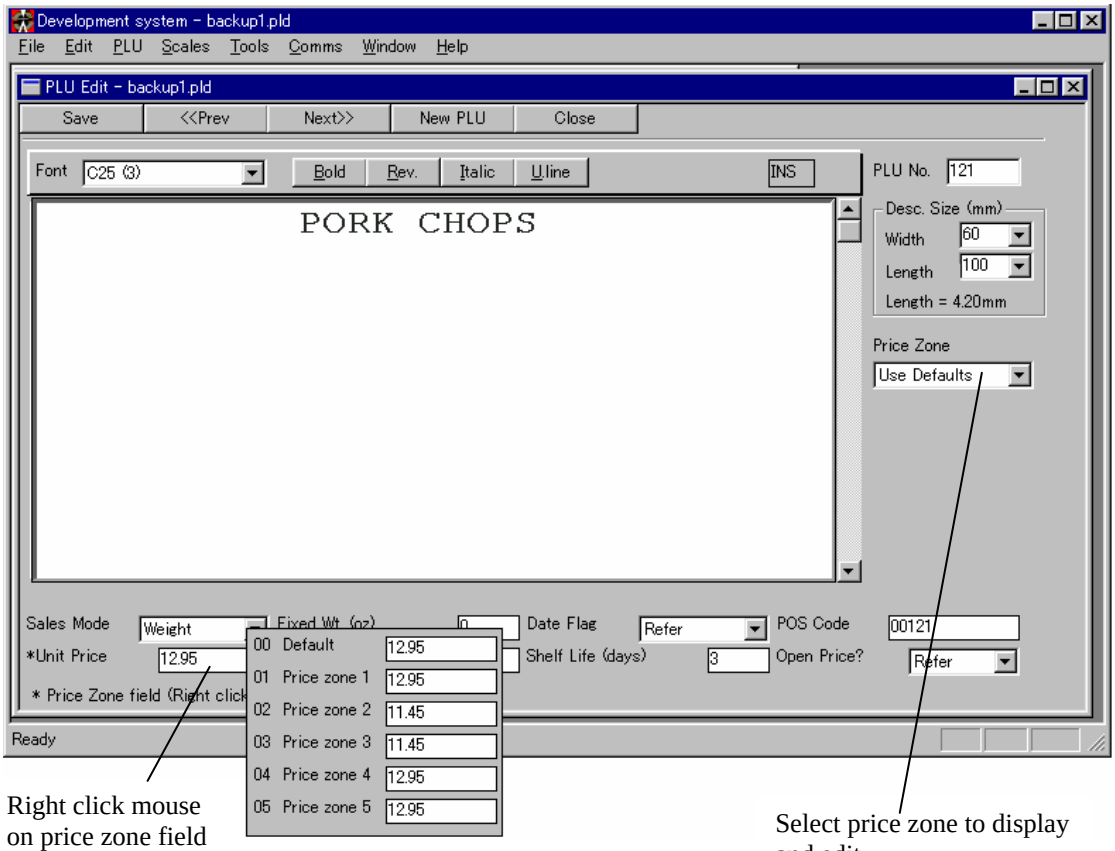
9.6 Price Zones

Price zones are intended for use in a multi-store environment. The price zone feature allows different values to be set for specific data fields in each PLU. Typically, this is used to set different prices for different groups of stores (hence the name "price zones"). However, the price zone feature can be used to set store-specific values for most PLU data fields (the main exception is the PLU description).

Which PLU fields can have price zone-specific values is defined as part of the setup. (See Appendix A *Installing ScaleLink Pro at a New Store* for details.)

The setup also defines the price zone names and the operation mode. Three different price zone operation modes are available:

Mode	Explanation
Disabled	Turns off the price zone feature. Any price zone data in the database is ignored and all operations use the default data.
Local Store	The price zone for the store is specified in the setup. ScaleLink Pro operation is the same as when the price zone feature is disabled except that the data for the specified price zone is displayed instead of the default data. Any changes made to price zone fields in local store mode are set as price zone-specific data.
Head Office	The operation of the PLU Edit window changes as shown below to allow you to edit the data for all price zones:



Right click mouse on price zone field to list the field values for each price zone.

Select price zone to display and edit.

9.7 User Access Control

The ScaleLink Pro system administrator can setup a list of authorized users. In this case, a logon dialog opens when you start ScaleLink Pro asking you to specify your user name and password.

The ScaleLink Pro menus only display those commands that are permitted in your user setup.

In addition to specifying which functions you can use, your user setup may also specify the database or department and the PLU profile for your ScaleLink Pro session.

9.8 Scheduler

The scheduler is used to automatically execute specified operations at a specified time.

You cannot start the scheduler from within ScaleLink Pro. Instead, a separate Scheduler icon appears in the ScaleLink Pro sub-menu of the Windows Start menu.

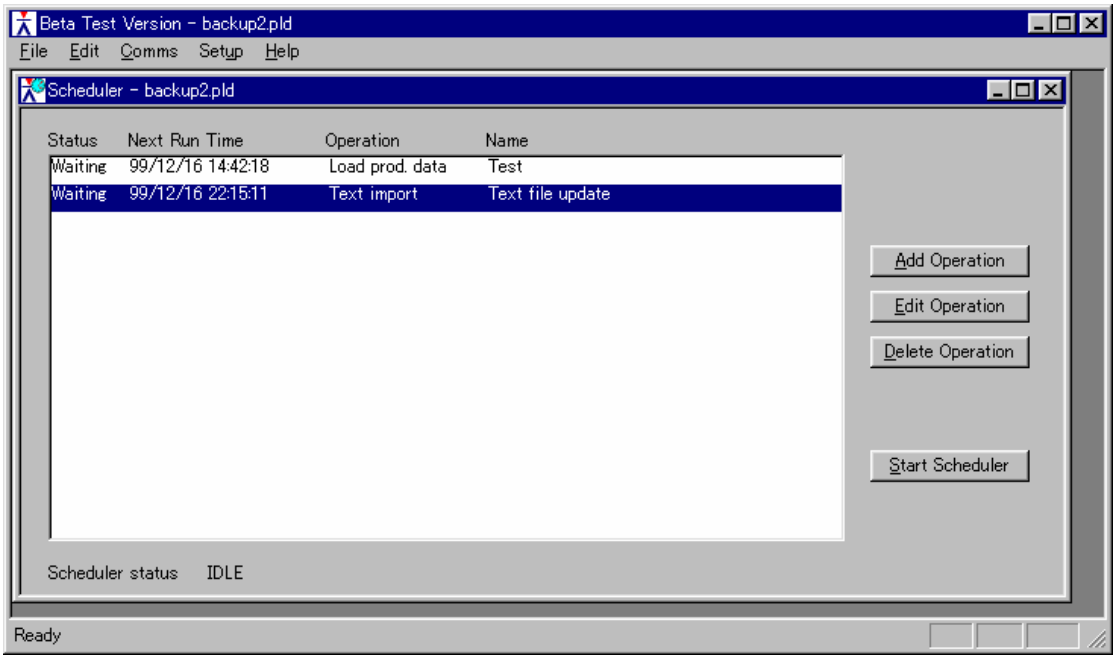
If you wish to run the Scheduler at the same time as the main ScaleLink Pro program, you must set the **Multi-user database access (MDB only)** check box ON in the Options dialog (see *Multi-User Installation* in *Appendix A.1 Setting Up ScaleLink Pro at a New Store*). If the setting is OFF, an error occurs if the Scheduler tries to perform an operation for a database that is already open in the main program.

Starting the Scheduler Program

Click the Scheduler icon in the ScaleLink Pro sub-menu of the Windows Start menu.
This opens the main scheduler window shown below.

The Scheduler automatically opens the schedule file from the previous time the Scheduler was run. Use the **Open** command in the File menu if you wish to open a different schedule file.

The schedule file stores the list of scheduled operations displayed in the main window.



You can also start the scheduler from the command line. The command line parameters are as follows:

```
Slp3 -S -R -I -U"User name" -P"Password" <file name>
```

Where:

-S: Specifies the scheduler (instead of the normal ScaleLink Pro). (Required)
-R: Starts the scheduler running immediately. (Optional)
-I: Starts the scheduler iconized. (Optional)
<file name>: Specifies the schedule file. (Optional) If omitted, the schedule file from the previous Scheduler session is used.

If using user access control, specify the user name and password in the command line parameters -U"User Name" and -P"Password".

Running the Scheduler

Click the **Start Scheduler** button in the scheduler main window to start the scheduler. The scheduler remains idle until the first scheduled operation becomes due.

The scheduler performs the following steps each time an operation becomes due for execution:

- Delete the error file (if specified).
- Load the database specified in the operation settings.
- Execute the specified operation.
- Write any error messages to the error file (if specified).
- Close the database.

Error Handling

The scheduler does not display a message on the screen if an error occurs in a scheduled operation. This is for the simple reason that the scheduler is intended to be run unattended, so it makes no sense to display a message box and wait for the user to click OK.

Instead, you can specify that error information be written to an error log or passed to an external program. The error log is only created or added to if an error occurred. Accordingly, if you delete any old error log file before starting the Scheduler, you can use the fact that an error log exists as an indication that some sort of error occurred.

To execute an external program whenever an error occurs, create your own error handling program called **ReportError** and place in the same directory as the ScaleLink Pro executable files. When an error occurs, the Scheduler runs **ReportError** with the error message specified in the command line enclosed in quote marks. For example:

```
ReportError "This is an error message"
```

NOTE

Scheduler operations are recorded in the ScaleLink Pro event log in the same way as user operations.

If an error occurs for an operation, the operation status (the left hand column of the scheduler window) is set to "Error". The scheduler does not attempt to execute the error operation again. However, if the operation is setup to repeat execution at preset intervals, the scheduler does try to execute the operation when it is next due, even if the current status is "Error".

Off-Line Operation

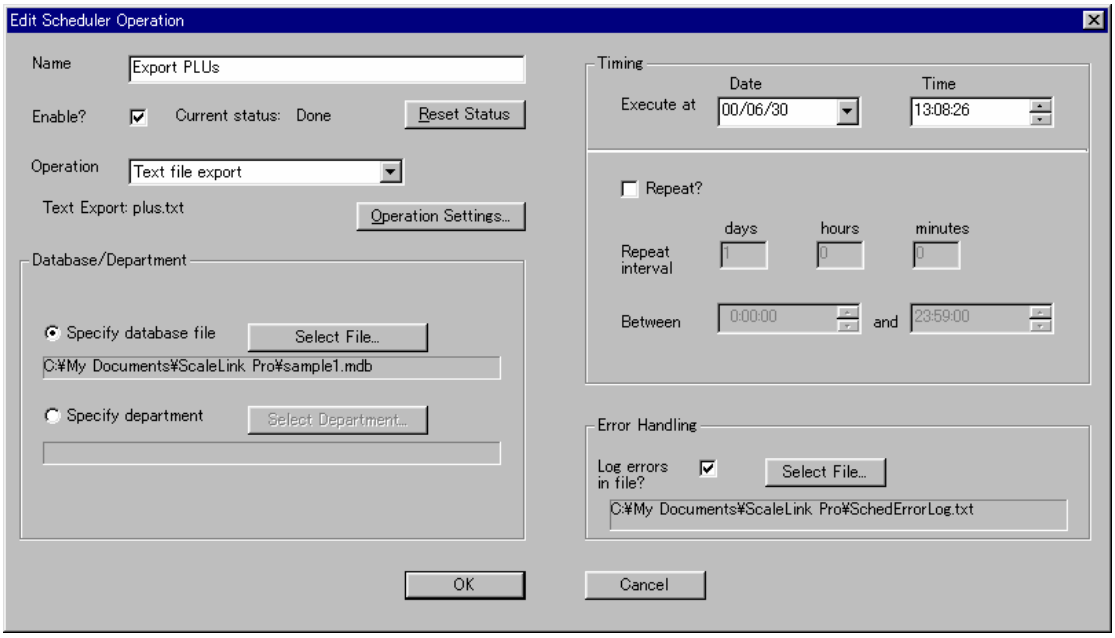
If a scheduler operation is executed when one or more scales are out of service for some reason, the operation is executed as usual and the database is updated. However, the scheduler can save the data that would have been sent to the off-line scale and automatically sends this data when the scale comes back on-line. Note, however, that automatic resending can be disabled by the "**Disable auto-resend of unsent data when scale off-line**" setting in the **Options** dialog.

However, the scheduler only checks off-line scales and performs re-sending while the

scheduler is running.

Setting up Scheduler Operations

Use the **Add Operation**, **Edit Operation**, and **Delete Operation** buttons in the scheduler window to setup the scheduler operations. Clicking the **Add Operation** or **Edit Operation** button opens a scheduler operation edit dialog.



The meaning of each item in the dialog is as follows:

Item	Explanation
Name	The name specified here appears in the **Operation** column in the main scheduler window.
Enable?	Set this check box OFF to prevent the operation from being executed when due.
Reset Status	The current status of the operation is displayed to the left of this button. Click the **Reset Status** button to set the status of a completed operation back to "Waiting" or to clear an error.
Operation	Specify the type of operation to execute. If applicable, a dialog may open to setup the selected operation. Changing the operation type deletes any existing operation settings.
Operation Settings	Open a dialog to setup the selected operation. The contents of the dialog differ depending on the type of operation selected.
Database/ Department	Select the database to update for the operation. **Specify database file**: Specify the database file directly. **Specify department**: Use the database for the specified department. ** This option is only available if departments are setup for your copy of ScaleLink Pro.*

Item	Explanation
Execute at	Specify the date and time for executing the operation.
Repeat?/ Repeat interval	Specify whether to execute the operation again after the specified interval.
Between .. and ...	You can set a time range so that repeat execution of the operation only occurs between specified times.
Log errors in file?	Set this check box ON to log any errors that occur when an operation executes. See the **Error Handling** section above for details.

9.9 Sale Wizard

This feature simplifies the process of creating a sale (temporary price changes). The concept is similar to the Campaign function. That is, a sale price can be entered for specified PLUs and automatically sent to the scale at a predetermined date and time. Similarly, the old prices are automatically restored at the end of the sale. Multiple Sale Wizards can be set up and scheduled to run at different times.

The difference with the campaign feature is that, in this case, the price changes and timings are controlled either manually or by tasks sent to the Windows Task Scheduler, rather than by the scale itself. Also, there is no limit on the number of PLUs that can be included in the sale.

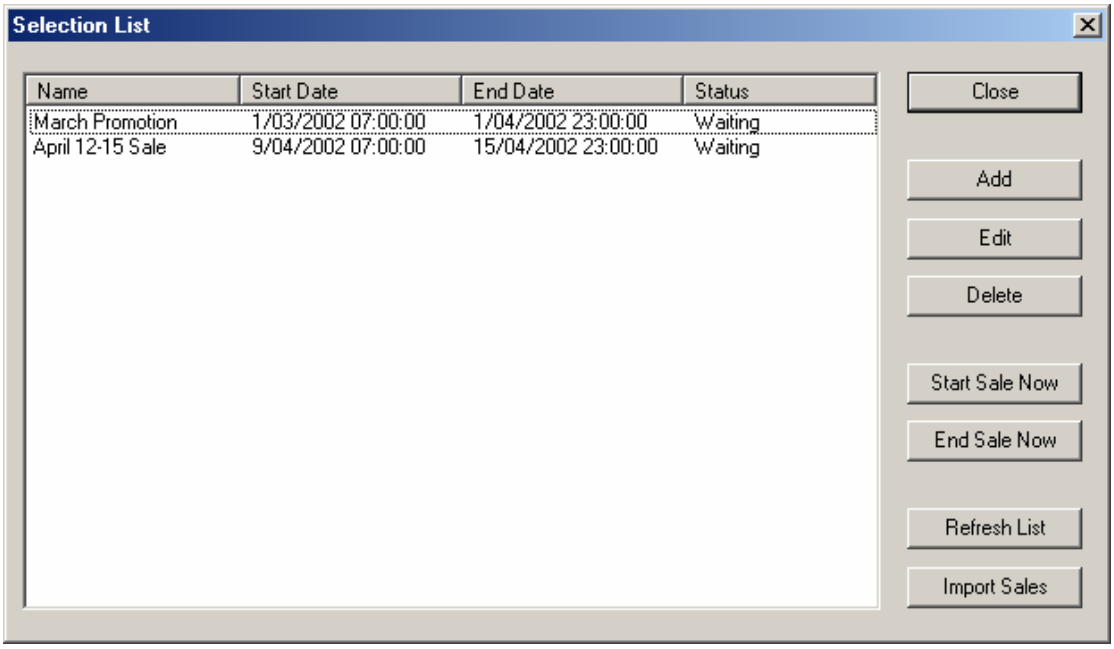
What the Sale Wizard Does

The Sale Wizard provides a simple user interface for generating the following:

- A Windows Scheduler task for loading the sale prices
- A Windows Scheduler task for restoring the old prices

Using the Sale Wizard

1. Select **Sale Wizard** from the **Tools** menu, and a dialog like the one shown below will appear:



The procedure for using the Sale Wizard is as follows:

2. A selection list appears like the one below, listing all of the sale wizards that have previously been set up. Select whether to **Add** a new sale wizard, or **Edit** or **Delete** an existing sale wizard. Other options are: **Start Sale Now**, **End Sale Now**, **Refresh List** and **Import Sales**.

   Add: Adds a new Sale Wizard to the list. See below.

   Edit: Edits an existing Sale Wizard. See below.

   Delete: Deletes an existing Sale Wizard.

Start Sale Now: Starts the selected sale regardless of its preset Start Date/Time. This will change appropriate PLU prices in the database to the sale price, send the sale price to the scales and delete the task scheduler event that was created to start the sale, if one was created.

End Sale Now: Ends the selected sale regardless of its preset End Date/Time. This will change appropriate PLU prices in the database back to their original value, send the original value to the scales and delete the task scheduler event that was created to end the sale, if one was created.

Refresh List: Refreshes the list of Sale Wizards to reflect any change in status, eg. if a task has been started or ended by the Windows Task Scheduler.

Import Sales: You can import sales files which have been created outside ScaleLink Pro. See Appendix 2 for details on the sale file format.

3. Clicking on **Add** or **Edit** will bring up the Sale Wizard configuration dialog described below. On the first screen you can select a name for the sale.

4. Enter the sale price changes.

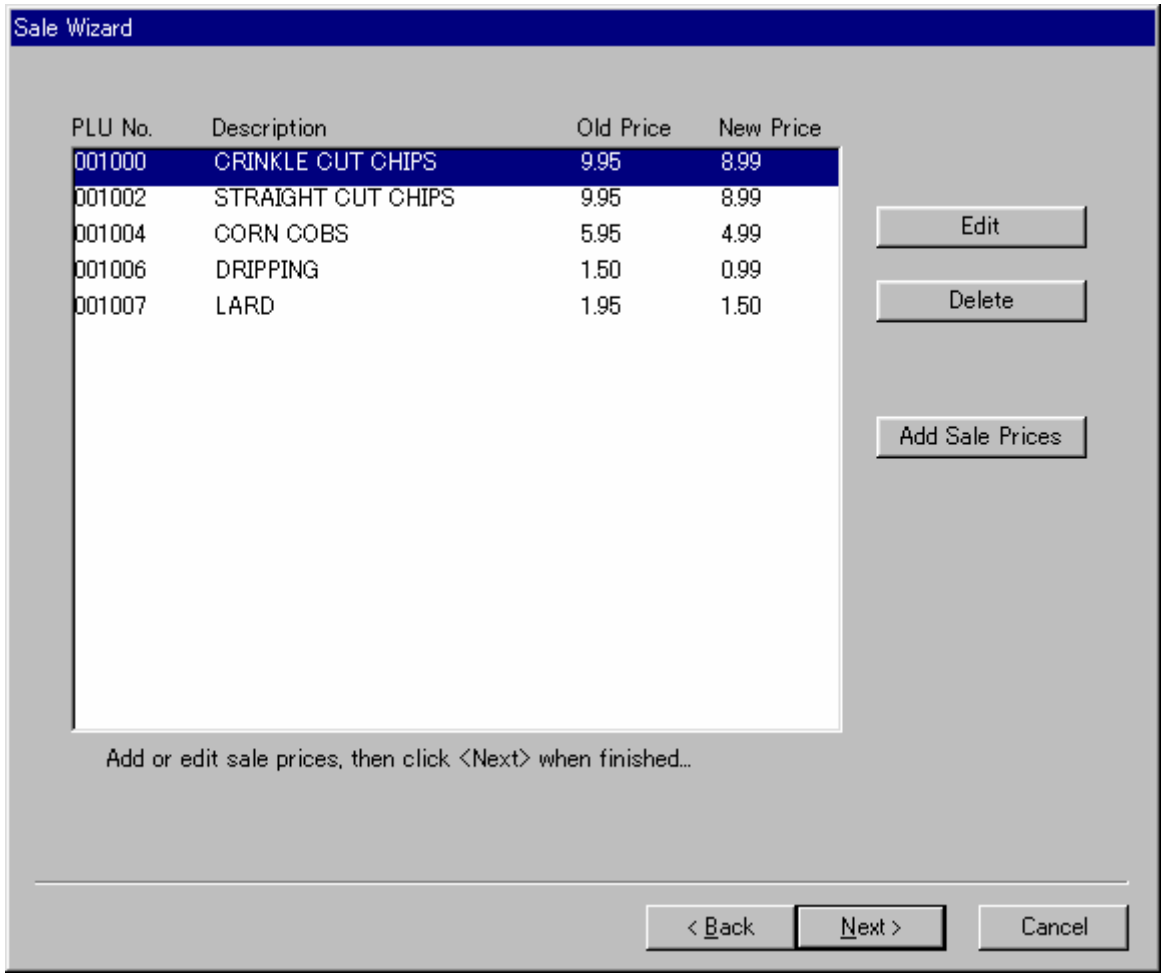
   If you selected **Add**, the Sale Wizard immediately prompts you to start entering price changes.

