
Ishida Label Editor

USER GUIDE

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1. Introduction

The purpose of the Label Editor is to simplify the process of creating and managing the label formats used in Ishida weighing and label printing equipment. The main Label Editor features are as follows.

- Provides a visual interface for creating and editing labels.
- Label format data can be sent to and read from the scales via a serial port.
- The structure of the label format data in the Label Editor can be modified to take account of future scales upgrades.

System Requirements

Label Editor requires a Windows 3.1 or higher personal computer with a free serial port. (The FDP-5010 and Astra versions require Windows 95 or higher.)

Installing Label Editor

1. Startup Windows, then run SETUP.EXE from the installation floppy disk. Follow the instructions that appear on the screen.
2. Double click on the Label Editor icon to run Label Editor.
3. Select **Comms Setup** from the Setup menu and check that the communication parameters are set correctly for your PC.

For a quick summary of how to use Label Editor, see *Getting Started*.

Uninstalling Label Editor

Click the Uninstall icon in the Label Editor group to remove Label Editor from your hard disk.

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 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 describes some simple steps to get you started with creating and editing labels. The section also introduces the main concepts used in the Label Editor program.

WARNING: The Label Editor setup must match the scales exactly. If not, labels may not print correctly and the scales may malfunction. Do not change the setup unless you are thoroughly familiar with the requirements of the scales.

Also, a label data file saved for a particular setup will not work correctly if loaded when the setup is different. The Label Editor checks the validity of label data files on opening and displays error messages if the contents do not match the setup.

Starting Label Editor

When you start the Label Editor, the program automatically loads the default setup data and opens a new, empty Label List window. The Label List window consists of a list containing the number of label slots that can be stored on the scales. Double-clicking on a slot opens a Label Edit window for the label in that slot, or for a new label if the slot is empty.

After starting the program you can perform one of the following operations to start editing a label.

Receive label data from the scales

If the computer is connected to a set of scales, you can download the label formats from the scales. See the explanation below.

Downloading existing formats from the scales is particularly useful if you do not know the correct address and other scale-specific parameters in the Label Properties dialog.

Open an existing label data file

Select **Open** from the File menu and open an existing label file. Example label files are provided with the Label Editor.

Create a new label

Double click on an empty slot in the Label List window to open a Label Edit window for a new label.

Receiving Label Data from the Scales

The operation differs depending upon which version of the Label Editor you are using:

AC-3000

If this is the first time you have run the Label Editor, select **Comms Setup** from the Setup menu and check that the communication parameters are set correctly. Also check that the cable to the scales is plugged into the specified serial port.

1. Select **Receive File** from the Tools menu. A File Open dialog appears for you to specify the file in which to save the formats.
2. A Comms Progress dialog box appears to display the status of the data transfer. Wait for the dialog box to appear, then initiate data transfer from the scales.
3. After transfer has completed, a message box appears asking whether you wish to import the received data into a label data file. (The message box does not appear if you transmitted data other than label formats.) Select "Yes". A new Label List window opens containing the label formats received from the scales.

See *Sending and Receiving Labels from the Scales* for a full description of how to transmit and receive label data from the scales.

FDP-5010

If this is the first time you have run the Label Editor, select **Comms Setup** from the Setup menu and check that the communication parameters are set correctly. Also check that the cable to the scales is plugged into the specified serial port.

1. Select **Communicate with Scales** from the Tools menu. A dialog opens asking whether you wish to save the currently open label file in IF21 format. You must save the file if you wish to send it to the scales. If you click "Yes", a File Open dialog appears for you to specify the file name.
For this tutorial, click "No".
2. A dialog opens for you to specify the directory containing the scales data. The Data Save (IF21) communications function on the scales was initially intended for use with a dedicated floppy disk backup unit (called an IF21FD). When communicating with a PC, this directory fills the role of the floppy disk on the IF21FD.
For this tutorial, simply click OK to use the default directory.
3. A Comms Progress dialog box appears to display the status of the data transfer. Wait for the dialog box to appear, then initiate data transfer from the scales.
The progress dialog displays the number of bytes sent and received.
4. When you have finished the data transfer, click the Close button in the progress dialog to end the communications session.
5. If a label data file was received during the communications session, a message box appears asking whether you wish to import the received data into a label data file. Select "Yes". A new Label List window opens containing the label formats received from the scales.

See *Sending and Receiving Labels from the Scales* for a full description of how to transmit and receive label data from the scales.

Astra

If this is the first time you have run the Label Editor, select **Comms Setup** from the Setup menu and check that the communication parameters are set correctly. Also check that the cable to the scales is plugged into the specified serial port.

1. Select **Receive from Scales** from the Tools menu.
2. A dialog opens with instructions on how to initiate data transfer from the scale.
Follow the instructions to start the transfer.
3. Once data transfer starts, the dialog displays progress.
4. When data transfer is complete, a new dialog opens asking you what to do with the received data. Select "Load into new database" to create a new database with the received scale data.