   If you selected **Edit**, the Sale Wizard displays the price changes from the existing sale.

   Use the buttons on the right of the window to add, edit, or delete price changes in the sale.

NOTE

If you are using the price zone feature in head office mode, you can specify different prices for each zone.

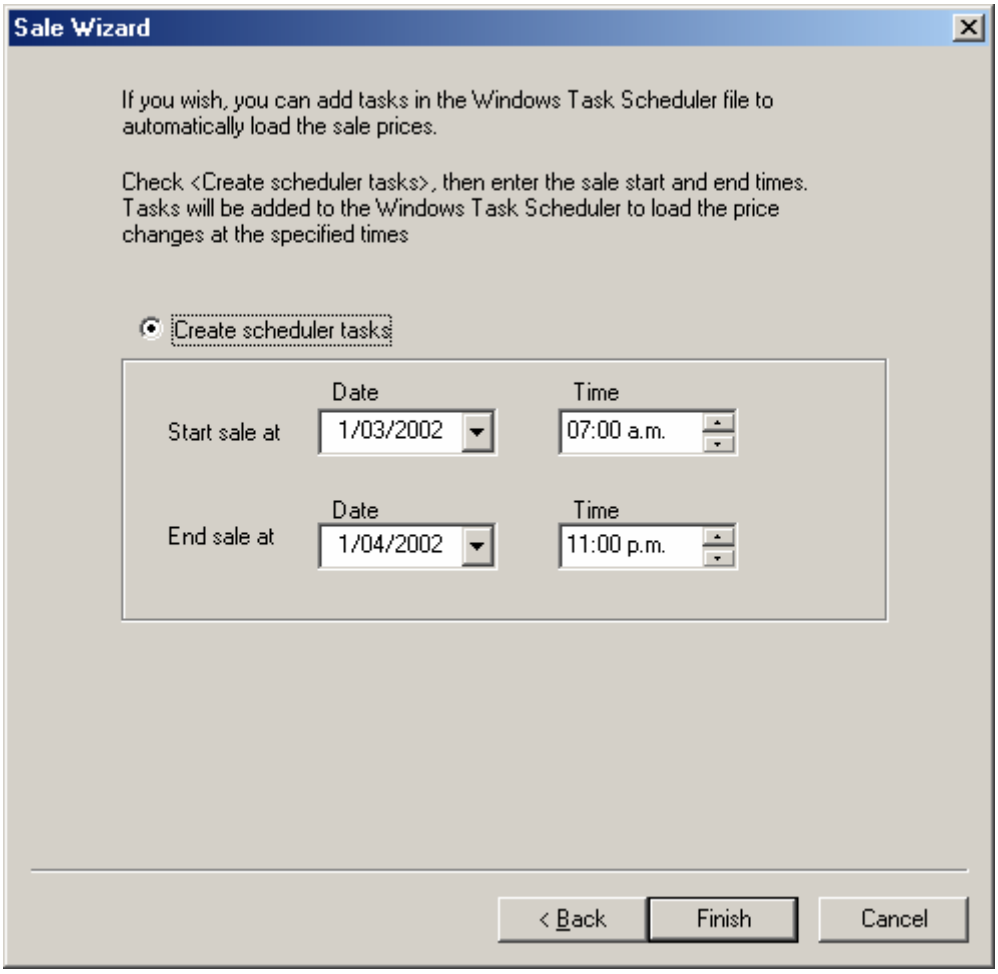


4. Click **Next** when finished entering price changes

5. The Sale Wizard now asks you whether you wish to create Windows Task Scheduler tasks to automatically load the price changes at the specified times.

   If so, check the **Create Scheduler Tasks** button and enter the times to start and end the sale.

   To bypass schedule creation, just click the **Finish** button.



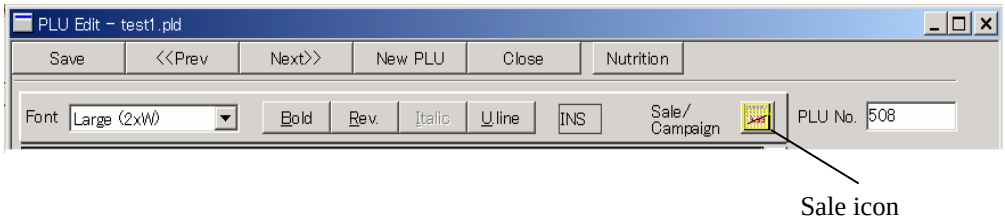
6. Click **Finish** when finished entering schedule details.

7. The sale wizard creates a Sale Wizard entry in the selection list, and creates a Windows Task Scheduler task if specified .

8. The price changes will be executed automatically at the specified time by the Windows Task Scheduler. These tasks should not be altered directly through the Task Scheduler. Use the Sale Wizard to modify them instead.

NOTE

An icon appears in the PLU edit window, as shown below, if the PLU is assigned to a sale. Click on the item to edit the sale settings directly.
The same icon also appears if the PLU is assigned to a campaign.
However, the icon does not appear if the sale or campaign has already finished.



9.10 Automation

ScaleLink Pro supports ActiveX automation (also known as OLE automation). This allows ScaleLink Pro operations to be controlled by external programs, including programs written in scripting languages such as Visual Basic and Java script.

Example script files are available. Contact your Ishida dealer for details.

Supported Features

Appendix C gives a full list of the methods and properties available to external users. However, new features will be added in the future based on user requirements. If a feature you require does not appear to be currently supported, please contact your Ishida agent.

The currently supported features are as follows:

- Text file import/export
- Read production data from scales
- Send data to scales
- Resend unsent data (when data is not sent due to a scale being off-line, for example)
- Execute Scheduler operations

Due to the internal structure of ScaleLink Pro, automation is executed using a separate executable file. This is to prevent any conflicts if a copy of ScaleLink Pro is already running.
See *Appendix C* for details.

Setup File

When invoked via automation, ScaleLink Pro reads its setup files from the directory in which the ScaleLink Pro executable files are located (the installation directory). Ensure that the correct setup files are located in this directory. If you wish to use a different setup file for automation operations, call the *LoadSetup( )* and *LoadSiteSetup( )* methods before opening a database.

Handling of Unsent Data

Any data that could not be sent to a scale due to the scale being off-line is saved and automatically resent the next time automation is used to open the same database.

This is not the same function as automatic resend from the main ScaleLink Pro application. That is, any unsent data remaining from an automation operation is not resent automatically by the main ScaleLink Pro application. Similarly, unsent data the main ScaleLink Pro application is not resent when ScaleLink Pro is run using automation.

Instead, ScaleLink Pro attempts to resend any unsent data remaining from an automation operation the next time automation is used to send data to the scales. You can also use the *IsUnsentDataWaiting( )* and *SendUnsentData( )* methods to explicitly check for and resend unsent automation data.

Unsent data remaining from automation operations is linked to the database file. Accordingly, the database must be open before the unsent data can be resent.

The unsent data is stored in the file *<Database file name>.usd*. To clear unsent data, just delete this file (see the example in *Program Structure 2* below). However, do not delete the file while the corresponding database is open.

Program Structure 1 - Executing Scheduler Operations

A simple method of using automation is to use the Scheduler to predefine the operations you wish to execute from an external program.

In this case, the external program must have the following structure.

1. Open schedule file (Use ScheduleOpen(*schedule file name*).)
2. Execute schedule operations (Use ScheduleExecOp(*schedule operation name*).)
3. Close schedule file (Use ScheduleClose().)

The figure below shows an example Windows script that opens a schedule file C:\ScaleLinkPro\Sample.SCH that contains an operation called *Read Prod Data*. The script executes the operation then closes the schedule file and terminates.

```
' Windows Script - Execute Scheduler Operation Sample

' Declare ScaleLink Pro object
Dim ScaleLinkPro
Set ScaleLinkPro = WScript.CreateObject("Slp3.Document")

' Open schedule file
Result = ScaleLinkPro.ScheduleOpen (“C:\ScaleLinkPro\Sample.SCH”)
if Result = False then
  MsgBox "Error Opening schedule", vbInformation
  WScript.Quit
end if

' Execute operation
Result = ScaleLinkPro.ScheduleExecOp ("Read Prod Data")
if Result = False then
  MsgBox "Error executing Read Prod Data", vbInformation
end if

' Close schedule file
ScaleLinkPro.ScheduleClose ()
```

Program Structure 2 - Executing Operations Directly

Operations can also be executed directly, independently of any schedule file

In this case, the external program must have the following structure.

1. Open database file (Use DatabaseOpen(*database file name*).)
2. Execute operations (Use the various operation methods provided.)
3. Close database file (Use DatabaseClose().)

The figure below shows an example Windows script that opens a database file C:\ScaleLinkPro\Bakery.MDB and imports PLU data from a text file. After executing the operation, the script closes the database file then deletes any unsent data.

```
' Windows Script - Execute Text Import Operation Sample

' Declare constants used by ImportTextFileEx
Const slpCommaDelim = 0
Const slpTabDelim = 1
Const slpAdd = 0
Const slpUpdate = 1
Const slpDelete = 2
Const slpDescIshida = 0
Const slpDescLineByLine = 0
Const slpPluTable = 2
Const slpScrollMsgTable = 3
Const slpExMsgTable = 4
Const slpCouponTable = 8
Const slpNutritionTable = 9

' Declare ScaleLink Pro object
Dim ScaleLinkPro
Set ScaleLinkPro = WScript.CreateObject("Slp3.Document")

' Open database file
Result = ScaleLinkPro.DatabaseOpen (“C:\ScaleLinkPro\Bakery.MDB”)
if Result = False then
  MsgBox "Error Opening database", vbInformation
  WScript.Quit
end if

' Execute operation - Import text file and send to scales
Result = ScaleLinkPro.ImportTextFileEx("C:\ScaleLinkPro\Plus.txt",
slpCommaDelim, slpAdd, slpPluTable, slpDescIshida, True, False, False,
False)
if Result = False then
  MsgBox "Error importing text file", vbInformation
end if

' Close database
ScaleLinkPro.DatabaseClose ()

' We do not want to save unsent data - so delete unsent data file
Dim fso
Set fso = CreateObject("Scripting.FileSystemObject")
fso.DeleteFile(“C:\ScaleLinkPro\Bakery.MDB.usd”)
```

Appendix A Installing ScaleLink Pro at a New Store

This section describes how to install ScaleLink Pro, how to set it up to suit your scales system, and how to obtain the initial PLU data.

A.1 Installing the Software

This section describes how to install ScaleLink Pro.

System Requirements

ScaleLink Pro requires a Windows 98 or higher personal computer.

The software can also be used on Windows 95 in most cases.

Operation on Windows XP has been verified for Scalelink Pro version 3.2.

Installing ScaleLink Pro

1. ScaleLink Pro may need to install some Windows system files that may also be in use by other programs. If you have problems installing ScaleLink Pro, try closing all currently running programs, including background programs such as virus checkers, before starting the installation. In the latter case, run a virus check on the installation disk before installing and again on your entire system after installing.
2. Click the Start Button, select Settings, and then Control Panel.
3. Double click on Add/Remove Programs, then follow the instructions that appear on the screen.
4. To run ScaleLink Pro, click the Start Button, select Programs, Ishida, and then ScaleLink Pro.
5. See A.2 *Setting Up ScaleLink Pro* and follow the procedures described to setup the system for this store.

For a quick summary of how to use ScaleLink Pro once it has been correctly setup, see *2. Getting Started*.

Full details on how to operate ScaleLink Pro are available using on-line help (select **Index** from the Help menu).

Uninstalling ScaleLink Pro

1. Click the Start Button, select Settings, and then Control Panel.
2. Double click on Add/Remove Programs, then follow the instructions that appear on the screen.

Multi-User Installation

The following describes how to use ScaleLink Pro in a multi-user environment.

ScaleLink Pro is not designed as a full multi-user program. However, you can install multiple copies of ScaleLink Pro on client PCs connected to a network and share a common database located on a server.

Note that some restrictions apply when more than one user attempts to use the PLU database at the same time. Specifically, PLD format databases cannot be open by more than one user at a time. Also, additions and deletions made by one user to an MDB format database are not updated automatically on other users' screens.

Note that the ScaleLink Pro Scheduler program is treated as a separate user. If you wish to run the Scheduler at the same time as the main program, you must setup ScaleLink Pro for multi-user access, as described below.

The procedure is as follows.

1. Install a separate copy of ScaleLink Pro on each client PC. Use the same folder name on each PC.
2. Use one of the installed copies to create the common PLU database on the server.
3. On one of the client PCs, setup ScaleLink Pro with appropriate settings for your store using the procedure described in *Appendix A.2 Setting Up ScaleLink Pro*.
4. Set the **Multi-user database access (MDB only)** check box ON in the Options dialog.
5. Copy the setup file (SETUP.DEF) to the installation folder on each client PC. (Also make a backup copy on the server.)
6. Make any client-specific changes to the setup (e.g. setup users for each client) at each client.

A.2 Setting Up ScaleLink Pro

Which Communications Link?

ScaleLink Pro can communicate with the scales by a variety of methods. The available methods are as follows.

ID-ENQ: ID-ENQ communications requires a master scale control unit (MSCU) or a scale fitted with special communications hardware (a “master board”). The main features are:

- Connects to the scales via the serial port on the PC (RS232C) or via the LAN (TCP/IP).
- Changes made on ScaleLink Pro can be sent to the scales immediately, even if the scales are in use.
- Operation is fully automatic.

Data Save and Astra/Astra XT Serial Comms: These communication functions are primarily provided on the scales as a means of data backup and restore. The main features are:

- The data transfer operation saves or restores a complete set of scale data at a time. The backed up data can be stored on the PC and modified by ScaleLink Pro.
- Available on all AC-3000 series scales (Data Save) and Astra/AstraXT scales.
- Communication is via the serial port on the PC. The AC-3000 Data Save function requires a special adapter (RS-232C to RS-485 converter).
- Data transfer is initiated manually: using the menu in ScaleLink Pro and using Test Mode (AC-3000) or Registration Mode (Astra/AstraXT) on the scales.

IF21FD: If you have an Ishida IF21FD backup unit, it is also possible to use ScaleLink Pro without a communications link to the scales.
In this case, you use the IF21FD unit to copy data between the scale and a floppy disk and use the **Import IF21FD** and **Export IF21FD** commands in ScaleLink Pro’s File menu to read and write data on the floppy disk.

Before setting up ScaleLink Pro, you must have decided which system you are going to use (you can use more than one method) and have installed the appropriate cabling. Consult with your Ishida agent for further information.

Networks Containing More Than One Type of Scale

ScaleLink Pro can support scale networks that contain more than one type of scale. Three generations of scale are supported by ScaleLink Pro: the AC-2000 series, AC-3000 series, and AstraXT. Each generation supports a different set of functions. There are also some differences between models within each generation, but these are generally small.

The **System Type** setting in the **General #1** page of the **Options** dialog (described in *Setting Up the ScaleLink Pro Software* below) specifies the default set of supported functions. For example, if [**AC-3000**] is selected, AstraXT functions such as extra messages #2 and #3 are hidden.
Take note of the following points when setting this parameter.

- If mixing AC-2000 and AC-3000 scales, select [**AC-3000**].
- If mixing AC-3000 and AstraXT scales, select [**AC-3000**] to hide the AstraXT-specific functions. This is recommended for consistency of data across all scales. You may select [**AstraXT**] if you wish to enable the AstraXT features such as extra messages #2 and #3, but take care as this may cause problems due to these features not being supported by the AC-2000 or AC-3000 scales.

The “system type” for each scale on the network is specified in the communication link setup for each scale. See *Setting Up ID-ENQ Communications* below.

Setting Up the ScaleLink Pro Software

Before you can communicate with the scales, you must check that ScaleLink Pro is setup correctly for your scales system. Use the following procedure.

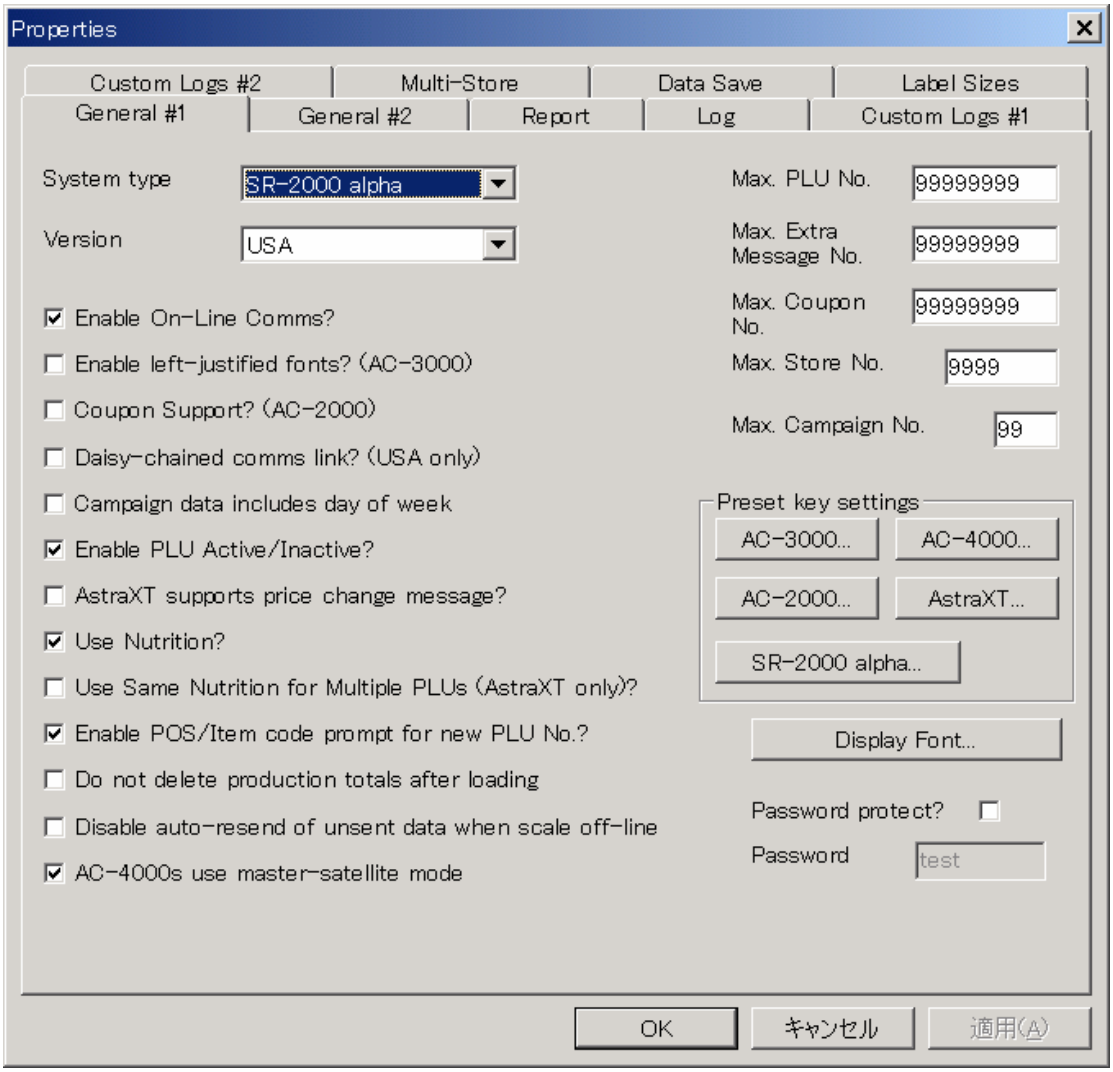
You can save the current setup to a file or load a previously saved setup using the **Save Setup** and **Load Setup** commands respectively in the **Setup** menu. The ScaleLink Pro setup consists of all the items set via the **Setup** menu.
This feature is useful for copying setups from one copy of ScaleLink Pro to another.