See *Sending and Receiving Labels from the Scales* for a full description of how to transmit and receive label data from the scales.

Opening a Label Edit Window

To edit an existing label, double click on the label in the Label List window (or select the label and press Enter). This opens a Label Edit window for the label.

Similarly, double-clicking on an empty slot in the Label List window creates a new label format and opens the format in a Label Edit window.

Editing Print Fields

The left side of the Label Edit window contains the Insert buttons. Cursor mode is selected when the Label Edit window first opens, as indicated by the cursor button (the top button) appearing depressed. In cursor mode, you can use the mouse or TAB key to select fields in the label.

Editing operations that can be performed on a selected field include dragging and resizing, opening a properties dialog to edit the print field's properties (by double-clicking on the field), and the standard Windows cut, copy and paste operations.

See *Editing Label Formats* for a full description of how to edit print fields.

Inserting Print Fields

1. Click an insert button other than the cursor button. This sets the Label Edit window to insert mode. The selected insert button specifies the unit type of the print field to insert.
2. Drag with the mouse to specify where to insert the new print field.
3. If more than one print ID has the specified unit type, a menu opens for you to select the print ID for the field.
4. Next, an Edit Properties dialog appears for you to edit the properties for the field. Make any required changes, then click OK. The new print field appears at the specified location on the label and the window returns to cursor mode.

See *Editing Label Formats* for a full description of inserting print fields.

Displaying Sub-Labels

Each label field can be assigned to a number of sub-labels (in the Edit Properties dialog). Use the View menu or the buttons at the righthand end of the toolbar to select which sub-label to edit.

Transmitting Label Data to the Scales

The operation differs depending upon which version of the Label Editor you are using:

AC-3000

1. Make the Label Edit window for the label you wish to transmit the active window, or select the label in the Label List window
2. Select **Transmit Label** from the Tools menu and wait for the Comms Progress dialog box to appear, then initiate data transfer from the scales.
3. A message box appears to notify you when transmission of the label data has completed.

See *Sending and Receiving Labels from the Scales* for a full description of how to transmit and receive label data from the scales.

FDP-5010

1. Make the Label Edit window for the label you wish to transmit the active window, or select the label in the Label List window
2. Select **Communicate with Scales** from the Tools menu. A dialog opens asking whether you wish to save the currently open label file in IF21 format. You must save the file if you wish to send it to the scales. If you click "Yes", a File Open dialog appears for you to specify the file name.
For this tutorial, click "No".

3. A dialog opens for you to specify the directory containing the scales data. The Data Save (IF21) communications function on the scales was initially intended for use with a dedicated floppy disk backup unit (called an IF21FD). When communicating with a PC, this directory fills the role of the floppy disk on the IF21FD.
For this tutorial, simply click OK to use the default directory.
4. A Comms Progress dialog box appears to display the status of the data transfer. Wait for the dialog box to appear, then initiate data transfer from the scales.
The progress dialog displays the number of bytes sent and received.
5. When you have finished the data transfer, click the Close button in the progress dialog to end the communications session.

See *Sending and Receiving Labels from the Scales* for a full description of how to transmit and receive label data from the scales.

Astra

1. Make the Label Edit window for the label you wish to transmit the active window, or select the label in the Label List window
2. Select **Send to Scales -> Current Label Only** from the Tools menu.
3. A dialog opens with instructions on how to initiate data transfer from the scale.
Follow the instructions to start the transfer.
4. A message box appears to notify you when transmission of the label data has completed.

See *Sending and Receiving Labels from the Scales* for a full description of how to transmit and receive label data from the scales.

3. Creating and Managing Labels

This section describes how to create new labels and manage the label data. The following lists the main label creation and edit operations.

Managing Label Data

A label data file stores the label formats for one set of scales. Opening a label data file opens a Label List window which displays a list of label slots. Empty label slots are marked "Unused".

You can use the Label List window to copy and paste labels between slots (and between label data files), and to open Label Edit windows or Label Properties dialogs for specific labels.

Use the File menu to open, close, and save label data files.

Receiving Label Data from the Scales

You can download the existing label formats from the scales. It is often easier to download and modify existing label formats than to create new labels from scratch.

See *Sending and Receiving Labels from the Scales* for a full description of how to transmit and receive label data from the scales.

Saving Label Data in an EPROM File

Select **Import Labels** from the File menu to import labels from an EPROM file. To use this feature, the EPROM offset address must be set correctly in the setup.

Importing Label Data from a Binary Format File

Select **Import Labels** from the File menu to import binary format labels.

Exporting Label Data to a Binary Format File

Select **Export Labels** from the File menu to save labels to a binary format label file.

Exporting Label Data to an EPROM File

Select **Save to EPROM File** from the File menu to save the contents of the current data file to an EPROM file. Both binary and Intel Hex formats are supported for the EPROM file.

To use this feature, the EPROM offset address must be set correctly in the setup.

Creating a New Label

Double click on an unused slot in the Label List window (or select the slot and press Enter). This creates a new label and adds the default print fields. A Label Properties dialog opens for you to set the label parameters such as the label size and product name area type. Clicking OK saves the settings and opens a Label Edit window for you to edit the new label.

Transmitting Label Data to the Scales

See *Sending and Receiving Labels from the Scales* for a full description of how to transmit and receive label data from the scales.

Editing Label Properties

Select a label in the Label List window then select Edit Properties from the Edit menu to edit the label's properties.

The Label Properties dialog edits properties specific to an entire label (rather than to specific print fields).

You can also open the Label Properties dialog from the Label Edit window by double clicking on a point in the label that does not contain a print field.

Editing Label Formats

Editing Label Formats describes in detail how to edit label formats using the Label Edit window.

To open a Label Edit window for a label, double click on the label in the Label List window (or select the label and press Enter).

Outputting a List of Label Contents

You can use the **Dump Label to Text File** command in the tools menu to output a list of the label fields to a text file. This lists the coordinates of each label field. (The X, Y coordinates are for the bottom left of the field and the origin is the bottom left of the label.)

4. Editing Label Formats

This section describes how to edit labels in the Label Edit window.

The following edit operations can be performed on labels in the Label Edit window.

NOTE: The *Product Name* and *Store Name and Address* fields have a special meaning in Ishida labels. Consequently, certain restrictions apply when editing these fields. See, *Some Background on Ishida Label Formats*.

Select a Print Field

Click on a print field to select it. Selected print fields appear as a dotted rectangle with sizing handles on each side and corner.

Pressing the TAB key moves the selection to the next field in the label and pressing SHIFT-TAB moves the selection to the previous field.

Clicking on overlapping fields always selects the top-most field. Pressing the space bar successively changes the selection to the fields underneath the point used to select the top field.

Insert a New Print Field

The insert buttons located on the left of the Label Edit window set the Label Edit window to insert mode. Select the button corresponding to the type of print field you wish to insert, then drag the mouse on the label to specify where to place the new field.

You can also insert a new print field using the Insert Menu.

Edit Print Field Properties

You can open an Edit Properties dialog for a print field by the following methods.

- Double click on a print field
- Select the print field and press Enter
- Select the print field and select **Edit Properties** from the Edit menu)

Edit Label Properties

You can open a Label Properties dialog for the label by the following methods.

- Double click on a point on the label that does not contain a print field
- Press Enter when no print field is selected.
- Select **Edit Properties** from the Edit menu when no print field is selected.

Move or Resize a Print Field

Select a print field, then drag the entire field (to move the field) or drag a corner or side (to resize the field). You cannot move a field outside the label or resize the field to less than its minimum size.

A snap-to-grid function is available and can be set on or off using the **Grid** command in the View menu.

The **Size to Fit** command in the Edit menu resets the selected print field to its standard size.

NOTE: In the FDP-5010 and Astra versions of the Label Editor, some field types (including numeric fields) cannot be resized. This is because the fields have a position but no size properties. Instead, the size is determined in the scale when the label is printed (based on the number of digits, etc.).

Delete a Print Field

Select a print field, then select **Delete** from the Edit menu to delete the field.

Transmit Label to the Scales

Select **Transmit Label** from the Tools menu to transmit the label in the currently active Label Edit window to the scales. See *Sending and Receiving Labels from the Scales* for further details.

Set the Grid and Zoom Options

You can enlarge or reduce the label display by setting the zoom ratio using the **Zoom** command in the View menu.

You can specify whether or not to display a grid and set the snap-to-grid function on or off using the **Grid** command in the View menu.

NOTE: It is strongly recommended that you turn off snap-to-grid when editing existing labels, especially those downloaded from the scales. This is because, if you hold down the mouse button too long when clicking on a field, the click may be interpreted as a drag operation, causing the field to move to the nearest grid point.

Auto-Size a Print Field (Size to Fit)

Select a print field, then select **Size to Fit** from the Edit menu to reset the field to its standard size (if it has one).

The Label Editor also has an auto-size function. If you set auto-size ON for a field (in the Edit Properties dialog), the field is automatically reset to its standard size whenever you change a property (such as the number of digits) that affects the size.

Disable and Re-Enable Fields

Disabling a field inhibits the field from being printed on the label without deleting the field from the label. Disabled fields can be re-enabled by the procedure described below.

In general, you should not need to use this feature other than to delete unused fields. The feature is provided for backward-compatibility with Ishida label formats.

To disable a field, select the print field, then select **Disable Field** from the Edit menu.

To edit the disabled fields, select **Edit Disabled Fields** from the Edit menu. A dialog appears listing the currently disabled fields. (The Edit Disabled Fields command appears dimmed if there are no disabled fields in the label.) You can delete and edit (re-enable) fields using the dialog.