A number of alternative setups may be shipped with the ScaleLink Pro installation. Use the procedure below to check the default setup. If it does not appear suitable for your store (if the version is "USA" but you are in Australia, for example), use the Load Setup command to see if a more appropriate setup is available. The names of the listed setup files indicate their purpose (for example, NZ.SET contains the New Zealand setup).

Outputting a Listing of all ScaleLink Pro Settings

Select **Output Setup List** from the **Setup** menu to output a list of all ScaleLink Pro setup parameters to a text file.

1. Start ScaleLink Pro.
2. If a database does not open automatically, use **New** or **Open Database** in the **File** menu to create or open a database.
3. Click the **Setup** menu and select **Options** and to display the following dialog:



4. Set the following options:

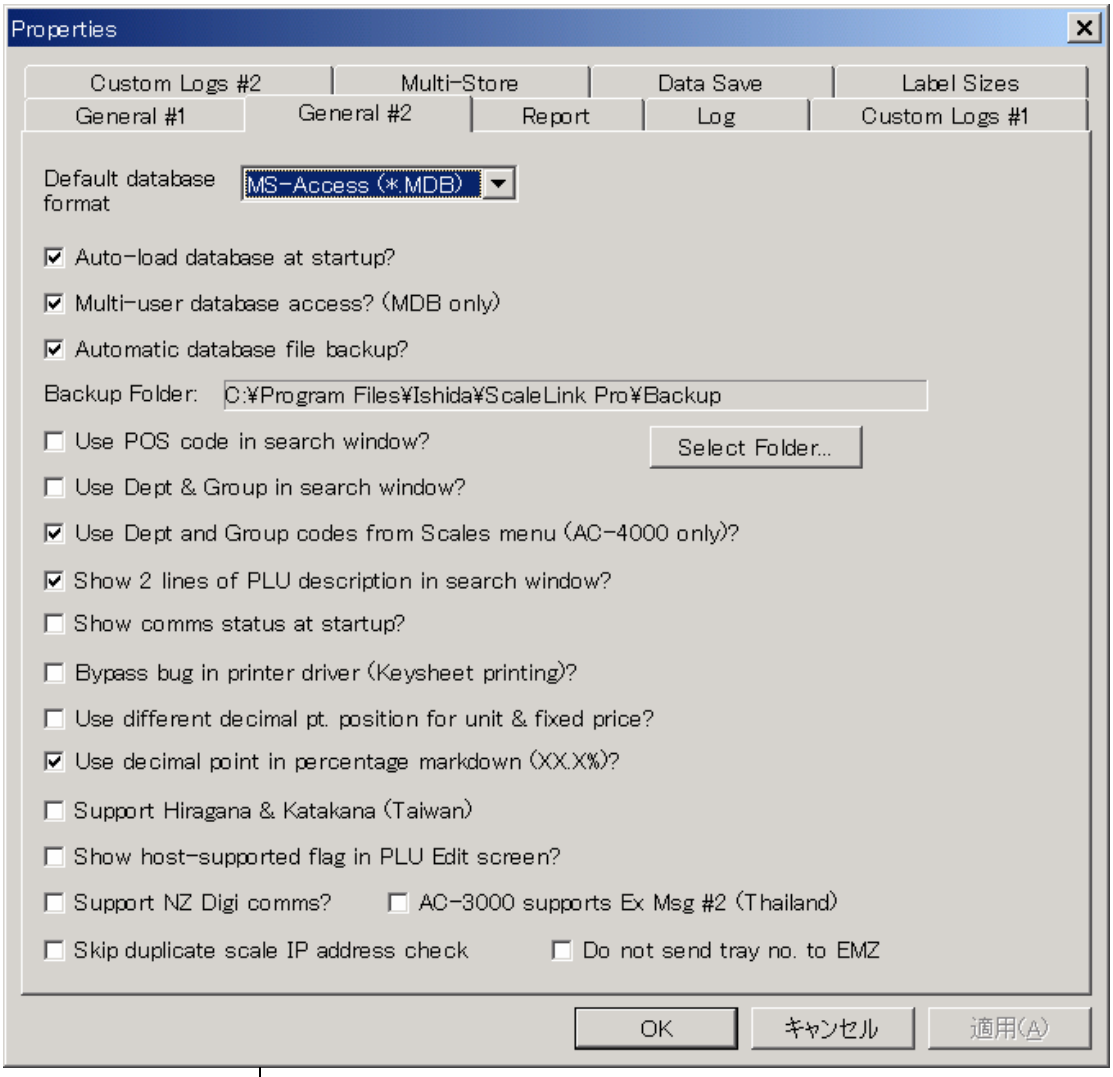
Item	Explanation
System type:	Specifies the default scale type. ScaleLink Pro operation is optimized for the selected scale model and functions not applicable to that model are hidden. For example, if [**AC-3000 Master**] is selected, AstraXT functions such as extra messages #2 and #3 are hidden. When communicating with more than one master scale or MSCU, this setting can be overridden for individual scales in the communication link setup. See *Networks Containing More Than One Type of Scale* above for more details.
Version:	Specifies the default scale version. ScaleLink Pro uses this parameter to select which communication message formats to use.

Item	Explanation
Enable on-line comms:	Set this check box ON if you are using on-line communications.
Enable left-justified fonts?	Set this flag ON if using AC-3000 series scales that support the full set of left-justified fonts.
Coupon support:	Different ID-ENQ message formats are used for sending PLU data to the AC-2000 depending on whether or not the scales support coupon labels. Set coupon support ON for the AC-3000 series.
Daisy-chained comms link? (USA only)	Set this on if more than one scale is connected to each comms link.
Campaign data includes day of week	Set this on if the scales use the "day of week" version of the campaign function.
Enable PLU active/inactive	Enables or disables the PLU active/inactive function. This function allows PLUs to be marked as inactive. Inactive PLUs are deleted from the scales but remain in the Scalelink Pro database.
AstraXT supports price change message?	Enable this setting if using an AstraXT model that supports price change communications.
Use nutrition	Enable or disable nutrition data editing. Only enable this setting if supported by the scales.
Use same nutrition for multiple PLUs	If this setting is enabled, the same nutrition data can be shared by more than one PLU. However, this feature is only supported by AstraXT scales and may not be used in systems that include older scale models.
Enable POS/Item code prompt for new PLU No.?	If enabled, Scalelink Pro asks the user whether to automatically modify the POS code and item code to match the PLU number when the PLU number is changed.
Do not delete production totals after loading	If enabled, Scalelink Pro does not delete automatically the production total data on the scale after reading this data.
Disable auto-resend of unsent data when scale off-line.	Normally, Scalelink Pro saves any data that cannot be sent to a scale while it is off-line, and automatically resends the data when the scale comes back on-line. Enabling this setting turns off this function.
AC-4000s use master-satellite mode	Select this checkbox if using AC-4000s in a master-satellite configuration. If selected, Scalelink Pro sends a message to the master scale to update the satellites after each change in the scale data.
Max. PLU No.	Specifies the maximum allowed PLU No. This field also controls the number of PLU digits (e.g. set to 9999 for 4-digit PLUs, 999999 for 6-digit PLUs, etc.). The maximum is 99999999 (8-digit PLUs).

Item	Explanation
Max. Extra Message No.*	Specifies the maximum allowed extra message No. Specify 99 if your scale supports 2-digit extra message numbers and 9999 for 4-digit extra message numbers. The maximum is 99999999 (8-digit Extra Messages)
Max. Coupon No.* **Max. Campaign No.*** **Max. Store No.***	Set these to the number supported by your scales.
Preset Keys	Opens a dialog to set the code to use for each preset key meaning (e.g. PLU, Tare, etc.) Different scale versions use different codes. Set the correct codes for the type of scale system you are connecting to. (Refer to your Ishida agent for details.)
Display font	Sets the font used in description text fields. If using non-English characters, you must set a font for the character set (e.g. Thai, Korean) used by your scales.
Password, Password protect	If desired, you can password-protect the setup menu commands to prevent users from making unauthorized changes. To enable the password function, set Password protect? ON and enter a password in the Password field. This is independent of the User Access Control function.
	NOTE: If you forget the password, press Ctrl+Alt+P in the PLU Search window. This displays the current password.

* If you have a system with both AC-3000 and AstraXT or AC-4000 scales, always set these values to match the AC-3000 specifications. Setting a larger number will cause invalid data to be sent to AC-3000 scales.

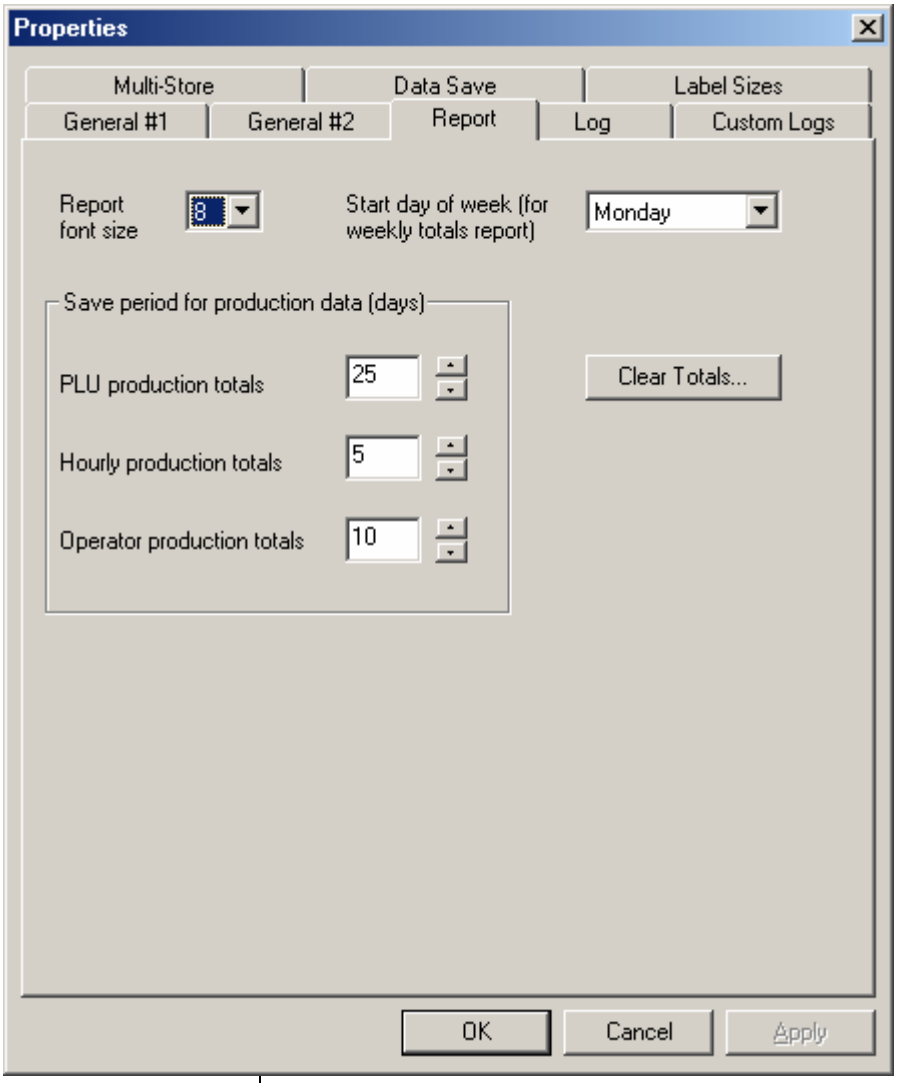
5. Click the **General #2** tab and set the following options:



Item	Explanation
Default database format	Specifies whether to use Microsoft Access or Ishida proprietary format PLU databases. This only specifies the default format. Both formats are still available in File Open and Save As dialogs. See *Setting Up the PLU Database* for details.
Auto-load database at startup?	Specify whether to automatically load the database when ScaleLink Pro starts (the database that was open when ScaleLink Pro last exited). Normally, set this option ON.
Multi-user database access (MDB only)	Specify whether to allow multi-user database access. If OFF, ScaleLink Pro does not allow more than one user to have a database open at the same time. Set this option OFF if you do not need multi-user access. See *5.3 Multi-User Operation* for more details.
Automatic database file backup	Set this on to automatically backup the database each time you start ScaleLink Pro. Click **Select Folder** to modify the folder in which to save the backups.

Item	Explanation
Use POS code in search window	Set this on to enable use of the POS code (bar code) in the PLU Search window.
Use Dept & Group code in search window	Set this on to enable use of the department and group codes in the PLU Search window.
Use Dept & Group codes from Scale menu (AC-4000 only)	Set this on to use the department and group codes set in the **Scale** menu (the department and group codes sent to the scale). If disabled, the department and group codes defined in **Department Codes** in the **Setup** menu are used instead.
Show 2 lines of PLU description in search window	Set this on to show the first two lines of a PLU description in the PLU search window.
Show comms status at startup?	Set this on to open the comms status dialog automatically when you start ScaleLink Pro.
Bypass bug in printer driver?	Some printer drivers have a bug that causes them to print rotated text incorrectly. If you have trouble printing keysheet template, try changing this setting. If neither setting works, try changing the print orientation from portrait to landscape.
Use different decimal position for unit and fixed price?	This is only used in China. In other countries, always set this off.
Use decimal point in percentage markdown?	Set this on if the scale expects percentage markdown values to be expressed to one decimal place.
Support Hiragana & Katakana (Taiwan)?	Set this on if the scale supports Hiragana & Katakana characters. This is used in Taiwan only.
Show host-supported flag in PLU Edit screen?	The host-supported flag function is currently only used in New Zealand. In other countries, always set this off.
Support NZ Digi comms	This is a special setting for use in New Zealand only.
Skip duplicate scale IP address check	If enabled, Scalelink Pro allows you to define more than one scale with the same IP address. Generally this should only be used if the scale is assigned to different departments.
AC-3000 supports Ex Msg. #2	Select this checkbox if using the version of the AC-3000 that supports a second extra message file. (For use in Thailand only)
So not send tray number to EMZ	Select this checkbox to inhibit sending the tray number data field to EMZ scales. In this case, the tray number setting on the scale remains active.

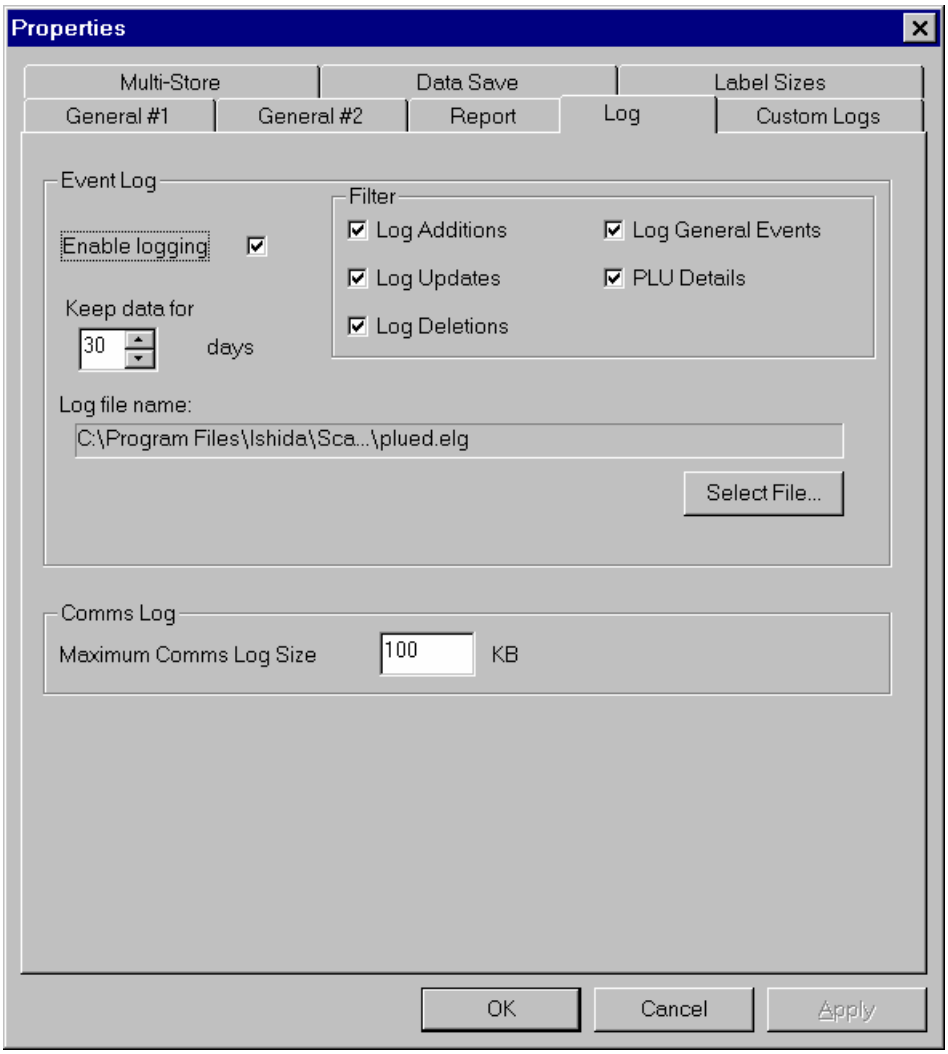
Report Settings



Item	Explanation
Report font size	You can select the font size for the PLU report. The smaller the font size, the more information can fit on the report.
Start day of week	Determines the start day of the week to use when accumulating weekly totals.
Save period for production data	Production data is automatically deleted after the specified number of days.
Clear totals	Clicking this button deletes all current production data.

Log Settings

ScaleLink Pro generates an event log recording changes to the database and other significant operations.



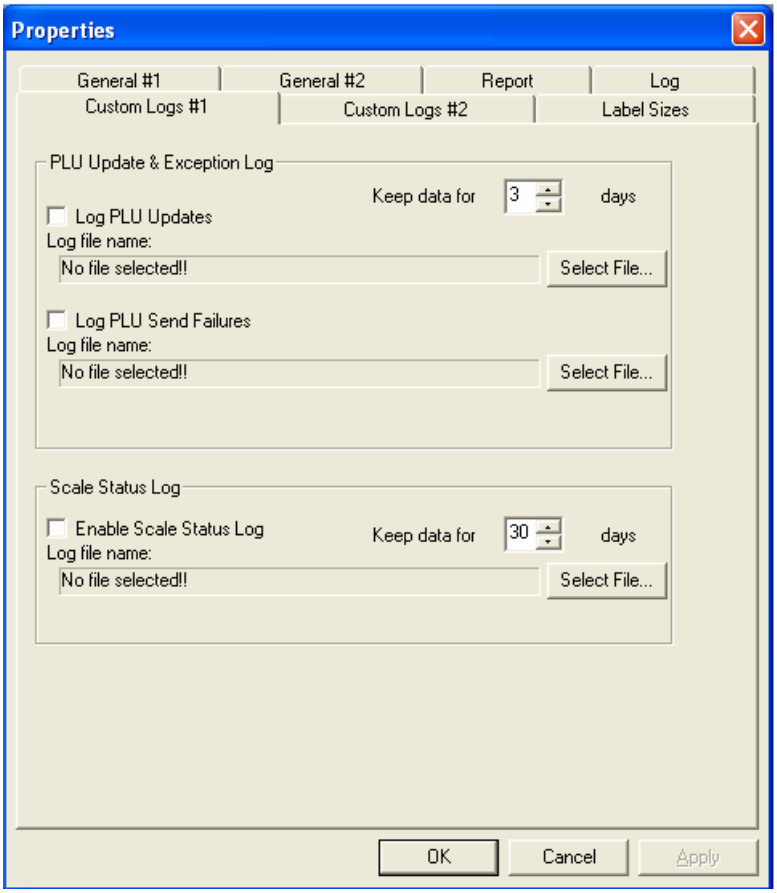
Event Log

Item	Explanation
Enable logging	Use this check box to set event logging on or off.
Filter	Select the type of events you wish to record in the log.
Keep data for ...	ScaleLink Pro automatically deletes old data from the event log after the specified number of days.
Log file name	Specify the name of the log file.
Maximum Comms Log Size	This specifies the maximum size of the comms logs generated by each communications link. These logs are compacted to be less than the specified maximum size each time ScaleLink Pro starts. The comms log for each communications link is specified in the communications link setup.