Sub-Labels

A single Ishida label format can be used to define more than one label. In Label Editor, these are called sub-labels. The fields for each sub-label are defined in the same label format and the scale selects the correct fields to print based on the type of label being printed.

Unfortunately, this can result in many overlapping fields when the format is displayed in the Label Editor, making the label format difficult to edit. To solve this problem, you can selectively display only those fields that belong to a specified sub-label. The Edit Properties dialog defines the sub-labels to which a field belongs. Use the Sub-Labels command in the View menu (or the buttons at the righthand end of the toolbar) to select which sub-label to display.

NOTE: The sub-label settings for a label format are only stored in Label Editor. The settings are set to default values when a label format is received from the scales (all fields assigned to all sub-labels).

5. Sending and Receiving Labels from the Scales

This section describes how to load label formats from the scales and how to send new label formats to the scales.

The operation depends on the type of scale you are using:

AC-3000

Differences Between Label Editor and Scales Data Formats

The Label Editor program stores label data differently to the scales. Consequently some data is lost if you transmit a label to the scales and then read it back again.

See *Some Background on Ishida Label Formats* for details.

Scales Communications Link

Label Editor connects to the scales using a serial port on the PC. Use the **Comms Setup** command in the Setup menu to select the serial port to use and to set the communication parameters (baud rate, etc.).

Loading Existing Label Data from the Scales

You can load the existing labels stored on the scales. This not only has the advantage of providing you with a set of example labels to work from, but also enables you to obtain the address and other scale-specific parameters set in the Label Properties dialog.

The procedure for loading label data from the scales is as follows.

1. Select **Receive File** from the Tools menu to prepare Label Editor to receive data.
2. A Save As dialog box appears. Specify the file in which to receive the data.
3. A Comms Progress dialog box appears to display the status of the data transfer. Wait for the dialog box to appear, then initiate data transfer from the scales.
4. A message appears to notify you when the data transfer has completed.
5. If the received data contained label formats, a dialog opens asking whether you wish to open the received data in a label data file. Click Yes if you wish to open the file. This opens a new Label List window containing the label formats received from the scales.

Note that, even if you do not open the file at this time, you can import the received data file at a later time using the **Import Labels** command.

Transmitting Label Data to the Scales

The procedure for sending label format data to the scales is as follows.

1. Make the Label Edit window for the label you wish to transmit the active window, or select the label in the Label List window.
2. Select **Transmit Label** from the Tools menu.
3. Wait for the Comms Progress dialog box to appear, then initiate data transfer from the scales.
4. A message box appears to notify you when transmission of the label data has completed.

Transmitting a File to the Scales

Binary-format files received by the Receive File command can be transmitted back to the scales is as follows.

1. Select **Transmit File** from the Tools menu.
2. A File Open dialog appears. Select the file to transmit and click OK.
3. Wait for the Comms Progress dialog box to appear, then initiate data transfer from the scales.
4. A message box appears to notify you when transmission has completed.

FDP-5010

Differences Between Label Editor and Scales Data Formats

The Label Editor program stores label data differently to the scales. Consequently some data is lost if you transmit a label to the scales and then read it back again. See *Some Background on Ishida Label Formats* for details.

Scales Communications Link

Label Editor connects to the scales using a serial port on the PC. Use the **Comms Setup** command in the Setup menu to select the serial port to use and to set the communication parameters (baud rate, etc.).

Sending and Receiving Label Data to and from the Scales

You can load the existing labels stored on the scales. This not only has the advantage of providing you with a set of example labels to work from, but also enables you to obtain the address and other scale-specific parameters set in the Label Properties dialog.

The procedure for loading label data from the scales is as follows.

1. Select **Communicate with Scales** from the Tools menu. A dialog opens asking whether you wish to save the currently open label file in IF21 format. You must save the file if you wish to send it to the scales. If you click "Yes", a File Open dialog appears for you to specify the file name.
You must save the file in the scales data directory selected in step 2 below and the file name must be a valid name expected by the scales - typically FOMT.001, where "001" specifies the IF21 file number and can be any three-digit numeric value.
2. A dialog appears for you to specify the directory containing the scales data. The Data Save (IF21) communications function on the scales was initially intended for use with a dedicated floppy disk backup unit (called an IF21FD). When communicating with a PC, this directory fills the role of the floppy disk on the IF21FD.
3. A Comms Progress dialog box appears to display the status of the data transfer. Wait for the dialog box to appear, then initiate data transfer from the scales.
4. When you have finished the data transfer, click the Close button in the progress dialog to end the communications session.
5. If the received data contained label formats, a dialog opens asking whether you wish to open the received data in a label data file. Click Yes if you wish to open the file. This opens a new Label List window containing the label formats received from the scales.

Note that, even if you do not open the file at this time, you can import the received data file at a later time using the **Import Labels** command.