Custom Log Settings

ScaleLink Pro also generates a number of special-purpose logs. The settings for these are split over two pages.

Custom Logs #1



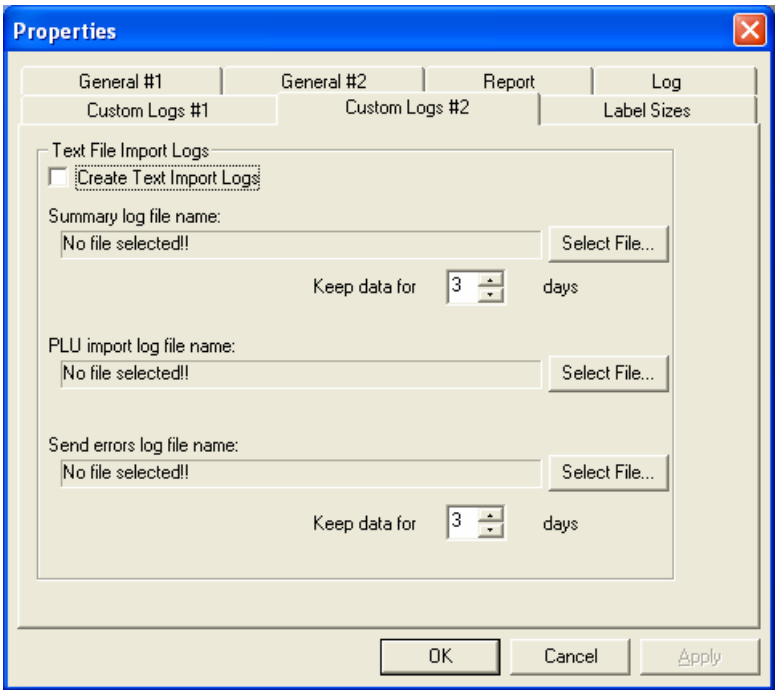
PLU Update & Exception Log

Item	Explanation
Log PLU Updates	Use this check box to set logging of changes to PLU data on or off.
Log PLU Send Failures	Use this check box to specify whether or not to log PLUs that are not successfully sent to each scale.
Keep data for ...	ScaleLink Pro automatically deletes old data from the log files after the specified number of days.
Log file name	Specify the name of the log file.

Scale Status Log

Item	Explanation
Enable Scale Status Log	Enables the scale status log. This log saves the current status of each scale (whether each scale is enabled or connected). See *9.1.3 Scale Status Log* for details. If you set the **Keep Data for** setting to zero, the old log is overwritten each time it is updated. That is, the log only saves the current scale status.

Custom Logs #2



Text File Import Logs

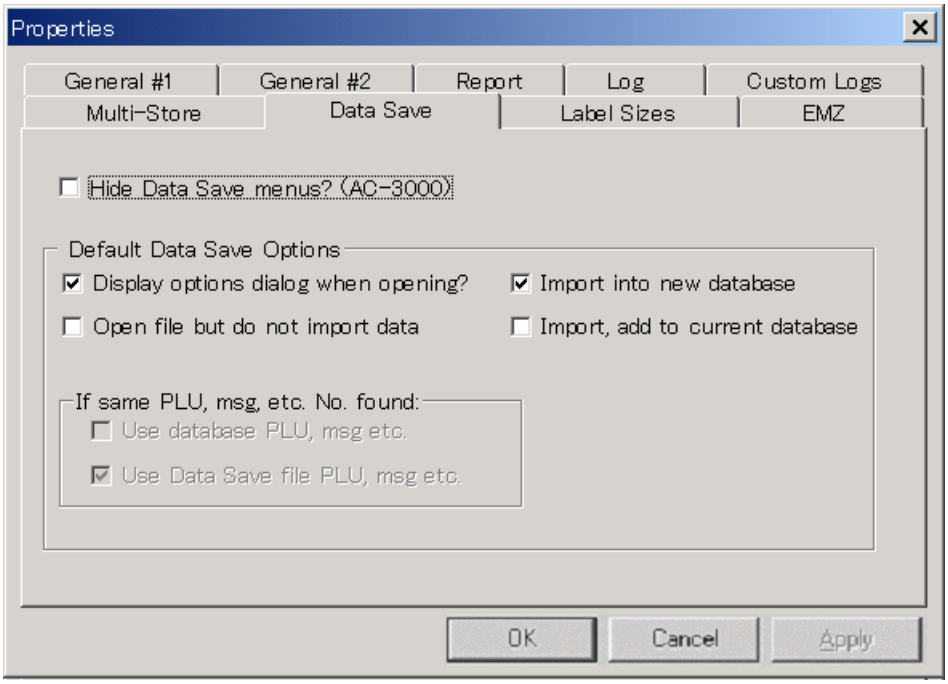
Item	Explanation
Create Text Import Logs	Set this on to save the following logs relating to text file import operations: **Summary Log** Contains summary information of import operations, including text file name and number of records imported **PLU Import Log** Contains detailed information on PLU import operations, including changes to individual fields **Send Errors Log** Logs PLUs that are not successfully sent to the scale (due to a scale being off-line, for example)

Multi-Store Settings

See *Setting Up Price Zones*.

Data Save Settings

These settings control the importing of Data Save files.



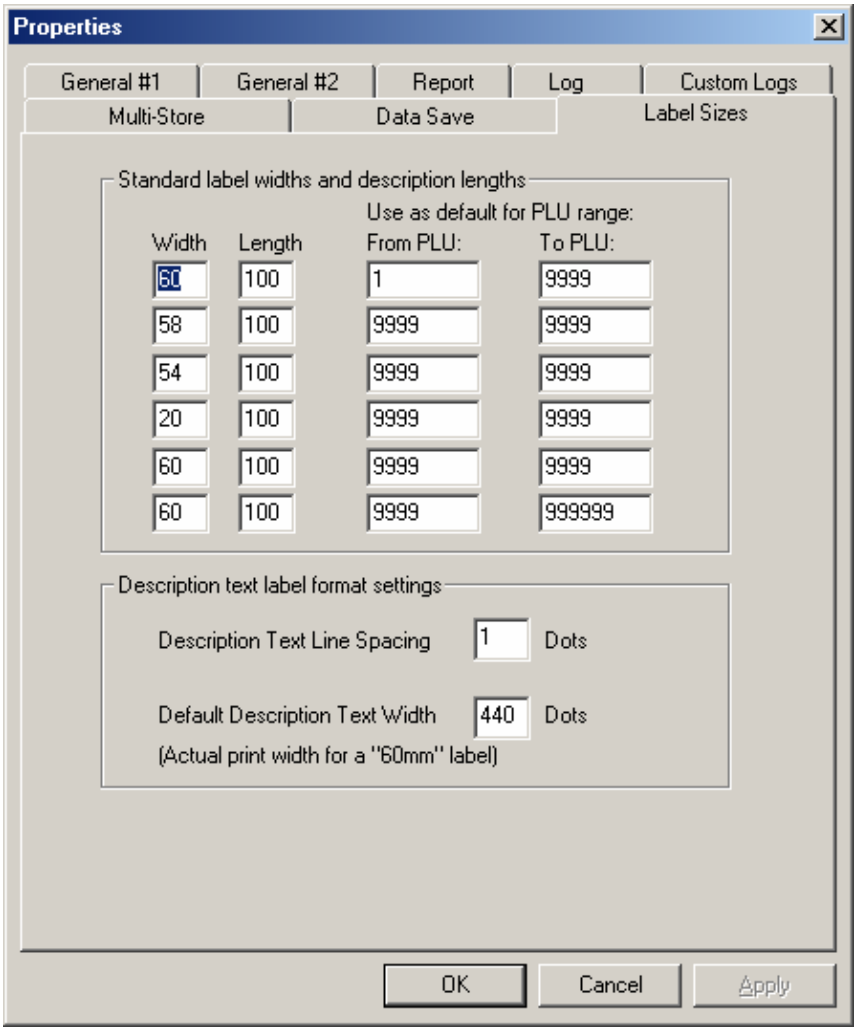
Item	Explanation
Hide Data Save menus:	Set this flag ON if not using Data Save communications. This simplifies ScaleLink Pro operation by removing the Data Save related commands from the menus. As Data Save communications are not supported for AC-2000 series scales, set the flag OFF for the AC-2000 series.
Display options dialog when opening?	Specify whether or not to display the Data Save Open Options dialog when opening a Data Save file. If this option is set OFF, the default options specified here are used automatically.
Open but do not import data	This selects the specified file but does not import the file contents into the database. Clicking **Save (Data Save)** in the File menu writes the database data into the specified file.
Import into new database	This closes the current database, creates a new empty database and imports the data from the specified Data Save file. The database is assigned the same file name as the Data Save file. e.g. If the Data Save file is *backup.dsv*, the database is created as *backup.pld*. If *backup.pld* already exists, it is overwritten.
Import, add to current database	This imports the file contents into the currently open database. The following two flags only apply when this option is selected.
Use database PLU, msg etc.	If the same PLU No., message No. or other scale data ID is found in both the Data Save file and database, the database data is left unchanged.

Item	Explanation
Use Data Save file PLU, msg etc.	If the same PLU No., message No. or other scale data ID is found in both the Data Save file and database, the database is overwritten with the data from the Data Save file.

Label Sizes

ScaleLink Pro uses the label size information to control word wrapping when entering product description text and similar, and to warn you if the length of product description is too long for the label.

Set all the different label widths and maximum description text lengths used in your store. The label widths and lengths set here appear as options in the description size width and length menus when editing PLUs and messages.
If different label formats are used for set ranges of PLUs, enter the start and end PLU No. for each label format (you can enter more than one range for the same label size). When you add a new PLU, the default label width and maximum description text length specified here are set automatically.



Length

This is the length (in mm) of the product name area in the label format. ScaleLink Pro displays the total length of the product description and any extra message in the PLU Edit window, and warns you if the length exceeds this value.

The **Description Text Line Spacing** (dots) is used in this calculation. Set the value specified in your label format.

Default Description Text Width

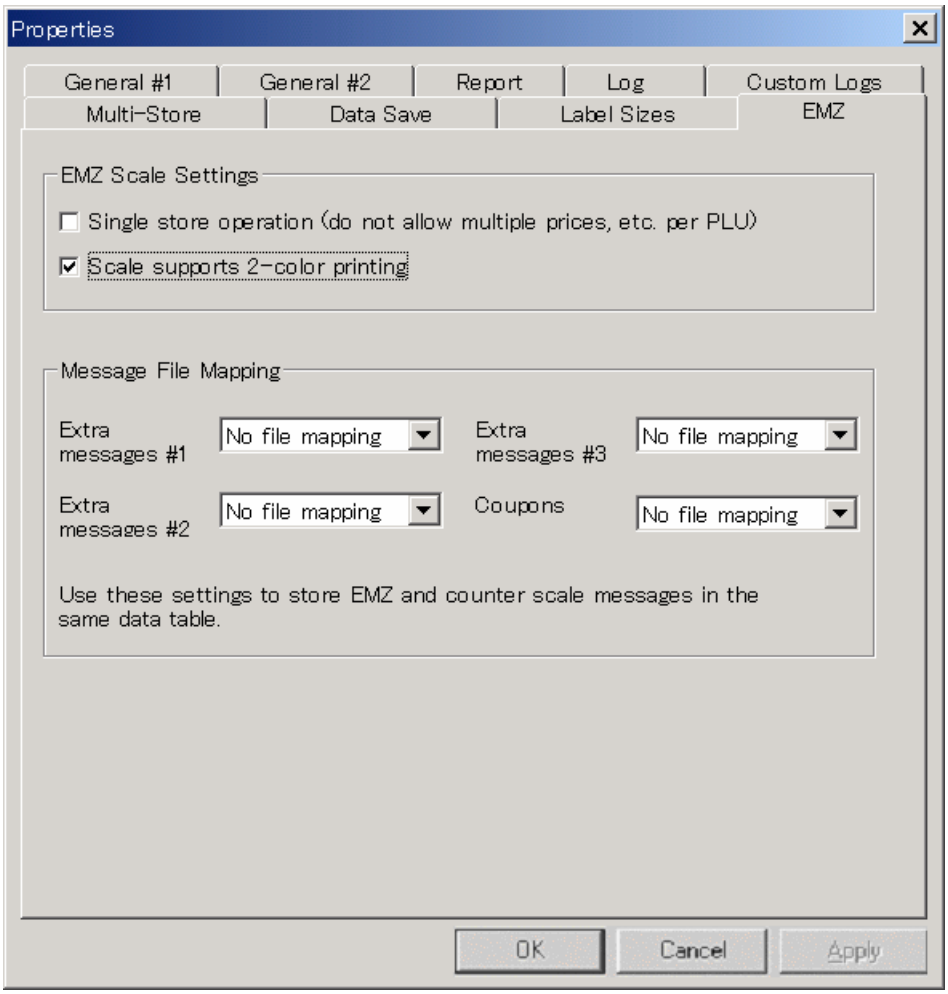
This is the actual width (in dots) of the product description area in your label format for a 60mm wide label. This is typically slightly less than the actual label width (to allow a margin).
For example, an actual print width of 440 dots = 440 x 0.135mm/dot = 59.4mm. In other words, when you select a 60mm label width, ScaleLink Pro assumes an actual available print width of 59.4mm. Other label widths are scaled based on this value. That is, a 40mm label is assume to have an actual print width of 40 x 59.4/60 = 39.6mm.

4. Click **OK** to save the setup information.

5. Use one of the procedures described below to test the communications link to the scales.
   (Which procedure to use depends on whether you are using ID-ENQ or Data Save communications. See *Which Communications Link?* Above.)

EMZ Settings

This page contains a number of settings specific to EMZ series scales.



Item	Explanation
Single store operation (Do not allow multiple prices, etc. per PLU)	EMZ series scales permit a maximum of five price master records per PLU. (See for details.) This is intended for use in processing center or similar environments where you are packing product for more than one store. Set this check box off if you are using the EMZ in a single store environment where you have only one price per PLU. This setting controls the operation of the PLU Edit window and Price Change dialog to suit the way the EMZ scales are used.
Scale supports 2-color printing	Set this on if the EMZ scale has a 2-color print head. When set on, the print color can be specified in the PLU Edit window and other description text fields.
Message file mapping	This setting is intended for use in systems which use both EMZ and AC-series scales. Both the EMZ and AC-series scales support a range of different types of messages (extra messages on the AC series, free messages and ingredients, etc. on the EMZ). Normally the data for each type of message is maintained separately. However, if you wish to share messages between the two different

types of scale (to avoid duplication of data, for example), you can assign EMZ messages to be used in place of AC series messages. For example, if you map extra message #1 to free message #1, any changes made to free message #1 in Scalelink Pro are sent to the extra message #1 file on the AC series scales as well as to the free message #1 file on the EMZ scales.

Important: If you enable these fields, set the corresponding PLU field to **Display = OFF** in **Setup** -> **Plu Fields**. For example, if you map extra message #1 to free message #1, the extra message #1 field in the PLU data is no longer used so should be removed from the PLU Edit window.

Setting Up ID-ENQ Communications

Use the following procedure to setup and test the ID-ENQ communication link to the scales (See *Which Communications Link?* above):

ID-ENQ communication links can use either RS-232C or TCP/IP communications.

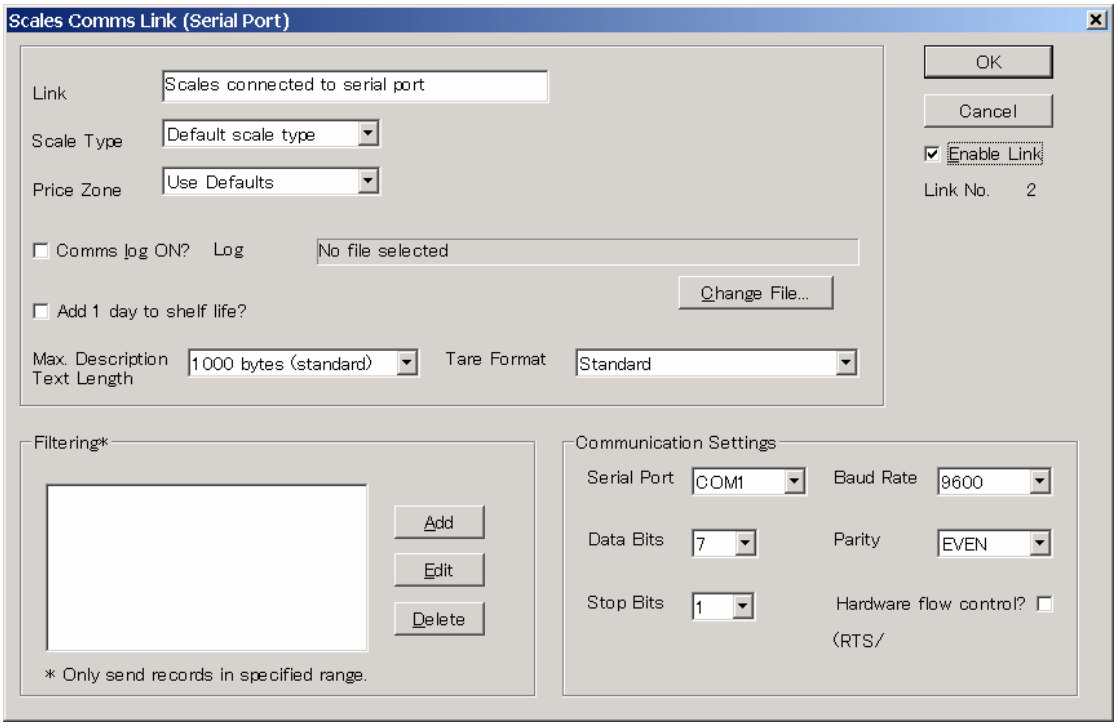
1. Check that the scales or MSCU are turned on and the necessary cabling is connected.
2. In ScaleLink Pro, click the Setup menu and select **Options**. Check that the **Enable Online Comms** check box is ON and that **Daisy-chained comms link?** is set correctly, then click OK.
3. Click on **Comms (Online)** in the **Setup** menu to open the **Communication Links** dialog.
4. Click the **Add** button to create a new communication link.
5. Select the type of communication link (RS-232C, TCP/IP, or AstraXT)
6. This opens a dialog (shown below) for the type of communications link specified. Set the comms link name and other parameters (described below). When finished, click OK to exit the dialog
7. If using more than one communication link, repeat steps 4 to 6 until you have created all the required communication links.
8. Click OK to save the settings and exit the dialog.

At any time, you can check the current link statuses or reconnect a link that has become disconnected (See *Chapter 3 Communicating with the Scales*).