Astra

Differences Between Label Editor and Scales Data Formats

The Label Editor program stores label data differently to the scales. Consequently some data is lost if you transmit a label to the scales and then read it back again. See *Some Background on Ishida Label Formats* for details.

Scales Communications Link

Label Editor connects to the scales using a serial port on the PC. Use the **Comms Setup** command in the Setup menu to select the serial port to use and to set the communication parameters (baud rate, etc.).

Receiving Label Data from the Scales

You can load the existing labels stored on the scales. This has the advantage of providing you with a set of example labels to work from.

The procedure for loading label data from the scales is as follows.

1. Select **Receive from Scales** from the Tools menu.
2. A dialog opens with instructions on how to initiate data transfer from the scale. Follow the instructions to start the transfer.
3. Once data transfer starts, the dialog displays a running total of the number of records received.
4. When data transfer is complete, a new dialog opens asking you what to do with the received data. The right side of the dialog lists the number of records received for each type of Astra data.
If you selected "All Data" when you initiated data transfer from the Astra, the Label Editor will have received a full set of Astra data. This can be saved to provide a backup of the Astra settings. The resulting database file can also be edited using the AstraLink program.
5. Select the desired option. If you select "load into current database", you must also specify whether you wish to overwrite any existing data with the same label number.
6. Click OK to load the data into the Label Editor.

Sending Label Data to the Scales

You can select whether to send a single label only, all labels in the database, or all data in the database. The latter option is useful if you wish to use the Label Editor to restore the scale settings that have previously been backed up from the scale using the procedure described above in *Receiving Label Data from the Scales*.

1. To send a single label to the scale, make the Label Edit window for the label you wish to transmit the active window, or select the label in the Label List window - then select **Send to Scales -> Current Label Only** from the Tools menu.
2. To send all labels or the entire database, make the Label List window for the database you wish to send the active window, then select **Send to Scales -> All Labels in Database** or **Send to Scales -> All Data in Database** from the Tools menu.
3. A dialog opens with instructions on how to initiate data transfer from the scale. Follow the instructions to start the transfer.
4. A message box appears to notify you when transmission of the label data has completed.

6. Initiating Data Transfer at the Scales

The following describes the procedure for initiating data transfer at the scales for an AC-3000 series scale. The procedure is different for different scales models. Refer to the Ishida documentation for the correct procedure for the scales you are using.

1. Set the scales to TEST mode.
2. Select DATA SAVE/LOAD (99).
3. Select TRANSFER FILE (2).
4. Enter the IF21 FILE NO.

If receiving label data from the scales

5. Select SEND, LABEL FORMAT (4).
6. Press the PRINT button.
7. The scales display indicates when data transfer has completed.

If transmitting a label to the scales

5. Select RECEIVE, LABEL FORMAT (4).
6. To set the new label in a slot other than slot 0, enter the slot number (but do not press enter).
7. Press the PRINT button.
8. The scales display indicates when data transfer has completed.

7. Setting Up the Label Editor

This section describes how to set the various setup data required by the Label Editor. The setup data consists of all the data set from the **Setup** Menu.

WARNING: The scales setup data must match the scale's requirements exactly. Only use the data provided with Label Editor or any subsequent updates provided by Ishida. If changes are required, the changes should only be made by someone with a thorough understanding of how the label format data is used in the scales. You may, however, safely change the "Name" assigned to unit properties, property values, unit types, and print IDs (for example, if you wish to set names for a language other than English).

WARNING: A label data file saved for a particular setup will not work correctly if loaded when the setup is different. The Label Editor checks the validity of label data files on opening and displays error messages if the contents do not match the setup.

7.1 Overview

Scales Setup

The items in the Scales Setup sub-menu define the data structure and meaning of the label format data required by the scales. As described in the warning note above, changing this data should be done with extreme caution as labels will not print correctly if the setup does not match the scale.

Unit Properties

These define the data values used by a unit type definition. Each unit property definition consists of a name, a maximum, minimum and default value, and an optional set of allowed values. If no set of allowed values is defined, the property can be set to any value within the allowed range.

Unit property definitions can be viewed or edited using the Unit Properties command in the Setup menu.

The unit properties for an actual print field are edited using the Edit Properties dialog.

See *7.2 Unit Properties* for a detailed explanation.

Unit Types

An 8-bit value that defines the type (numeric, bar code, etc.) of field to print on the label. In the Label Editor, the unit type defines which properties are to be set for the field.

The definition includes a "type" parameter which specifies how Label Editor displays print fields that have that unit type.

See *7.3 Unit Types* for a detailed explanation.

Print IDs

An 8-bit value that defines the field to print on the label (product name field, best by date, etc.). Each print ID is assigned a unit type and some print IDs (such as the product name) have a special meaning in the Label Editor.

See *7.4 Print IDs* for a detailed explanation.

General Parameters

The **General Parameters** command in the Setup menu sets a range of parameters for the Label Editor. All parameters other than the default label size must match the specifications of the scales. If not, the scales may not operate correctly. Typically these parameters should only need to be changed if Ishida changes the specifications of the scales equipment.