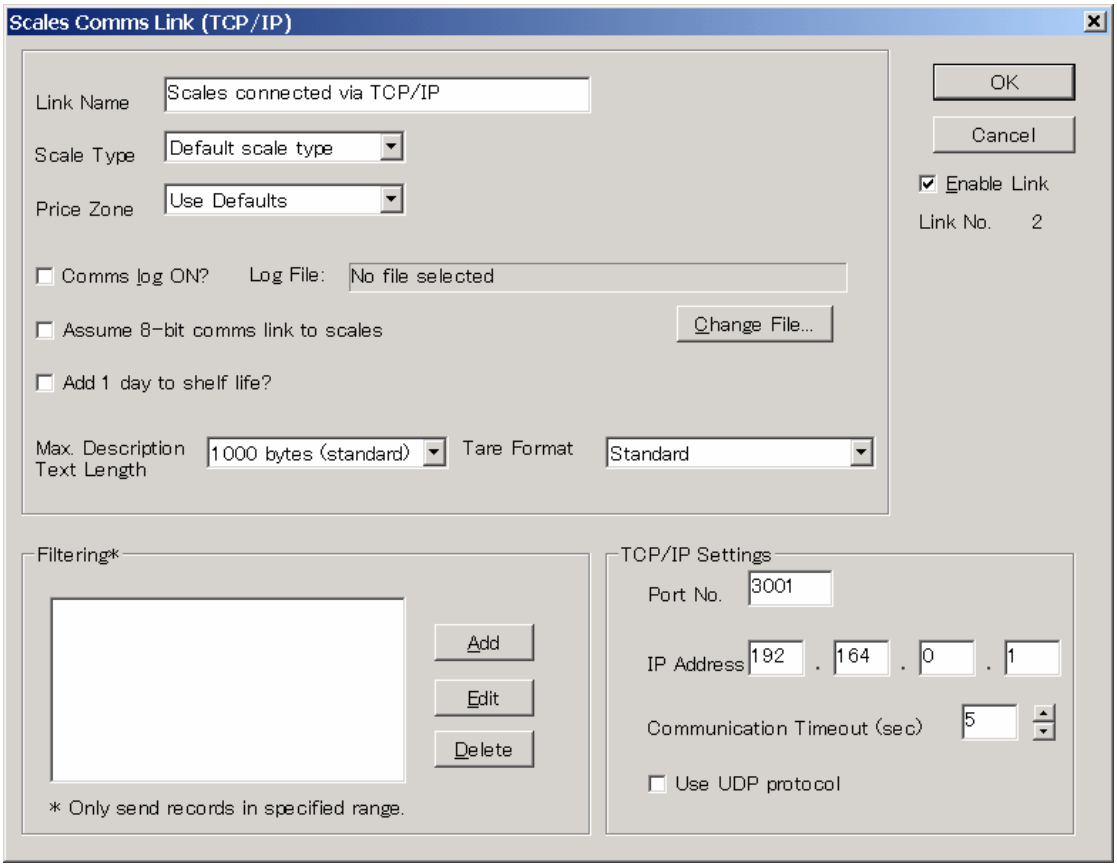
NOTE

The comms link setup dialog format differs depending on whether **Daisy-chained comms link?** is set on or off. The following examples are for **Daisy-chained comms link?** = OFF.

RS-232 Settings Dialog



TCP/IP Settings Dialog



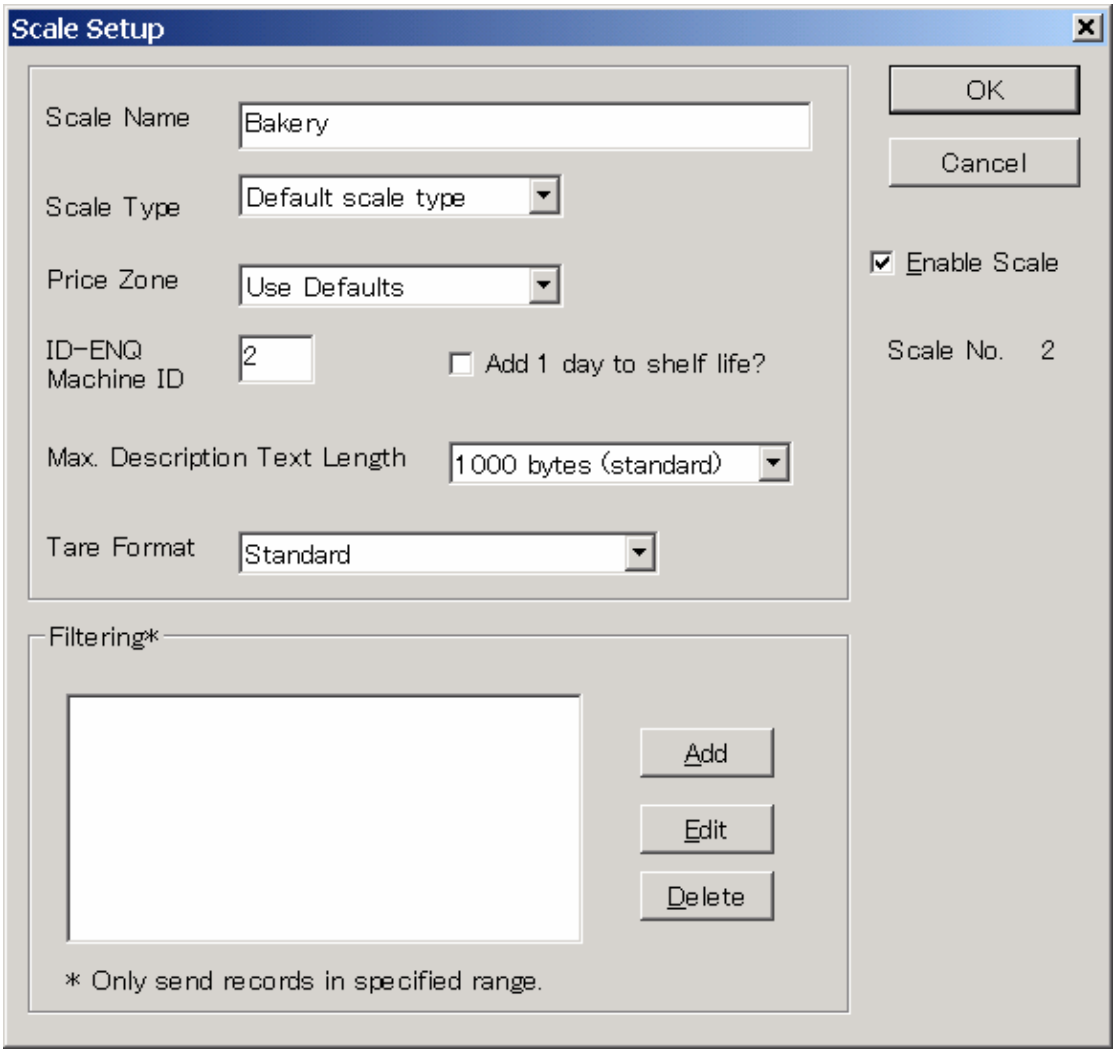
Communication link settings

Item	Explanation
Enable link	You can disable a link that is not currently being used. This avoids unwanted error messages if a link is unavailable for some reason.
Link name	Specify the link name. The name specified here is used to identify the link in other setting dialogs.
Scale type	The type of scale connected to this communications link. Set "Default scale type" unless connecting to a scale other than the type specified in the Options dialog.
Price Zone	Assigns the scale to a specific price zone. Set "**Use Defaults**" if not using the price zone feature.
Comms log ON **Log file**	ScaleLink Pro can record all communication activity in a log to help in fixing communications problems. If you set logging on, also specify the name of the log file. **NOTE**: Log files are cleared each time ScaleLink Pro starts.
Assume 8-bit comms link to scales	Set this check box when communicating with the scales via a TCP/IP terminal server if the serial link between the terminal server and scales uses 8 data bits. Typically, this setting is only used in Asian and other countries that use extended character sets. This setting only applies to TCP/IP links.

Item	Explanation
Add one day to shelf life?	Setting this ON increments the shelf life field in PLU data by one when transmitting to the scale (so zero represent "today", etc.).
Max. Description Text Length	Select the option that applies for the connected scale.
Tare Format	This setting only applies in the USA when using old single range scales in the same system as new dual range scales. In all other cases set "**Standard**".
Filtering (Daisy-chained comms link? = OFF.)	You can specify that the communication link only transmit data to the scales within a specified range of record numbers. Use the **Add**, **Edit**, and **Delete** buttons to specify the filters. If no filter is specified for a particular data type, all records for that data type can be sent to the scales.
Scales (Daisy-chained comms link? = ON.)	Use the **Add**, **Edit**, and **Delete** buttons to add or edit the scales connected to this comms link. Clicking the **Add** or **Edit** button opens a scale setup dialog. The operation is described below.
TCP/IP settings	Set the communication parameters for the link. The standard value for the **Communication Timeout** is 5 seconds. You may need to increase the value if the network is congested (e.g. if sending to more than 10 scales at a time) or if operating via a WAN which has a slower connection time.

Scale Setup

When **Daisy-chained comms link?** is set ON in the Options dialog, you can connect more than one scale to each communication link. In this case, clicking the **Add** or **Edit** button in the Scale Comms Link dialog displays the following dialog for defining the individual scales.
The meaning of each field is the same as described above for the Scale Comms Link dialog.
Important: The **ID-ENQ Machine ID** must match the value set in the scale.



Setting Up Data Save Communications

Use the following procedure to setup and test the Data Save communication link to the scales (See *Which Communications Link?* above).

The procedure is described for an AC-3000 series scale. The operation may differ somewhat for other Ishida products.

1. Connect the PC to the scales via an RS-485 to RS-232 converter. Consult your Ishida agent if you do not know the correct cabling requirements.
2. Turn on the scales and set to Test Mode.
3. Use the Test Mode menu to select DATA SAVE/LOAD.
4. Select TRANSFER FILE, enter the IF21 FILE NO. (enter 1) and press the Enter key twice.
5. Use the → key to select SEND: MASTER FILE.
   Leave the scales in this state and move to the PC. **Do not start sending the file yet**.
6. In ScaleLink Pro, click the Setup menu and select **Options**. Check that the **Hide Data Save menus** check box is OFF, then click OK.
7. Click the Setup menu and select **Comms (Data Save)**. Set the **Serial Port** selection to the port used to connect the scales and set the communications parameters.
8. Click the Comms menu and select **Receive (Data Save)**. A dialog appears indicating that ScaleLink Pro is ready to receive data from the scales.
9. Press the PRINT key on the scales to start the data transfer. A message appears on ScaleLink Pro when the transfer completes.
   If an error message appears, check that the cable is plugged in to the correct connectors and re-check the **Comms (Data Save)** settings.
10. If the transfer was successful, a dialog opens for you to specify the file name. Enter an appropriate name and click **OK**. Next, another dialog opens asking whether to import the received data. As we are only testing the comms link at this stage, click **No** to exit the dialog.

This completes setup of the communications link. The next step is to set the PLU profile.

Setting Up Department and Group Codes

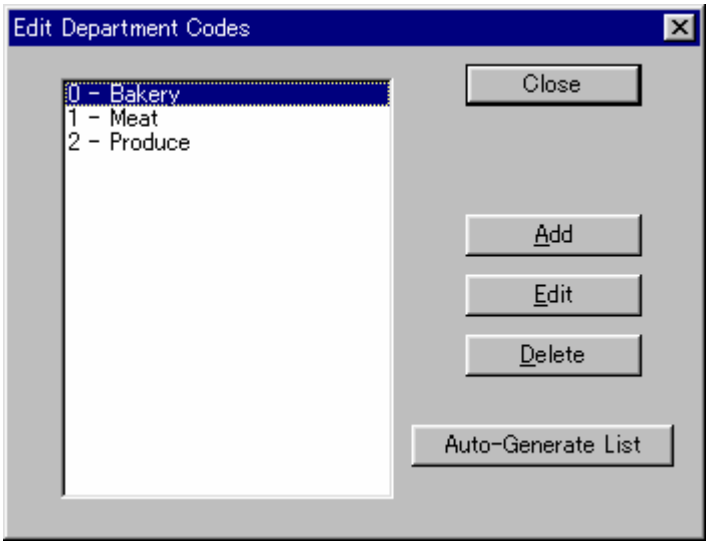
Ishida scales include department and group code fields in the data for each PLU. These are used to classify each PLU. In ScaleLink Pro, department and group codes are used in the PLU search window and for production report totals.

The scale treats the combined department, group and item code as a single 8-digit code. Within ScaleLink Pro, you can specify the number of digits for these fields, provided the total for the three fields adds up to 8 digits. The respective field lengths are specified in the PLU field setup. See *Appendix A.3 PLU Field Setup* for details.

If you wish to use department and group codes at your store, you must first enter the code definitions to ScaleLink Pro.

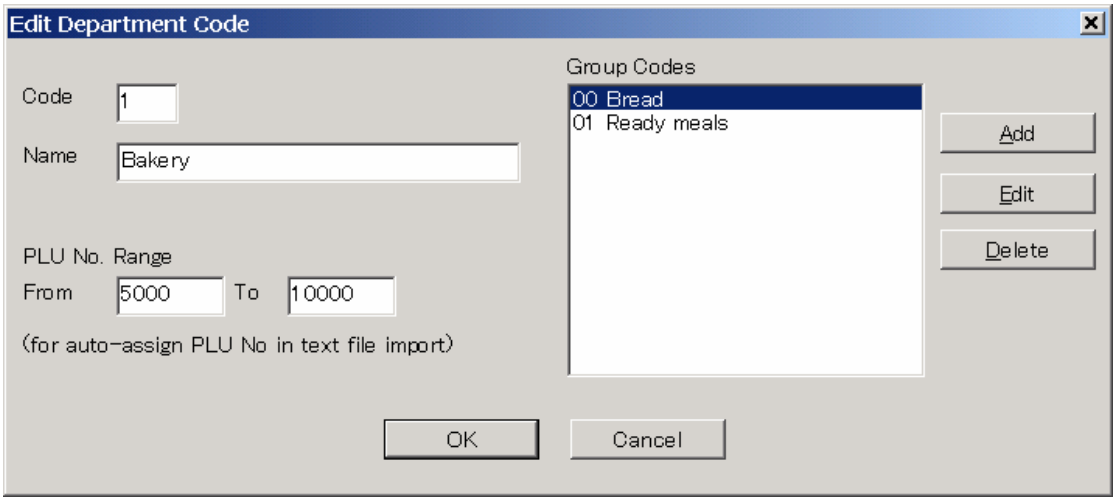
Use the following procedure:

1. Click on **Department Codes** in the **Setup** menu.
   This displays the dialog shown below.



2a. If you have already loaded the PLU data into the database with existing department and group codes, click the **Auto-Generate List** button. This scans the PLUs in the database and automatically generates a list of all codes found.
In this case, arbitrary names are assigned to each department and group. Use the **Edit** button to edit each department. This opens the dialog shown below.

2b. If you do not have existing PLU data with department and group codes set, click the **Add** button. This opens the dialog shown below.



3. Enter the department code and name.
4. If using the function to automatically assign PLU numbers based on department when importing from a text file, set the PLU number range for the department. See *8.1 Text File Import* for details of this function.
5. Click the **Add** button to add a group code definition. This opens a dialog for you to specify the group code and name.
6. Repeat step 4 until all group codes used in the department have been defined, then click OK to save.
7. Repeat the above steps until all department and group codes are defined.

NOTE

To enable use of the department and group codes in the PLU Search window, select **Options** from the **Setup** menu and set **Use Dept & Group code in search window** = ON.

Setting Up Departments

The departments feature is useful in stores where you wish to manage the PLU and other scale data separately for each department.

NOTE This is not the same as the department and group codes used in the PLU data.

Do I need this feature?

Use the department feature if you wish to keep data for different departments separate. However, you must use the department feature in the following case:

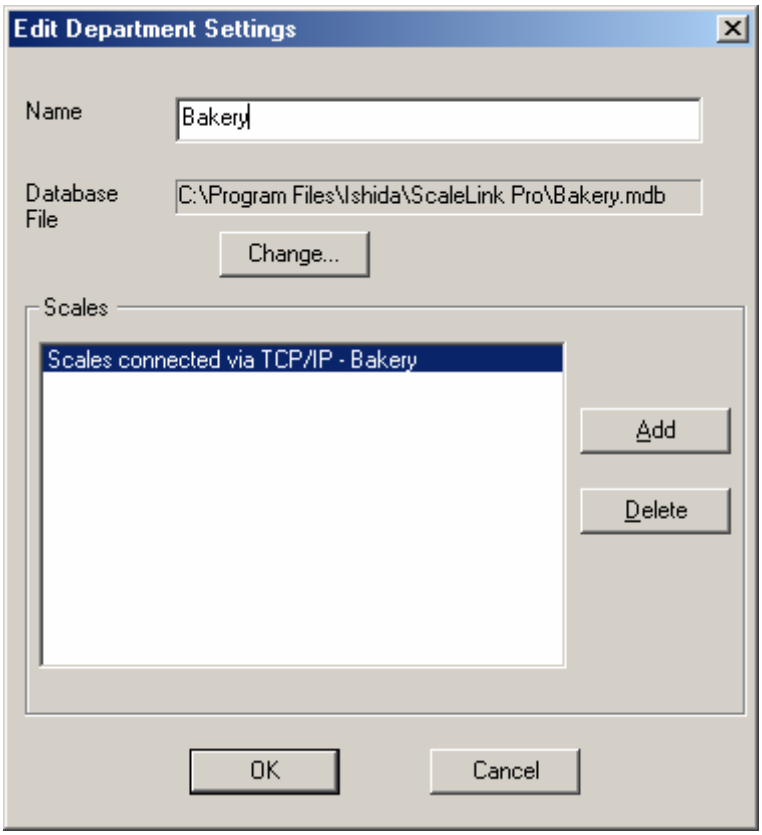
- If you use the same PLU number for different products in different departments

NOTE You must have defined all the communication links and scales used in the store before you can define the departments. See *Setting Up ID-ENQ Communications* above for details.

Setup procedure

Use the following procedure to setup the departments for your site.

1. Click on **Departments** in the **Setup** menu.
2. Click **Add** to create a new department. This opens the dialog shown below.
3. Enter the department **name** and other settings (described below), then click OK.
4. Continue until you have added all the required departments, then click OK to exit the Edit Department Settings dialog.



Settings

Item	Explanation
Name	The department name specified here appears in the department selection dialog. The title bars of the PLU Search and PLU Edit windows display the name of the currently open department.
Database file	Specify the database file for this department.
Scales	Use the **Add** and **Delete** buttons to assign which scales belong to this department. Each department must have at least one scale assigned.

Setting Up the PLU Range Profile

The PLU range profile function is used to restrict which PLUs are visible in ScaleLink Pro.

Do I need this feature?

PLU range profiles are intended for multi-store or multi-department operation where the same master file (PLU database) is used for all stores or departments, but where not all stores carry the same products.

The PLU range profile function allows you to specify ranges of PLU numbers to exclude from all ScaleLink Pro screens and operations. In this way, ScaleLink Pro can be made to only show those PLUs that are actually used in the store or department, making searching for PLUs easier.


NOTE

A separate PLU range profile can be assigned to each user. See *Setting Up ScaleLink Pro Users* below for details.


NOTE

In version 2 and earlier of ScaleLink Pro, the PLU profile settings were stored in a separate file. From version 3 onwards the settings are stored in the site setup file. However, if a user-specific PLU profile is defined, the profile settings for that user are stored in the file name specified in the user setup. See *Setting Up ScaleLink Pro Users* below for details.

Use the following procedure to setup the PLU range profiles for your site.

1. Click on **PLU Range Profile** in the **Setup** menu.
2. Click **Add** to create a new PLU range.
3. Enter the PLU range and an optional comment, then click OK
4. Continue until you have added all the PLU ranges used in this store or department.

Setting Up ScaleLink Pro Users

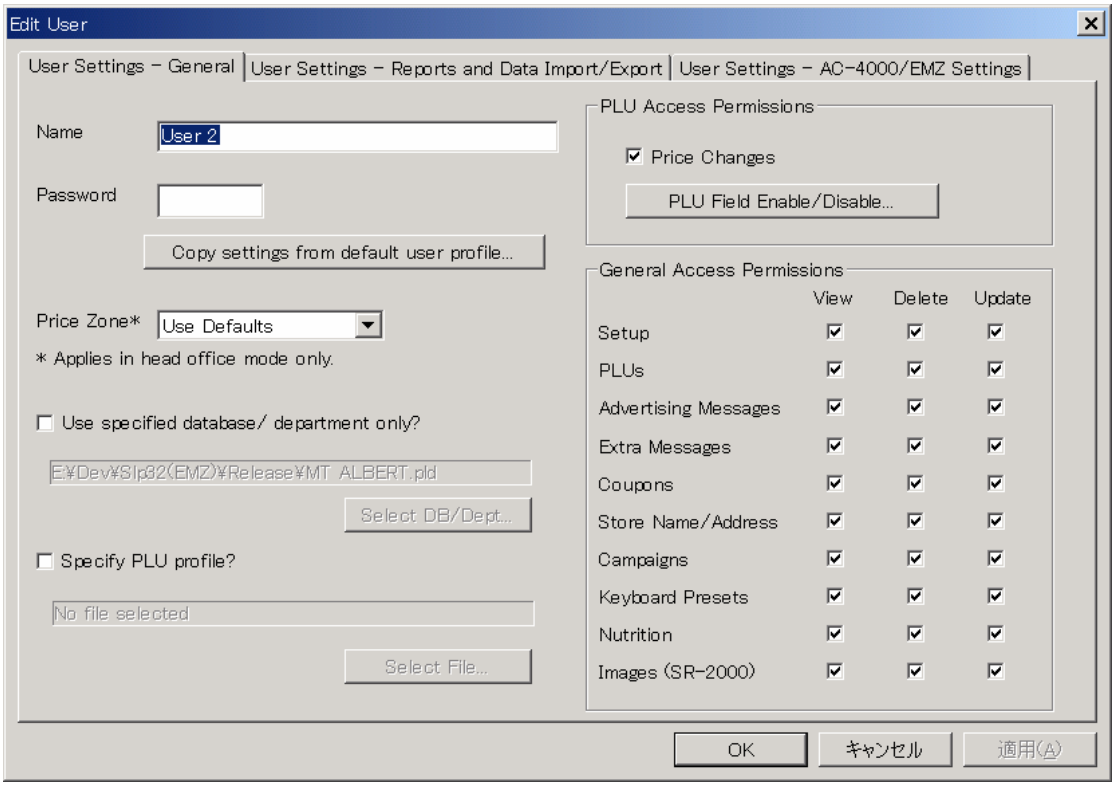
ScaleLink Pro allows you to define a user name and password for authorized users and to restrict access to specific functions.

Do I need this feature?

You need to define user settings if you wish to control user access to the ScaleLink Pro functions. User access control is automatically disabled if no users are defined. In this case, ScaleLink Pro does not prompt for a user name and password at startup and all users can access all functions.

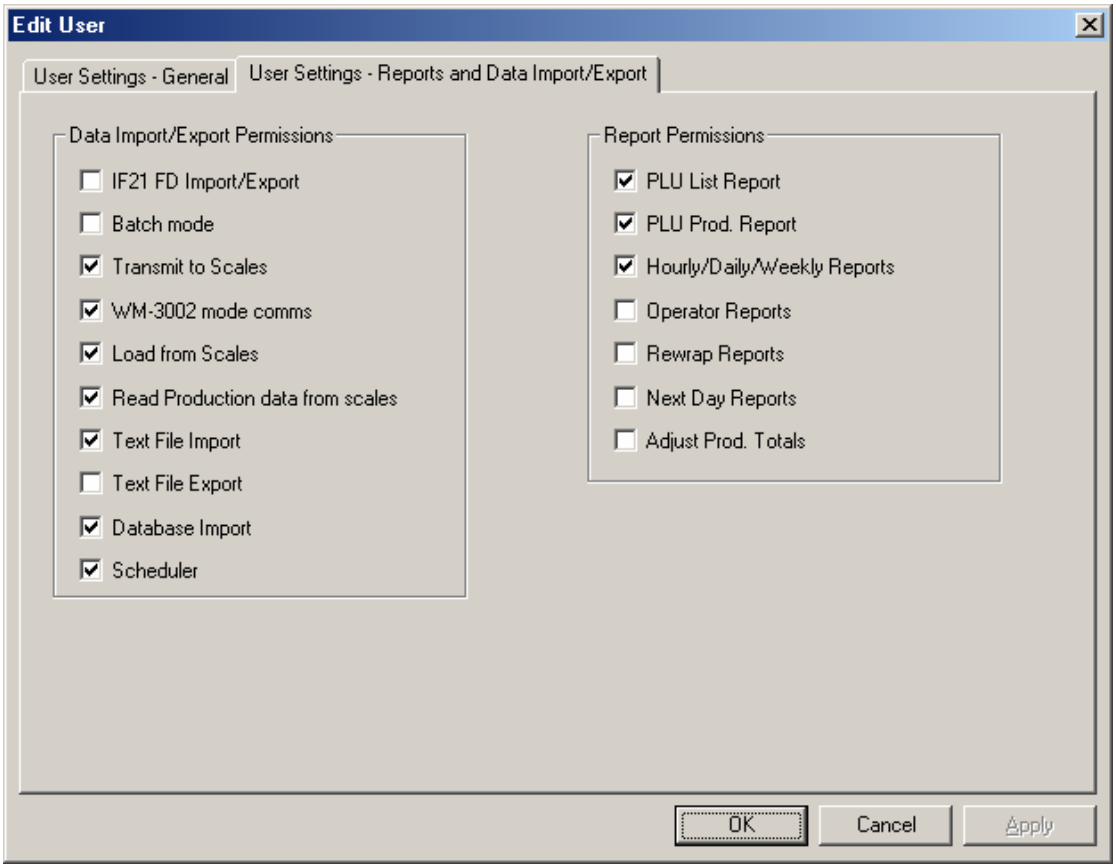
Use the following procedure to setup the ScaleLink Pro users for your site.

1. Click on **Users** in the **Setup** menu.
2. Click **Add** to create a new user. This opens the dialog shown below.
3. Enter the user **name** and **password**, then set the access permissions and other user settings, on both the tabs described below. Click OK when finished.
4. Continue until you have added all the required users, then click Close to exit the Edit User Settings dialog.



User settings - General

Item	Explanation
Copy settings from default user profile	Click this button select a profile to copy the settings from. Once a new profile is selected, existing settings are replaced with the settings from the profile. See *Setting Up User Profiles* below for details
Price Zone	You can restrict the user to only modify data from a specified price zone. This setting is only applicable in head office mode. Specify "Use Defaults" to allow the user to access all price zones. Note that the Sale Wizard is not available to users with a setting other than "Use Defaults".
Use specified database/ department only?	Set this check box on to limit the user to access one designated database or department only. A File Open dialog or Department Selection dialog opens for you to specify the database file or department. Use the **Select DB/Dept** button if you wish to change the specified database file or department.
Specify PLU profile?	Set this check box on if you wish the user to use a specified PLU range profile. A File Open dialog opens for you to specify the PLU profile file. The file does not need to exist already. Use the **Select File** button if you wish to change the specified PLU profile file. To enter the actual PLU profile settings for the user, you must log-in as that user and use the **PLU Range Profile** command in the **Setup** menu to set the profile. The profile settings are saved in the users PLU profile file (the file set in this field) and applied to all users who have this file specified as their PLU profile.
PLU Access permissions	The **Price Changes** check box specifies whether the user has permission to make price changes. Click on the **PLU Field Enable Disable** button to display a dialog box showing all available PLU fields. This allows you to choose individual fields which the user has permission to change.
General Access permissions	These check boxes specify whether the user has access to each type of scale data. If these check boxes are selected: **View** Shows the associated menus commands and buttons. **Delete** Allows the user to delete data. **Update** Allows the user to modify data.



User settings – Reports and Data Import/Export

Item	Explanation
Data Import/Export Permissions	These check boxes specify access permission to functions related to data import and export.
Report Permissions	These check boxes specify whether the user has the permission to create each type of report.

Disabling User Access Control

Click the **Remove All** button in the Edit User Settings dialog to delete all users. This disables the user access control feature.

Using the User Access Control Feature to Customize ScaleLink Pro

Even if you do not wish to control user access to ScaleLink Pro, you can still use the user access control feature to determine which commands appear in the menus. Specifically, you can simplify the operation of ScaleLink Pro by hiding those feature that are not used at your store.

To do this, simply create a single user with the unwanted functions disabled. Leave the user password blank.

If only one user is defined and that user has no password specified, ScaleLink Pro applies the access permissions for that user automatically but does not display the user logon dialog at startup.

Setting Up User Profiles

ScaleLink Pro allows you to define profiles of common user settings and permissions. The settings created here can be used to speed up creating new users for the system. If you have many users, and groups of users need access to similar features, then a profile can be set up specifying default access permissions. When setting up a new user, this profile can be selected and these defaults are loaded. Individual changes can then be made before the user is created.

Use the following procedure to setup the ScaleLink Pro user profiles for your site.

1. Click on **User Profiles** in the **Setup** menu.
2. Click **Add** to create a new user profile or **Edit** to edit an existing one. This opens the same dialog that was shown above for setting up a new user. The only difference is that you cannot enter a password. Passwords must be specified for each user
3. Enter the profile **name** and set the access permissions and other settings, on both the tabs as described above for setting up a new user. Click OK when finished.
4. Continue until you have added all the required profiles, then click Close to exit the Edit Default User Profiles dialog.
5. Once User Profiles are set up, when you click **Add** in the Edit User Settings dialog box (See step 2 under *Setting Up ScaleLink Pro Users* above), you will first see a Select User Profile dialog. You can either select the profile you wish to use then click **Select**, or click **Cancel** to use the defaults (i.e. all access enabled). In either case, the Edit User dialog is displayed and user settings can be edited normally.

Setting Up Price Zones

The price zone feature allows different values to be set for specific data fields in each PLU. Typically, this is used to set different prices for different groups of stores (hence the name "price zones").

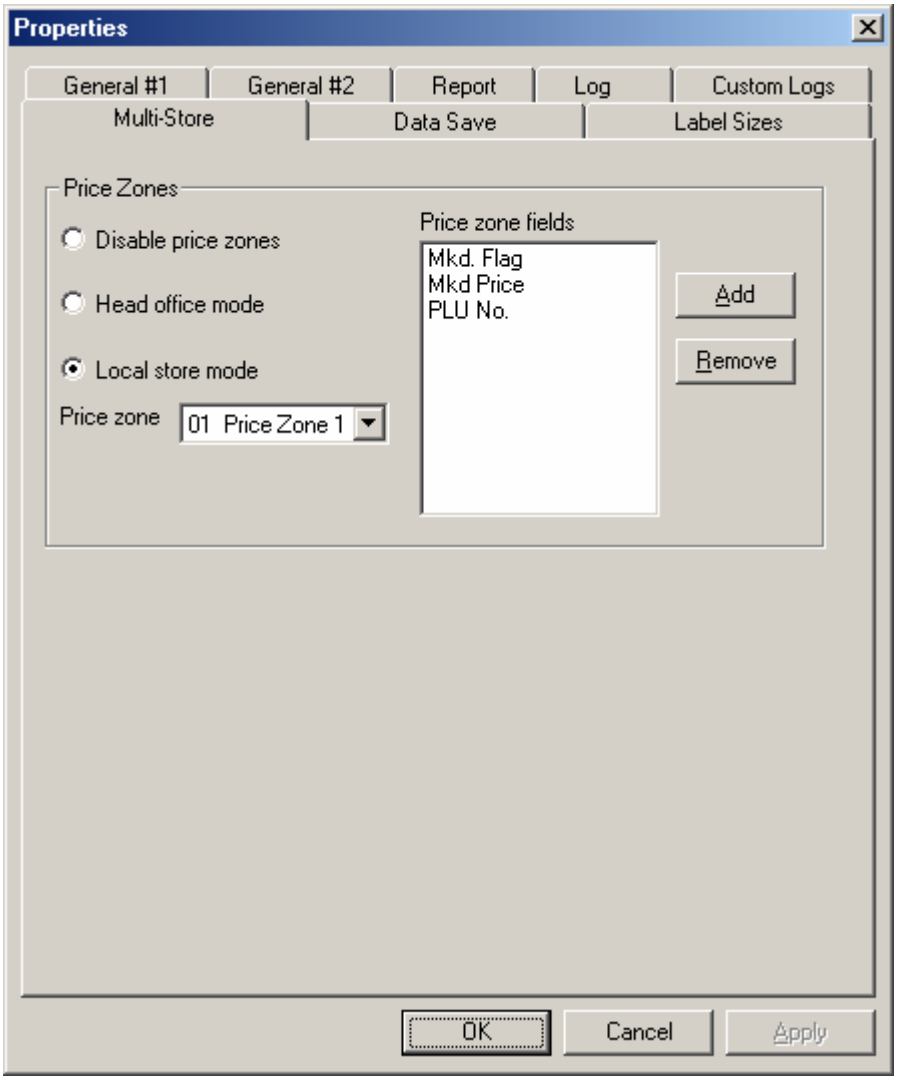
Do I need this feature?

Price zones are intended for use in a multi-store environment. Use the price zone feature if you intend to manage PLU data for multiple stores in a single central database, but need the flexibility of setting store-specific values such as price.
If not required, you can disable the price zone feature.

Use the following procedure to setup the price zone feature for your site.

1. Click **Price Zones** in the **Setup** menu.
2. Click **Add** to create a new price zone.
3. Enter the price zone **name** and **ID** in the dialog, then click OK.
4. Continue until you have added all the required price zones, then click OK to exit the Edit Price Zones dialog.
5. Click **Options** in the **Setup** menu and click on the **Multi-Store** tab. This opens the dialog shown below.
6. In the left side of the dialog, select the operation mode for this installation. If you select local store mode, select the price zone to which the store belongs.
7. In the right side of the dialog, use the **Add** and **Remove** buttons to specify which fields allow price zone-specific values to be set.
8. Click OK to complete price zone setup.

Note: The PLU active/inactive setting may also be used as a price zone field. However, in this case you must define the active/inactive field in the PLU field setup. Contact your Ishida agent for details.


Properties
General #1
General #2
Report
Log
Custom Logs
Multi-Store
Data Save
Label Sizes
Price Zones
Disable price zones
Head office mode
Local store mode
Price zone
01 Price Zone 1
Price zone fields
Mkd. Flag
Mkd Price
PLU No.
Add
Remove
OK
Cancel
Apply

Setting Up Text File Import and Export

ScaleLink Pro has a flexible text file import and export function. To simplify operation for the user, you can pre-define the settings for commonly used import and export operations.

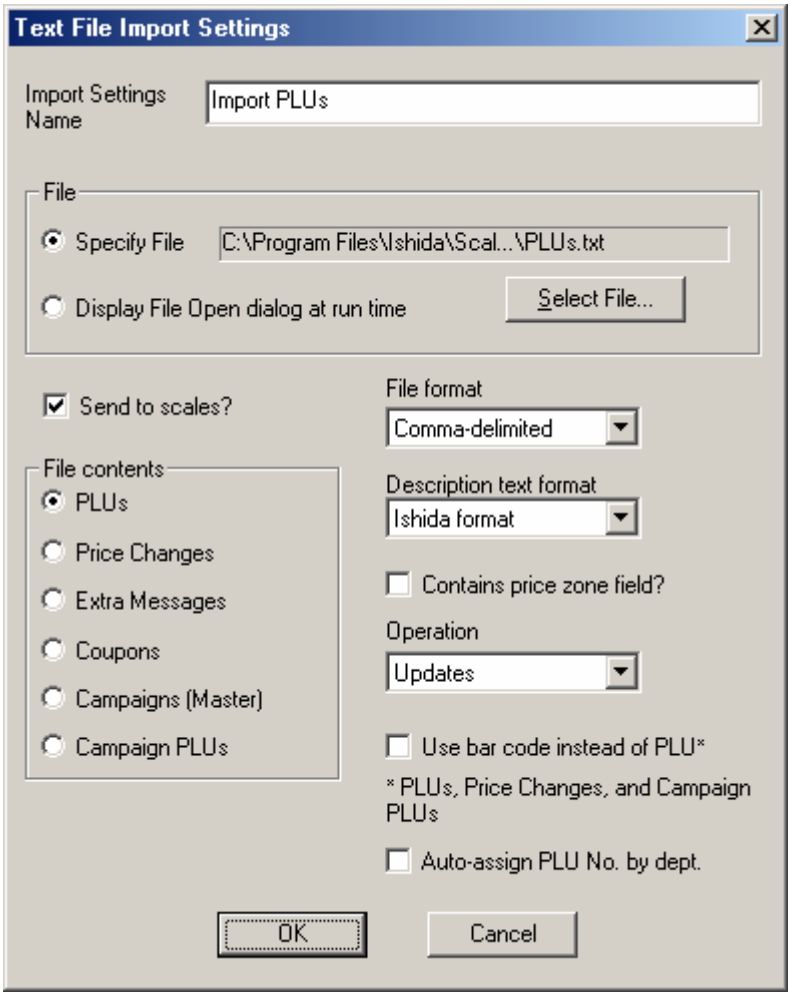
When the user selects the text file import or export command from the **Tools** menu, a list of the defined import or export operations is displayed. The user can either select a pre-defined import/export operation or click the **Customize** button to specify the import/export settings directly.

Do I need this feature?

Only use the text file import and export setup feature if you have a commonly used import or export operation. The text file import and export functions are still available even if no import or export settings are defined.

The procedure for defining text file import settings is as follows. The operation for defining text file export settings is the same.

1. Select **Text File Import** from the **Setup** menu.
2. Click **Add** to create a new text file import operation. This opens the dialog shown below.
3. Enter a name and the various settings including the format and operation. (See *Appendix B Text File Formats and Operations* for details.)
   The name specified here appears in the list of pre-defined import settings when the user clicks **Import from Text File** in the **Tools** menu.
4. Click OK to exit the Text File Import Settings dialog.
5. Repeat steps 2 to 4 until all import operations are defined, then click OK to save the setup.


Text File Import Settings
Import Settings Name
Import PLUs
File
Specify File
C:\Program Files\Ishida\Scal...\PLUs.txt
Display File Open dialog at run time
Select File...
Send to scales?
File format
Comma-delimited
File contents
PLUs
Price Changes
Extra Messages
Coupons
Campaigns (Master)
Campaign PLUs
Description text format
Ishida format
Contains price zone field?
Operation
Updates
Use bar code instead of PLU*
* PLUs, Price Changes, and Campaign PLUs
Auto-assign PLU No. by dept.
OK
Cancel

Setting Up Database Import

To simplify operation for the user, you can pre-define the settings for commonly used database import operations.

When the user selects the **Import from Database** command from the **Tools** menu, a list of the defined import operations is displayed. The user can either select a pre-defined import operation or click the **Customize** button to specify the import settings directly.

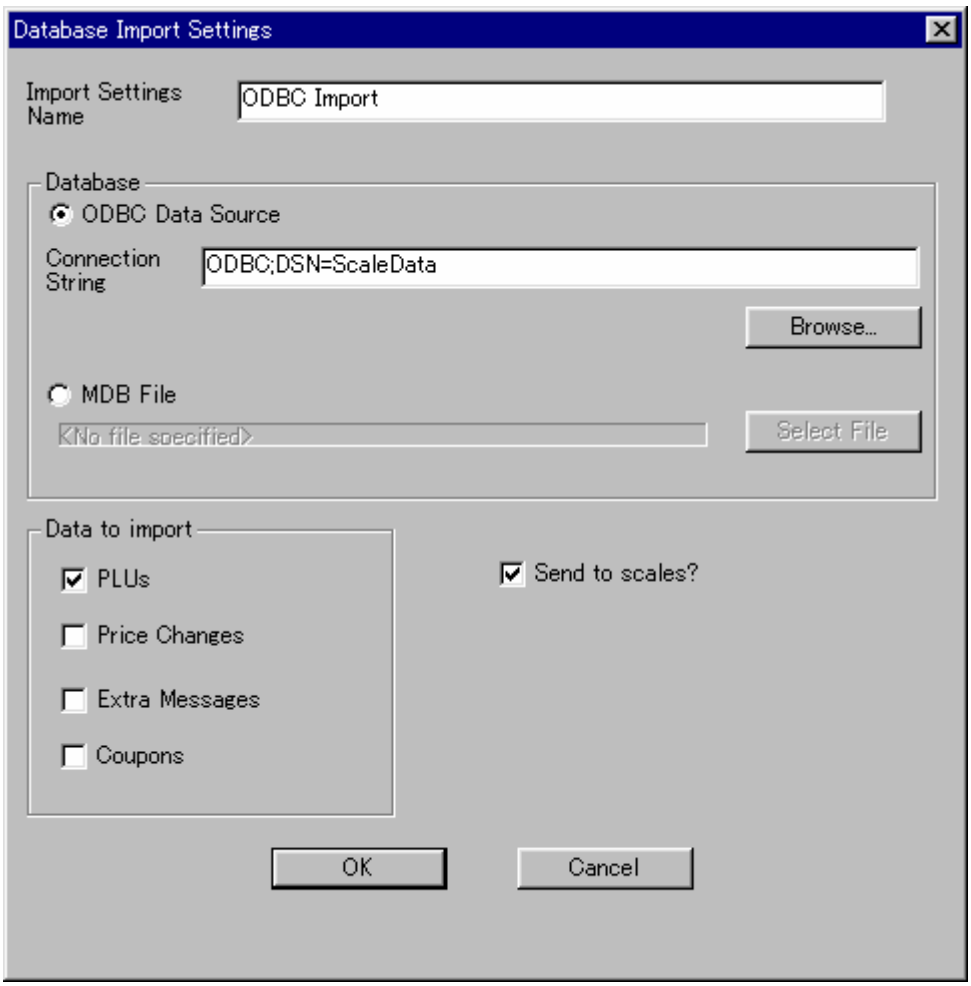
See *8.3 Database Import* for details.