Comms Setup

The **Comms Setup** command in the Setup menu sets the serial port and communications parameters for the communication link to the scales.

Make sure that the settings match the communications parameters used by the scales and that the cable to the scales is plugged into the specified serial port.

Saving and Loading Setup Data

The Label Editor saves the current setup when it exits and reloads this setup when next started.

However, you can save the current setup to a file using the **Save Setup** command and reload a previously saved setup using the **Load Setup** command.

This function is useful if you are creating labels for two or more different types of scales which have different setups.

Load Text Table

Astra only. Loads the text corresponding to each text table ID from a text file.

7.2 Unit Properties

Clicking on **Unit Properties** in the **Scales Setup** sub-menu of the **Setup** menu opens a dialog for defining the unit properties used by the various print field unit types.

Unit Properties Dialog

The dialog displays a list of the currently defined unit properties. The following operations are available.

Add a new unit property

Click the **Add** button.

This opens a Unit Property Definition dialog for you to define the new unit property.

Edit an existing unit property

Select a unit property from the list and click the **Edit** button (or double click on the unit property).

This opens a Unit Property Definition dialog for you to edit the unit property.

Delete a unit property

Select a unit property from the list and click the **Delete** button.

This deletes the unit property from the list.

Click OK to save your changes or click Cancel to close the dialog without saving.

Unit Property Definition Dialog

Defines the following data for a unit property.

Name

Used to identify the property in the Edit Properties dialog.

Property Type

Some property types have specific meanings in the Label Editor. For example, the font size property defines the size of the font used to display a print field in the Label Edit window and is used to calculate the minimum size for the field.

Property types include user-defined property types which can be used to add new unit properties in the future and filler properties which can be specified in unused areas of the label data format.

Minimum

Minimum value for the property. Only applicable if the allowed property values list is blank.

Maximum

Maximum value for the property. Only applicable if the allowed property values list is blank.

Default Value

Default value for the property. The default value is set when a new print field is added to a label. Only applicable if the allowed property values list is blank.

Property Values

If the property can only take a number of pre-defined values, define those values in the Property Values list. The following operations are available.

Add a new property value

Click the Add button.

This opens a Set Property Value dialog for you to define the new property value.

Edit an existing property value

Select a property value from the list and click the Edit button (or double click on the property value).

This opens an Set Property Value dialog for you to edit the property value.

Delete a property value

Select a property value from the list and click the Delete button.

This deletes the property value from the list.

Set Default

Select a property value from the list and click the Set Default button.

This marks the selected property value as the default. The default value is set when a new print field is added to a label. An asterisk (*) indicates the current default value in the list.

Load the property values from a file

Loads the property values from a scales EPROM file or a text file. Only available for properties with the Image ID or Text Table ID property type.

This function is useful for ensuring that the label displayed in the Label Edit window matches the label printed on the scales.

Clicking the Load from File button opens a File Open dialog for you to specify the EPROM file or text file. Select the file then click OK. This loads the values from the file, overwriting the previous property values.

Click OK to save your changes or click Cancel to close the dialog without saving.

Set Property Value Dialog

The form of this dialog depends on the property type.

All versions of the dialog contain the following fields.

Name

Assigns a name to the property value for use in the Label Editor.

For properties with the "Text Table ID" or "Units" type, the name specifies the actual text to be displayed for the property.

Value

Specifies the value of the property (the value sent to the scales). The allowed range is 0 to 255 (i.e. an 8-bit value).

Other versions of the dialog assign specific meanings to a property value so that the Label Editor knows how to interpret the property when displaying a field in the Label Edit window.

Click OK to save your changes or click Cancel to close the dialog without saving.

7.3 Unit Types

Clicking on **Unit Types** in the **Scales Setup** sub-menu of the **Setup** menu opens a dialog for defining the unit properties used by the various print field unit types.

Unit Types Dialog

The dialog displays a list of the currently defined unit types. The following operations are available.

Add a new unit type

Click the Add button.

This opens a Unit Type Definition dialog for you to define the new unit type.

Edit an existing unit type

Select a unit type from the list and click the Edit button (or double click on the unit type).

This opens a Unit Type Definition dialog for you to edit the unit type.

Delete a unit type

Select a unit type from the list and click the Delete button.

This deletes the unit type from the list.

Click OK to save your changes or click Cancel to close the dialog without saving.

Unit Type Definition Dialog

Defines the following data for a unit type.

Name

Assigns a name to the unit type. Used in Label Editor only.

Type

Specifies the type of the unit type. The type determines how the Label Edit window displays print fields with this unit type. For example, a print field with a "Bar Code" unit type appears as a bar code.

In addition to the standard unit types, a "User-Defined" type is also provided to allow new unit types to be defined in the future.

Code

Specifies the unit type code that is transmitted to the scales.