Do I need this feature?

Only use the database import setup feature if you have a commonly used database import operation. The database import function is still available even if no import settings are defined.

The procedure for defining database import settings is as follows.

1. Select **Database Import** from the **Setup** menu.
2. Click **Add** to create a new database import operation. This opens the dialog shown below.



3. Enter a name.
   The name specified here appears in the list of pre-defined import settings when the user clicks **Import from Database** in the **Tools** menu.
4. Select whether to import from an ODBC data source or an MDB file

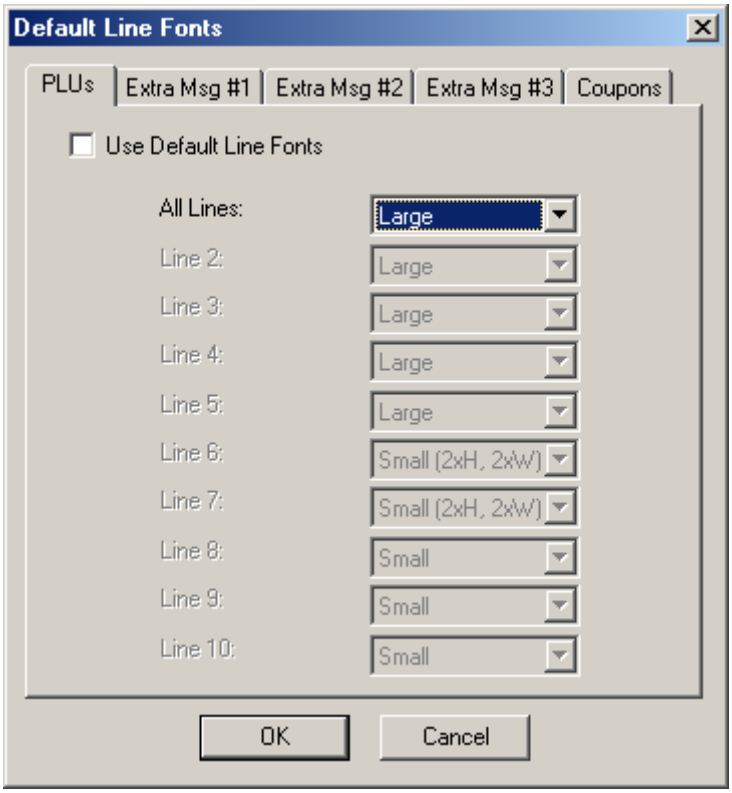
and set the connection string or file name. (Contact your database administrator for details.)

5. Set the otter settings, then click OK to exit the Database Import Settings dialog.

6. Repeat steps 2 to 5 until all import operations are defined, then click OK to save the setup.

Setting Up Default Line Fonts

ScaleLink Pro now allows you to have default line fonts for PLUs, Extra Messages (1, 2 and 3), and Coupons, where supported. This means that you can have a default font set for each line, up to a maximum of ten lines. The default fonts are then automatically applied when you create a new PLU label, extra message, or coupon. To set up default line fonts, click on **Default Line Fonts** in the Setup menu, and a dialog like the one below should appear.



Each of the tabs is used in the same way. By default, Default Line Fonts is turned off. If so, the only font you can change is the default font for all lines. To turn on Default Line Fonts, follow the steps outlined below:

1. Select the **Use Default Line Fonts** check box. This enables all the individual line options, and changes “All Lines” to “Line 1”

2. Select the appropriate font for each line from the list box

   2xH means the font is twice the normal height

   2xW means the font is twice the normal width

3. Click **OK** to save the changes, or click another tab and repeat steps 1 and 2 to change more line fonts.

e-Mail Settings

A function is also available in the scheduler to e-mail the results of the scale status log to designated e-mail addresses. This function is not available in all countries. Contact your Ishida agent for details.

The procedure for specifying the addresses and other e-mail settings is as follows.

1. Select **e-Mail Settings** from the **Tools** menu.
2. A dialog opens displaying the e-mail settings. Set the fields as described below.
3. Click **OK** to save the changes.

Item	Explanation
Store ID	This appears in the e-mail subject line and is used to identify the store that sent the message.
SMTP Server	The SMTP server to use to send the e-mail. Contact your network administrator if unfamiliar with this setting.
SMTP User Name, SMTP Password	Specify these if required by your SMTP server. Contact your network administrator if unfamiliar with these settings. These can be left blank in many cases,
From:	The e-mail address to appear in the "From" header of the e-mail. Depending on the SMTP server, this may need to be a valid e-mail address.
To:, Cc:	The e-mail addresses to send the e-mail to. You can specify multiple addresses separated by commas in the same way as standard e-mail software.
Body Text 1, 2, 3	Text used in the e-mail body. The format of the body text may be different for different countries.

A.3 PLU Field Setup

The data defining a PLU consists of the PLU description and a large number of parameters (such as the price) that specify how to print the PLU on a label. Most stores, however, will only use some of these parameters. The markdown price and markdown flag parameters, for example, are unnecessary if you do not use the markdown feature.

ScaleLink Pro has the facility to specify which fields to display in the PLU Edit window. This simplifies operation by hiding unused fields. Fields not displayed in the PLU Edit window are set to their default values (which you can also specify).

Similarly, you can configure which fields to include in the PLU report (click **PLU Report** in the PLU menu to open a Report window). The first two columns always contain the PLU number and description. The remaining columns are filled with those fields selected for inclusion in the report, up to the end of the line. If you select more fields than will fit on a line, the excess fields are not included in the report. (The line length automatically adjusts based on the size of the printer paper.)

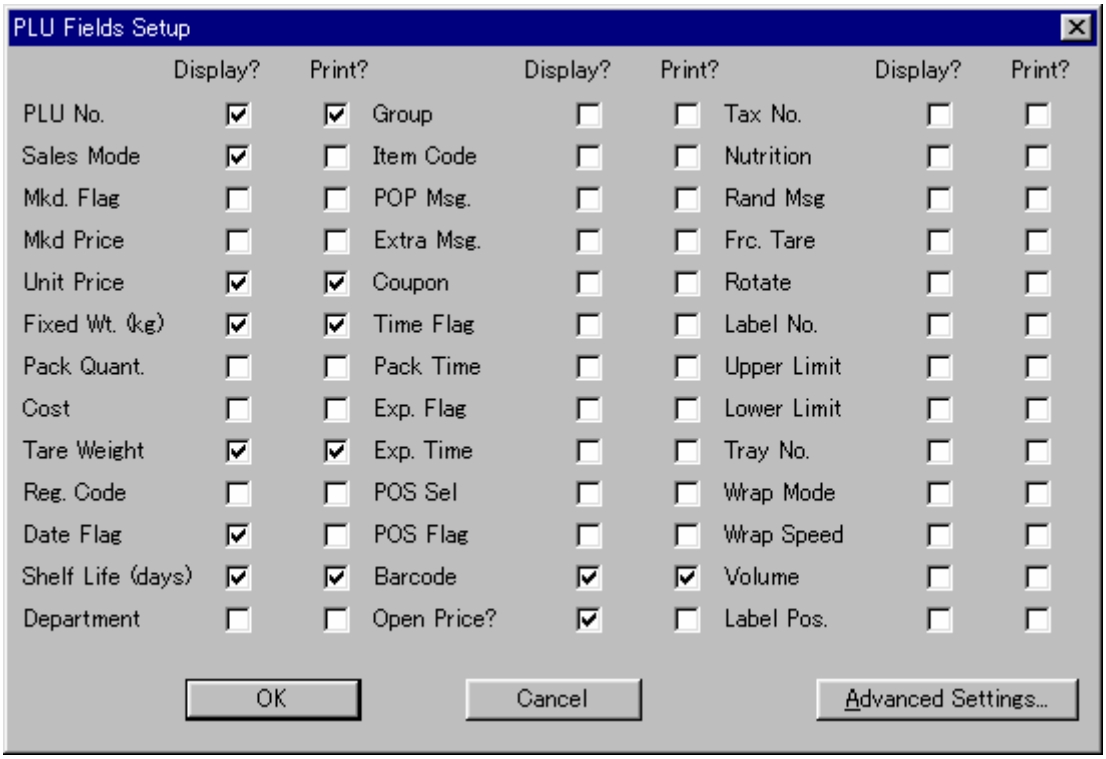
HINT: To fit more fields on a line, set the printer to landscape mode (select **Print Setup...** from the File menu.)

You can also control how each field is displayed. For example, if a field has a fixed set of allowed values, you can present the user a list of options to select from.

Selecting Fields for the PLU Edit Window and PLU Report

This section describes how to specify which fields to display in the PLU Edit and Report windows. You can also specify how to display each field.

1. Click **PLU Fields** in the Setup menu. This opens the dialog shown below.
2. Use the dialog to select which fields to display in the PLU Edit window and which to include in the PLU Report..



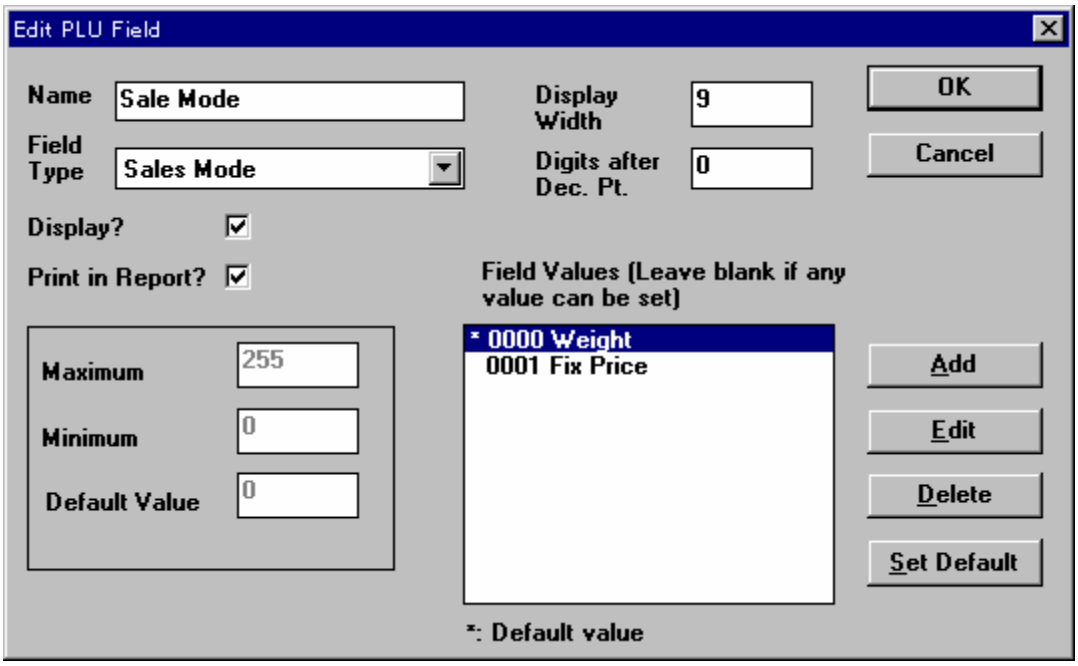
3. If you wish to customize individual fields, click the **Advanced Settings** button. The operation is described below.

Customizing a PLU Field (Advanced Settings)

Clicking the **Advanced Settings** button in the PLU fields setup dialog displays a list of the registered PLU fields. To edit the detailed settings for a field, click on the field to select then click the **Edit** button (or simply double-click on the desired field). This opens the dialog shown below for customizing the PLU field.

NOTE

The default PLU field settings provided with the installation should be adequate for most users. The ability to customize fields is mainly provided to allow for future modifications to the scales and to customize the software for different countries. Take care when using this feature as incorrect settings can cause misoperation of ScaleLink Pro or scales.



The following describes the meaning of each item.

Item	Explanation
Name	The field name. The name specified here is used as the field title in the PLU Edit window and report. Accordingly the name must be short enough to display in the PLU Edit window.
Field Type	The field meaning. Select from the list. Do not create more than one field with the same meaning.
Display?	Specifies whether to include the field in the PLU Edit window.
Print in Report?	Specifies whether to include the field in the PLU Report.
Display Width	For numeric fields, this specifies the number of digits to display (not counting the decimal point). For fields that have a fixed set of allowed values, this specifies the width of the field's column in the PLU Report. Set the width to at least the number of characters in the longest field value name. (e.g. in the above example, the display width = 9, being the number of characters in "Fix Price".)
Digits after Dec Pt.	The number of digits to display after the decimal point. Specify zero to not display a decimal point.

Which of the following items to set depends on how you wish the field to appear in the PLU Edit window.

For fields that take one of a fixed set of values (e.g. the sales mode can be either “Fixed price” or “Weight”), set the allowed values in the **Field Values** list, as follows.

Item	Explanation
Add	Adds a new field value. This opens a dialog to specify the name and numeric value of the field value.
Edit	Edits the selected field value. This opens a dialog to edit the name and numeric value of the field value. (Double-clicking on a value in the list performs the same operation.)
Delete	Delete the selected value.
Set Default	Makes the selected value the default value. This value is set as the default when a new PLU is created. The default value is indicted in the list by an asterisk (*).

For fields that take any value within a specific range (e.g. the price or weight), leave the **Field Values** list empty and set the following items.

Item	Explanation
Maximum	The maximum allowed value of the field. An error message appears if in the PLU Edit window if the user specifies a value grater than the maximum.
Minimum	The minimum allowed value of the field. An error message appears if in the PLU Edit window if the user specifies a value less than the minimum.
Default	This value is set as the default when a new PLU is created.

Appendix B Text File Formats and Operations

B.1 Operations

The text file import function can be used to add new records, update existing records, or delete records.

The operation can either be specified in the ScaleLink Pro text file import dialog, or in the text file itself using an "operation command".

Operation Commands

The text file format has an optional facility to specify an operation command field as the first field in each record.
The operation command is a single character (upper or lower case) as follows:

Command	Operation
A	Addition
U	Update
D	Deletion

Operations

Additions
Creates a new record with the specified record number. If the specified record number already exists, the old data is overwritten. Missing or empty fields are set to their default value defined in the PLU Fields Setup.

Updates
Updates existing records, if present. If the specified record number does not already exist, a new record is created with the default values defined in the PLU Fields Setup. Missing or empty fields are set to their existing values.

Deletions
Deletes the record with the specified record number, if present.
A deletion command is still sent to the scales even if the specified record number does not exist in the database.

B.2 Text File Formats

ScaleLink Pro defines a standard, general-purpose format for text file import and export which is described below.

Special custom formats may be added from time to time for specific customers. These are not covered by the ScaleLink Pro documentation. Contact your Ishida agent if you require details.

Key features of the standard format are as follows:

- Export data is in a format suitable for importing into packages such as Excel.
- An optional column header line can be included at the start of the import text file to specify which fields are present and the order in which they appear.
- Import text file fields can be empty (blank). Empty and missing fields are set to the existing value (for update) or default value (for addition).
- If a column header line is specified, the first field can optionally be a control field to specify whether the line represents an addition, update, or deletion.
- Character string fields must be enclosed in double quotes (in case the character string contains a comma in comma-delimited format).

Text File Export Format

In all text file formats, data consists of one record per line. Individual fields in each record are separated by the specified delimiter character (either a comma or TAB character).

When exporting, all fields from the selected data are output. If **output column headers** is ON, the field names are output on the first line of the file (separated by the delimiter character).
If **Include price zone?** is ON, a price zone field is included as the second field after the PLU number. (This only applies for PLU and Price Change exporting.)

This format is suitable for importing into packages such as Excel.

Text File Import Format (Additions and Updates)

The format for imported text files is the same as for text file exporting except that not all fields are required to be present. Fields can either be empty (blank space) or missing (not specified in the column headers). In both cases, the field value is set to the existing value (for an update to an existing record) or to the default value defined in the PLU Fields Setup (when adding a new record).

The different import format options are as follows

Column Header Line	Missing/Empty Fields	Explanation
Not present	All fields must be present and in the correct order. Empty fields are allowed.	The order of the fields in each line is the same as for text file export. Operation commands may not be used.
Present	Allowed. Missing and empty fields are set to existing value (update) or default value (addition)	The column header line is used to specify which fields are present and the order in which they appear. The data must always include the record number, which must be the first data field after the optional operation command (see below)

The simplest way to get a list of the column header names and the order in which ScaleLink Pro expects to find the fields is to use the text file export function with **output column headers** set ON, then use a text editor to view the resulting file.
Also use this method to check which fields are character string fields that must be enclosed in

double quotes.

Text File Import Format (Deletions)

The deletion format consists of the record number only. (Or, if operation commands are used, the format consists of the operation command 'D' followed by the record number. For example "D,0001" deletes record #1.)

Operation Command

If a column header line is present, the first field in each record may optionally be an operation command (described in *B.1 Operations*). The column header name for the operation command is "Cmd".

Price Zone

If a price zone field is present, it must be the first field after the PLU number. The column header name for the price zone field is "PriceZone".

Description Text Formats

Format	Explanation
Ishida format	The description text is output using the same format as in Ishida ID-ENQ communications (i.e. contains embedded control characters).
Line by Line	Each line of the description is output as separate font and text fields. However, this format has some important restrictions, described below. As a consequence of these restrictions, **do not use line by line format if you intend to import the text file back into ScaleLink Pro** as data will be lost.

Line by line format details

Line by line description text format does not support font type (bold, underline, reverse, or italic) information. Also, a maximum of ten lines of description text can be specified.

The column titles are "Font1,Desc1, Font2,Desc2, ..., Font10,Desc10". The font is the Ishida font code character ('1' to '9' and 'A' to E') and the description is the description text for the line, enclosed in double quotes.

Example:
...,Font1,Desc1,Font2,Desc2, ...
...,3,"Description line 1",3,"Description line 2","","","","",...

Keyboard Presets Import File Format

Keyboard preset settings are imported using the same procedure as the other text import operations described above. However, because keyboard preset data is assigned to specific scales and stored in the site setup file rather than being stored in the main database, there are some important differences in the text file format. The codes used to specify presets are also listed.

Import Format

The basic format is the same as described above for other text import operations. A title line can optionally be specified in the first line of the file. If not specified, the following column order is assumed:

ScaleId, KeyNo, Type, Data

Column Name	Explanation
ScaleId	Identifies the scale to which the keyboard setting belongs. See the explanation below. This field is optional but one of either **ScaleId** or **ScaleName** must be specified.
ScaleName	Identifies the scale to which the keyboard setting belongs. The name is case-sensitive. Note that **ScaleName** cannot be used in MSCU systems. This field is optional but one of either **ScaleId** or **ScaleName** must be specified.
KeyNo	The key number in the keyboard. The key numbering is shown below. This field is mandatory
Type	A code indicating the preset key meaning. The codes are listed below. This field is mandatory
Data	The value assigned to the preset key. For example, if the key *type* is PLU, this specifies the PLU number. Set zero for keys that do not require any data. This field is mandatory.