Properties Used and Available Properties

The list on the left shows the properties that are set in the data packet that is transmitted to the scales for print fields with this unit type. The properties are listed in the order that they appear in the data packet. The list on the right shows the available properties.

Use the **Add** and **Delete** buttons to add or remove properties from the Properties Used list on the left.

Note: The order in which the properties appear in the list defines the data structure of the packet. It is important that you specify the properties in the correct order expected by the scales.

Click OK to save your changes or click Cancel to close the dialog without saving.

7.4 Print IDs

Clicking on **Print IDs** in the **Scales Setup** sub-menu of the **Setup** menu opens a dialog for defining the print IDs used in labels.

Print IDs Dialog

The dialog displays a list of the currently defined print IDs. The following operations are available.

Add a new print ID

Click the Add button.

This opens a Print ID Definition dialog for you to define the new print ID.

Edit an existing print ID

Select a print ID from the list and click the Edit button (or double click on the unit type).

This opens a Print ID Definition dialog for you to edit the print ID.

Delete a unit type

Select a print ID from the list and click the Delete button.

This deletes the print ID from the list.

Click OK to save your changes or click Cancel to close the dialog without saving.

Print ID Definition Dialog

Defines the following data for a print ID.

Name

Assigns a name to the print ID. Used in Label Editor only.

Short Name

Assigns a name to the print ID. The Edit Label window uses the short name to display print fields that are displayed by name (for example, print fields with the Variable-Length Text unit type).

Code

Specifies the print ID code that is transmitted to the scales.

Special Meaning

Some print IDs have a special meaning in the label format and are handled differently to other print IDs when transmitted to the scales. See *8. Some Background on Ishida Label Formats* for a full explanation.

Unit Type

Specifies the unit type of the print ID. The unit type determines how a print field with this print ID appears on the label and the structure of the data transmitted to the scales. Unit types are defined in the Unit Type dialog (see *7.2 Unit Types*).

Click OK to save your changes or click Cancel to close the dialog without saving.

7.5 General Parameters

Clicking on General Parameters in the Setup menu opens a dialog to set various parameters used in the Label Editor.

The following items can be set.

Note: Some of the following fields may not appear, depending on which version (AC-3000, Astra, etc.) of the Label Editor you are using.

Min Label Number

Used on the Astra version to specify the minimum label number. Typically 10 (international) or 20 (USA).

Scale Type

Used on the Astra to specify which Astra model (country) is being used.

Logo Area Offset

The offset address of the logo data area in the EPROM. Required if you wish to load logo data from an EPROM file (see the Load from File command in the Unit Property Definition dialog for details).

Logo Area Size

Specify the size of the logo data area in the EPROM.

EPROM #2 Start Address

Specify the start address of the #2 EPROM (the EPROM containing the label format and logo data).

Label Area Offset

The offset address of the label data area in the EPROM. Required if you wish to save label data in an EPROM file.

Label Area Size

Specify the size of the label data area in the EPROM.

Text Area Offset

The offset address of the standard text data area in the EPROM. Required if you wish to load Text Table ID data from an EPROM file (see the Load from File command in the Unit Property Definition dialog for details).

Maximum Number of Labels

Specify the maximum number of labels that can be stored on the scales. This determines the number of label slots that appear in Label List windows.

Maximum Units per Label

Specify the maximum number of print fields per label. This number defines the size of the label format data transmitted to the scales (unused print field data is set to zero).

Data Packet Size

Specifies the size (in bytes) of the data for each print field transmitted to the scales. The data packet is padded with zeros up to the specified packet size.

Reverse Feed Printer

In order to feed the label being printed far enough out of the label printer for you to remove it, standard Ishida label printers must print the first few millimeters of the following label. This section at the bottom of the label is called the "preprint section". The Label Editor contains special processing to deal with the preprint section (See 8. *Some Background on Ishida Label Formats* for further details).

However, future printers may incorporate a reverse feed function removing the need for preprinting the bottom of the label. In this case, select the Reverse Feed Printer check box to disable the preprint processing in the Label Editor.

Preprint Length

If not using a reverse feed printer, specify the length of the preprint section.

Inter-Label Spacing

Specify the gap between labels.

Logo Type

Specify the format of the logo bitmap (row scan or column scan). At the time of writing, Ishida scales only support column scan bitmaps.

Maximum Label Size

Specifies the maximum size of a label.

Default Label Size

Specifies the default size of a label. Labels are initially set to the size when you create a new label.

Printer Dots/mm

Specifies the label printer resolution. Only used internally by Label Editor to display the equivalent value in mm for parameters specified in dots.

In the FDP-5010 and Astra, this value is the data dot size (the unit of length used in the label format data) and is not the same as the actual printer dot size.

Click OK to save your changes or click Cancel to close the dialog without saving.

8. Some Background on Ishida Label Formats

This section describes background information on how Ishida labels are defined.

Structure of Label Format Data

The data for a label format consists of a header section (primarily the data set in the Label Properties dialog) and a series of data blocks containing the data for each print field. The print field data items are called *properties*. In the Label Editor, they are the values set in the Edit Properties dialog.

To allow for future modifications to the way label formats are stored in the scales, the data structure of the print field data blocks are defined in the Label Editor setup data and can be modified by the user. (However, the setup must match the data structure expected by the scales. Do not modify the setup data unless you have a thorough understanding of the requirements of the scales. Obtain any necessary upgrades from Ishida.)

Print ID and Unit Type

Print fields have two special properties: the print ID and unit type. The print ID is a code that defines the type of field (whether the field is a price, product name, or bar code, etc.). Each print ID code has an associated unit type which defines how the field is printed (whether the field is numeric, variable-length text, or a bar code, etc.). The unit type also determines the data structure for the print field's properties.

The definitions of the unit properties, unit types, and print IDs are collectively called the scales setup. How to set these in Label Editor is described in more detail in 7. *Setting Up the Label Editor*.

Print Field Properties

The Label Editor setup not only defines the properties used to specify a print field but also defines the meaning of those properties. This allows the Label Edit window to display the print field as it would appear on the label. For example, if the orientation property of a print field specifies rotation of the field by 90 degrees, the Label Edit window recognizes that property and displays the field accordingly.

Preprint Section

Ishida label printers print the first few millimeters of the following label at the same time as printing the preceding label. This is done so as to feed the preceding label out of the printer far enough for it to be removed. The section at the bottom of the label is called the *preprint section*.

To achieve this, the Label Editor moves the label format data for the preprint section to the top of the label when transmitting the label to the scales. Similarly, the Label Editor moves the preprint section back to the bottom of the label when loading a label from the scales.

As the preprint section is printed before the rest of the label (i.e. before the scale knows what PLU will be printed), it may only contain the store name and address.

Store Name and Address Field

The store name and address field is a mandatory field in Ishida label formats and must be located in the preprint section described above. Consequently, the store name and address field cannot be moved or deleted in the Label Editor.

Product Name Field

The product name field has a special meaning in Ishida labels. The product name field can be specified as either "fixed" or "variable" in the Product Name Area setting in the Label Properties dialog. If "variable" is specified, the product name field is treated the same as other fields and no special considerations apply. However, if "fixed" is specified, the product name area differs from other fields in the following ways.

- In the scales, the height of the product name field is taken from a parameter set in the scales rather than from the label format. The field height set in the Label Editor is used for display only and the Label Editor sets the product name height to zero when

transmitting a label to the scales.

- In “fixed” mode, the label format downloaded from the scales does not contain the height of the product name field (because the height field is set to zero). In this case, the Label Editor resets the height to a default value.
However, if the downloaded height is non-zero, the Label Editor sets the product name area mode to “variable” and uses the downloaded height unchanged.
- As the height of the product name field can only be set to multiples of 19 dots in the scales, the same restriction is applied to the field height in the Label Editor.
- Other fields should not be located in the product name area. Specifically, the Y coordinate of a field must not be between the top and bottom of the product name field. This is because the product name height is reset to zero when transmitted to the scales.
Although the Label Editor allows you to place fields in such a position, the fields are forcibly moved outside the product name area when the label is transmitted to the scales.

Label Height

The label height value stored in the scales does not include the height of the preprint and product name areas (unless the product name area is set to “variable” mode). When loading a label from the scales, the Label Editor recalculates the label height by adding these heights back to the received height value. However, for the reason described above, the height of the product name field is set to a default value. Consequently the recalculated label height will be different to the value when the label was transmitted to the scales.

9. Editing Crowded Labels

Ishida label formats downloaded from the scales can be quite cluttered with many overlapping fields. This makes them difficult to edit. The following are some tips to make editing such labels easier.

Use the Sub-Label Function

The reason that the downloaded labels are so cluttered is that a single format definition on the scales often contains a number of overlapping labels. The scales selects which fields to print depending on the type of label being printed.

To achieve the same effect in the Label Editor, you can assign fields to sub-labels (in the Edit Properties dialog). You can then select to only display the fields belonging to a specified sub-label.

Use the Space Bar to Select Overlapping Fields

Clicking on overlapping fields always selects the topmost field. Pressing the space bar successively changes the selection to the fields underneath the point used to select the topmost field.

Turn Off Snap-To-Grid

Holding down the mouse button too long when clicking on a field may cause the click to be interpreted as a drag operation. If snap-to-grid is on, this causes the field unintentionally to move to the nearest grid point.

Delete Disabled Fields

Ishida labels often already have the maximum number of fields defined. If you wish to add any additional fields of your own, you must first delete some existing fields. Fortunately, Ishida labels also often contain a number of disabled fields. These are fields that are contained in the label format but which are not printed on the label. Use the **Edit Disabled Fields** command in the Edit menu to delete such fields.