Scale ID

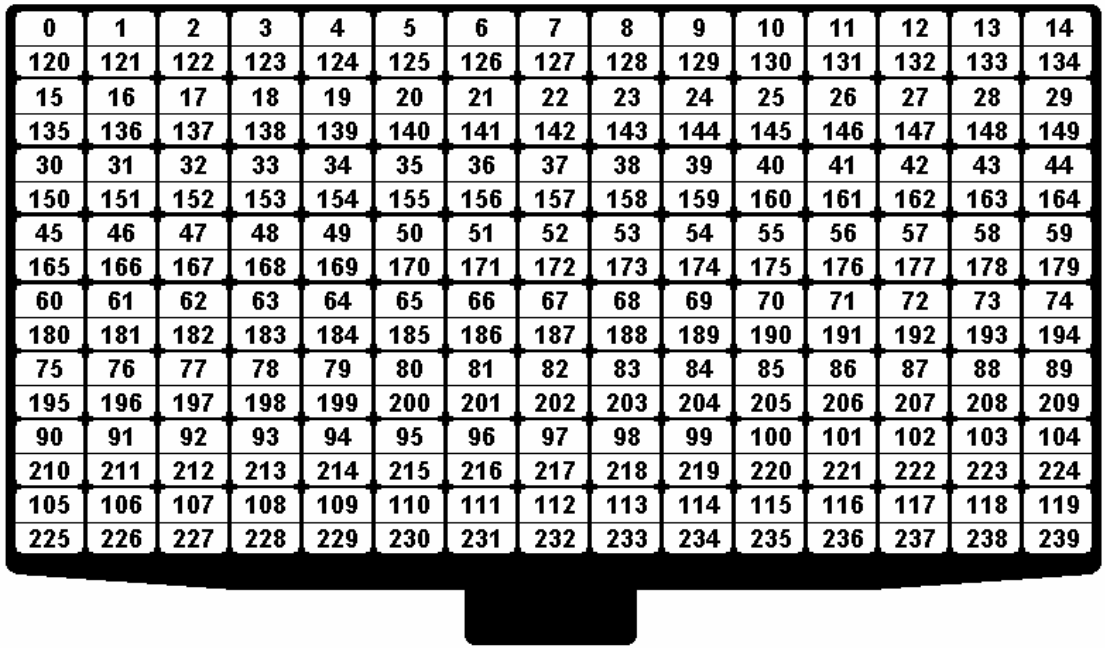
Note that you can specify the keyboard either by the scale name (which is case-sensitive) or the scale ID. The meaning of the scale ID differs depending on the system configuration, as follows:

System Configuration	Scale ID
Standard TCP/IP system configuration	The "**Link No.**" displayed on the right side of the scale comms setup dialog (select **Comms (On-Line)** from the **Setup** menu).
Daisy-chained RS-232C comms (USA only)	The "**Scale No.**" displayed on the right side of the scale setup dialog (select **Comms (On-Line)** from the **Setup** menu, then click **Add** or **Edit** to open the scale setup dialog).
MSCU system	((*Link No* -1)x 100) + *Machine No*. *Link No* : The "**Link No.**" displayed on the right side of the scale comms setup dialog (select **Comms (On-Line)** from the **Setup** menu). *Machine No*. The machine No. of the satellite scale (range = 2 to 32)

Key Numbering

The key numbers for the AC-3000 and AC-4000 are shown below. The lower number indicates the key number for the case when the shift key is pressed. Note that the numbering scheme includes the four columns of non-preset keys on the right end of the keyboard. Assigning presets to these keys will be ignored.

The AstraXT key numbers are not shown but use the same numbering scheme.



Key Type Codes

The table below lists the key type codes. Note that your scales may not support all of the listed codes. Also, additional code may be added in future. Consult with your Ishida agent if unsure.

Code	Meaning
0	Do not assign any meaning to this preset key.
1	PLU number
2	Tare
3	$ discount
4	% discount
5	Extra message
6	Logo
7	Coupon
8	Operator
9	Price
10	X
11	Markdown price
12	SAVE
13	VOID
14	Interval

(continued on next page...)

(cont...)

Code	Meaning
15	99
16	00
17	Proportional Tare
18	Sub Total
19	Extra Message 2
20	Extra Message 3
21	Label Batch
22	Store
23	Label Format
24	Logo #1
25	Logo #2
26	Peel Sensor
27	POP message
28	Pack Quantity
29	Units
30	Cash Drawer
31	Go to Weighing Mode
32	Special Price
33	Fixed Weight
34	Shelf Life
35	Unit Price -$
36	Unit Price -%
37	Logout
38	Barcode Print
39	Ingredients
40	Print 2nd Label
41	Batch Number
42	Number of Labels
43	Number of Fixed Price Labels

SaleWizard Import File Format

The SaleWizard can import sale information from a text file as described below. The file format is comma or tab delimited text, and the fields must be specified in the sequence listed below. However, unused fields may be omitted (no value specified).

Column Name	Explanation
SALES_NO	This is the number of the sale to import. All lines that are to be a part of the same sale should have the same number. More than one sale can be imported at a time by giving each set of entries a different number. This field is mandatory
SALES_NAME	This is the name of the sale. If a sale with the same name already exists, the sale will be overwritten. If different sale names are given for the same sale number, the first sale name that appears in the file will be used.
PLU_NO	This is the PLU number of the item in the sale. This field is mandatory
OLD_PRICE	Specify the old price of the item. If none is specified, the price at import time is used.
NEW_PRICE	Specify the new price (sale price) of the item. This field is mandatory
START_DATE	This is the start date and time of the sale. The date specified in the first line for the sale is used. Any different dates specified on latter lines are ignored.
END_DATE	This is the end date and time of the sale. The date specified in the first line for the sale is used. Any different dates specified on latter lines are ignored.
PRICE_ZONE	Price zone for which to change price.
REPEAT_TYPE	Specifies whether the sale is to be repeated and, if so, how to repeat the sale. If REPEAT_TYPE is omitted, operation defaults to REPEAT_TYPE = 0 (execute sale once only) Specify one of the following codes: Value Meaning 0 Execute once only (Do not repeat) 1 Execute every day at the specified times 2 Execute on the specified days of the week, at the specified times
START_DOW	Specifies which day(s) of the week to start the sale. This field is only meaningful when REPEAT_TYPE = 2. Specify as a string of "Y" (yes) and "N" (no) characters representing each day of the week, starting from Sunday. Examples: 1. NYNNNNN = Start sale each Monday 2. NYNNYNN = Start sale each Monday and Thursday
END_DOW	Specifies which day(s) of the week to end the sale. This field is only meaningful when REPEAT_TYPE = 2. Specify as a string of "Y" (yes) and "N" (no) characters representing each day of the week, starting from Sunday (same as START_DOW, above).

Example SaleWizard Import file:

SALES_NO	SALES_NAME	PLU_NO	OLD_PRICE	NEW_PRICE	START_DATE	END_DATE
1	Promotion1	1101	3.44	2.33	2002/03/21 20:50:00	2002/03/21 21:10:00
1	Promotion1	1102	4.44	3.33	2002/03/21 20:50:00	2002/04/21 21:10:00
1	Promotion1	1103	5.44	4.33	2002/03/21 20:50:00	2002/04/21 21:10:00
1	Promotion1	1104	6.44	5.33	2002/03/21 20:50:00	2002/04/21 21:10:00
1	Promotion1	1105	7.44	6.33	2002/03/21 20:50:00	2002/04/21 21:10:00
2	Promotion2	1101		2.33	2002/03/29 20:00:00	2002/03/29 22:00:00
…						

Appendix C ScaleLink Pro Automation Reference

C.1 ScaleLink Pro Object

The ScaleLink Pro automation object name is “Slp3.document” and the type library file is “Slp3.tlb”.

ScaleLink Pro automation is executed using a different EXE file to the main ScaleLink Pro. The automation executable file (Slp3Auto.EXE) is generated automatically by ScaleLink Pro when it is executed for the first time.
The reason for using a different EXE file is to prevent any software conflict if automation is executed at the same time as the main ScaleLink Pro is running.

C.2 ScaleLink Pro Properties

Property	Meaning	Default Value
ShowErrors	Set TRUE to display any errors on screen. Errors are displayed in a message box and wait for the user to click the OK button. Set FALSE if you do not wish execution to wait for user input, for example when executing operations unattended.	TRUE

C.3 ScaleLink Pro Methods

Method	Operation
ClearProdDatabase()	Deletes all existing data from the production database.
CompareScalesVsDb()	Receives PLU data from all scales and compares with the current database contents.
DatabaseClose()	Closes the currently open database.
DatabaseCompact()	Compacts the currently open database.
DatabaseOpen()	Opens the specified database file.
ExportTextFile()	Executes the specified text file export operation. Specify the name of a text file export operation that has been defined via **Text File Export** in the **Setup** menu.
ExportTextFileEx()	Performs text file export based on the specified parameters (export file name, data to export, export format, etc.)
GetErrorMessage()	Returns a string containing an error message for the previous method call. The sting is empty if no error occurred.
ImportTextFile()	Executes the specified text file import operation. Specify the name of a text file import operation that has been defined via **Text File Import** in the **Setup** menu.
ImportTextFileEx()	Performs text file import based on the specified parameters (import file name, import data format, send to scales?, etc.)

Method	Operation
IsUnsentDataWaiting()	Returns TRUE if unsent data is present. “Unsent data” is data that could not be sent to a scale due to communication problems (such as the scale being off-line).
LoadSetup()	Loads the specified general setup file. Can only be used when no database is open.
LoadSiteSetup()	Loads the specified site setup file. Can only be used when no database is open.
ReadProdFromScales()	Reads the production totals from the scales and saves in the production database.
ScheduleClose()	Closes the currently open schedule file.
ScheduleExecOp()	Executes the specified scheduler operation.
ScheduleExecSched()	Executes all operations in the currently open schedule file.
ScheduleOpen()	Opens the specified schedule file.
SendToScales()	Sends the specified records from the database to the scales.
SendUnsentData()	Sends any unsent data to the scales.
SetEventLogFile()	Temporarily changes the event log file to the specified file. Use if you wish to log automation operations separately to user operations.

C.4 Parameter Codes

Some methods use integer codes to specify parameters such as which data to perform the operation for. These are listed below.

Data type: Specifies the type of data for which to perform the operation.

Value	Meaning
2	PLUs
3	Advertising messages
4	Extra messages
7	Store name and address (AC-3000)
8	Coupons
9	Nutrition
10	Campaigns
11	Campaign PLUs
16	Department
17	Group
29	Extra messages #2
30	Extra messages #3
70	Comment
71	Store name and address (AC-4000, EMZ, etc.)
72	Free message #1
73	Free message #2
74	Free message #3
75	Free message #4
76	Free message #5
77	Free message name
78	Origin message
79	Storage temperature
80	Storage instructions

Import/export format: Specifies the format to use for text file import or export

integer ExportFormat Specifies the export format.

Value	Meaning
0	Comma-delimited
1	Tab-delimited
2	Custom format (SE Asia)
3	Custom format (Wal-Mart)

Description text format: Specifies the format to use for description text.

Value	Meaning
0	Ishida format
1	Line by line

Import operation: Specifies the import operation.

Value	Meaning
0	Add records (overwrite existing records)
1	Update records
2	Delete records

C.5 Method Details

Name

Boolean ClearProdDatabase()

Function

Deletes all existing data from the production database.

Return Value

True if successful, *False* if an error occurred.

Parameters

None

Name

Boolean CompareScalesVsDb(long SyncScales)

Function

Receives PLU data from all scales and compares with the current database contents. Details of any differences are logged for each scale in the file CompareResultsScaleXXX.txt (where XXX is the scale ID number).

If SyncScales is non-zero and differences are found, PLU data is sent to or deleted from each scale so that the scale data matches the database.

Return Value

True if successful, *False* if an error occurred.

Also returns *False* if differences between the database and scale are still present (that is, if differences were found and synchronization was not performed).

Parameters

None

Name

Boolean DatabaseClose()

Function

Closes the currently open database.

Return Value

True if successful, *False* if an error occurred.

Parameters

None

Name

Boolean DatabaseCompact()

Function

Compacts the currently open database.

Return Value

True if successful, *False* if an error occurred.

Parameters

None

Name

Boolean DatabaseOpen(string FileName)

Function

Opens the specified database file.

Return Value

True if successful, *False* if an error occurred or if a database is already open.

Parameters

string	FileName	Full pathname of database file.

Name

Boolean DeleteRecords(integer SendDataType, integer StartRecordNo,
integer EndRecordNo)

Function

Deletes the specified range of records from the database and scales.

Return Value

True if successful, *False* if an error occurred.

Parameters

integer	SendDataType	Specifies the type of data to delete.
		See "**Data type**" in **C.3 Parameter Codes** for details.
integer	StartRecordNo	Specifies the start record number to delete. Specify zero to delete all records.
integer	EndRecordNo	Specifies the end record number to delete. Ignored if StartRecordNo = 0 (delete all).

Remarks

Sends deletion commands to the scales for all records in the specified range, regardless of whether the records exist in the database or not.

Name

Boolean ExportTextFile(string ExportName, string FileName)

Function

Executes the specified text file export operation.

Return Value

True if successful, *False* if an error occurred.

Parameters

string	ExportName	Name of a text file export operation that has been defined via **Text File Export** in the **Setup** menu.
string	FileName	Full pathname of output text file.

Remarks

If an empty string is specified in the *FileName* parameter, a File Save As dialog opens for the user to select the output text file.

Name

Boolean ExportTextFileEx(string FileName, integer ExportFormat, integer ExportDataType, boolean OutputHeaders, integer DescTextFormat, boolean IncludePriceZone, integer PriceZone, boolean ExportByScale, boolean UsePosCode, boolean UseScaleNames)

Function

Performs text file export based on the specified parameters.

Return Value

True if successful, *False* if an error occurred.

Parameters

string	FileName	Full pathname of output text file.
integer	ExportFormat	Specifies the export format.

Value	Meaning
0	Comma-delimited
1	Tab-delimited
2	Custom format (SE Asia)

integer	ExportDataType	Specifies the type of data to export

See "**Data type**" in **C.3 Parameter Codes** for details.

boolean	OutputHeaders	Specifies whether to output column headers.
integer	DescTextFormat	Specifies the format for outputting description text.

Value	Meaning
0	Ishida format
1	Line by line

boolean	IncludePriceZone	Specifies whether to output price zone information.
integer	PriceZone	If *IncludePriceZone* is *True*, specify which price zone to output.
boolean	ExportByScale	Specifies whether to output separately for each scale.
boolean	UsePosCode	Specifies whether to use the POS code (bar code) instead of the PLU number.
boolean	UseScaleNames	Specifies whether to use scale ID numbers or scale names for production data output.

Remarks

If an empty string is specified in the *FileName* parameter, a File Save As dialog opens for the user to select the output text file.

See *Appendix B.2 Text File Formats* for more details about the meanings of the various output format options.

Name

string GetErrorMessage()

Function

Returns a string containing an error message for the previous method call. The sting is empty if no error occurred.

Return Value

Error message string, or empty string if no error occurred.

Parameters

none

Remarks

Use the Boolean return value of each method call to determine whether the operation was successful. Only call *GetErrorMessage()* if the previous method call returned *False*.

Name

Boolean ImportTextFile(string ImportName, string FileName)

Function

Executes the specified text file import operation.

Return Value

True if successful, *False* if an error occurred.

Parameters

string	ImportName	Name of a text file import operation that has been defined via **Text File Import** in the **Setup** menu.
string	FileName	Full pathname of text file to import.

Remarks

If an empty string or a non-existent file name is specified in the *FileName* parameter, a File Open dialog opens for the user to select the text file to import.

Name

Boolean ImportTextFileEx(string FileName, integer ImportFormat, integer ImportOperation, integer ImportDataType, integer DescTextFormat, boolean SendToScales, boolean IncludePriceZone, boolean UsePosCode, boolean UseDeptPlu)

Function

Performs text file import based on the specified parameters.

Return Value

True if successful, *False* if an error occurred.

Parameters

string	FileName	Full pathname of output text file.
integer	ImportFormat	Specifies the import format

Value	Meaning
0	Comma-delimited
1	Tab-delimited
2	Custom format (SE Asia)
3	Custom format (Wal-Mart)

integer	ImportOperation	Specifies the import operation.

Value	Meaning
0	Add records (overwrite existing records)
1	Update records
2	Delete records

integer	ImportDataType	Specifies the type of data to export
		See "**Data type**" in **C.3 Parameter Codes** for details.
integer	DescTextFormat	Specifies the format of any description text.

Value	Meaning
0	Ishida format
1	Line by line

boolean	SendToScales	Specifies whether to send imported records to the scales.
boolean	IncludePriceZone	Specifies whether the import data includes a price zone field.
boolean	UsePosCode	Specifies whether the import data uses POS code (bar code) instead of the PLU number.
boolean	UseDeptPlu	Specifies whether to assign PLU numbers based on department code.

Remarks

If an empty string or a non-existent file name is specified in the *FileName* parameter, a File Open dialog opens for the user to select the text file to import.

Name

Boolean IsUnsentDataWaiting()

Function

Indicates whether any unsent data is present. “Unsent data” is data that could not be sent to a scale due to communication problems (such as the scale being off-line).

Return Value

True if unsent data is present, *False* otherwise.

Parameters

None

Name

Boolean LoadSetup(string FileName)

Function

Loads the specified general setup file.

Return Value

True if successful, *False* if an error occurred or if a database is already open.

Parameters

string	FileName	Full pathname of database file.

Remarks

If this method is not called, the default setup file is used.

Cannot be used if a database is open. Load the setup file before opening the database.

The loaded setup file is only used during the current session. Other ScaleLink Pro automation or user sessions continue to use the default setup file.

Name

Boolean LoadSiteSetup(string FileName)

Function

Loads the specified site setup file.

Return Value

True if successful, *False* if an error occurred or if a database is already open.

Parameters

string	FileName	Full pathname of database file.

Remarks

If this method is not called, the default site setup file is used.

Cannot be used if a database is open. Load the site setup file before opening the database.

The loaded site setup file is only used during the current session. Other ScaleLink Pro automation or user sessions continue to use the default site setup file.

Name

Boolean ReadProdFromScales()

Function

Reads the production totals from the scales and saves in the production database.

Return Value

True if successful, *False* if an error occurred.

Parameters

None

Name

Boolean ScheduleClose()

Function

Closes the currently open schedule file.

Return Value

True if successful, *False* if an error occurred.

Parameters

None

Name

Boolean ScheduleExecOp(string Operation)

Function

Executes the specified operation from the currently open schedule file.

Return Value

True if successful, *False* if an error occurred.

Parameters

string	Operation	Name of an operation defined in the currently open schedule file.

Remarks

The operation is executed regardless of the execution time settings in the schedule file.

Name

Boolean ScheduleExecSched(string Operation)

Function

Executes all operations in the currently open schedule file.

Return Value

True if successful, *False* if an error occurred.

Parameters

None

Remarks

Operations are executed regardless of the execution time settings in the schedule file.

Name

Boolean ScheduleOpen(string FileName)

Function

Opens the specified schedule file.

Return Value

True if successful, *False* if an error occurred.

Parameters

string	FileName	Full pathname of schedule file.

Name

Boolean SendToScales(integer SendDataType, integer StartRecordNo,
integer EndRecordNo)

Function

Sends the specified records from the specified database table to the scales.

Return Value

True if successful, *False* if an error occurred.

Parameters

integer	SendDataType	Specifies the type of data to send.
		See "**Data type**" in **C.3 Parameter Codes** for details.
integer	StartRecordNo	Specifies the start record number to send.
integer	EndRecordNo	Specifies the end record number to send.

Name

Boolean SendUnsentData()

Function

Sends any unsent data to the scales.

Return Value

True if successful, *False* if an error occurred.

Parameters

None

Name

Boolean SetEventLogFile(string FileName)

Function

Sets the event log to use the specified log file. Typically used to save the event log for automation operations in a separate file to user operations.

Return Value

True if successful, *False* if an error occurred or if a database is already open.

Parameters

string	FileName	Full pathname of database file.

Remarks

If this method is not called, the event log file specified in the default site setup file is used.

Cannot be used if a database is open. Specify the event log file before opening the database.

The designated file is only used during the current session. Other ScaleLink Pro automation or user sessions continue to use the event log file specified in the default site setup file.

Calling the LoadSiteSetup( ) method after this method causes the event log file to be reset to the default file.