

C2484x PACKING HOUSE FIRMWARE RELEASE NOTES

IP-Ai Pre-Pack Scale

Procedure to Install New IP-Ai Firmware

Refer to the *IP-Ai Service Manual* for additional information.

1. Copy the firmware folder "Soft" onto an empty USB memory stick.
 - The "Soft" folder itself must not be zipped even if some files in the folder are.
 - The "Soft" folder must be the only data on the USB memory stick.
2. Power up the machine.
3. Press the green **ENTER** button at the Date/Time confirm screen.
4. Remove the plastic cover on the upper left.
5. Insert the USB memory stick into any of the four USB ports.
 - No other USB devices should be connected.
 - **DO NOT REMOVE** the USB memory stick during the firmware update procedure.
6. Press the **↑** (Return Arrow) key (upper right) to enter the Main menu.
7. Enter **495344** and press the **PLU** key to access the hidden menu steps.
8. Press the **ADJUST** menu button.
9. Select **DOWNLOAD**.
10. Select the firmware version to be installed. It will be highlighted in yellow.
11. Press **EXEC** to confirm the selection.

Note: If message *15036-0000 Database Version Is Different* is displayed a memory clear will be required after installing the firmware. Press **STOP** and make a USB backup (Setup menu → File Save/Load) if necessary, otherwise press **EXEC** to continue.
12. Press **EXEC** to begin the firmware download.
13. The screen will show the firmware download progress. The download will take several minutes to complete.
14. When Re-Boot Check message 15029 is displayed, the firmware download is complete.
15. The scale will automatically reboot.
16. Press the green **ENTER** button at the Date/Time confirm screen.
17. If prompted enter the Adjust menu and perform a Master Data memory clear. Then enter the Setup menu and load the backup from step 11.
18. Press the **↑** (Return Arrow) key (upper right) to enter the Main menu.
19. Enter **495344** and press the **PLU** key to access the hidden menu steps.
20. Press the **ADJUST** menu button, then select **DOWNLOAD**.
21. Press the **SUB APP** tab.
22. Select the program to be installed. It will be highlighted in yellow. Select only one Sub App program at a time.
23. Press **EXEC** to confirm the selection. Press **EXEC** to begin the firmware download.
24. The screen will show the firmware download progress. The download may take several minutes to complete.
25. When Re-Boot Check message 15029 is displayed, the firmware download is complete.
26. The scale will automatically reboot.
27. Press the green **ENTER** button at the Date/Time confirm screen.
28. Repeat steps 18 ~ 26 to load any remaining Sub App programs as needed.
29. Remove the USB memory stick.

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Note: Refer to the *2020 Nutrition Details and Conversion Procedure* instructions as needed.
The document is located under "Technical Bulletins" on the [Ishida ScaleLink Pro 5](#) page of the Rice Lake web site

Version C2484C

Release Date: October 1, 2024

Use with SLP-5 **2.50j** or later ([strongly recommended](#) for full compatibility)

<u>Related Programs</u>	<i>P-1100B CPU</i>	<i>P-1100D CPU</i>
Main:	C2485C	C2485C
Scale Driver:	J0834 (J0835)	J0834 (J0835)
OS:	J0829E	J1050A
BIOS:	J0825	J0825
FPGA App.:	J0910B (J0824)	J0973B (J0972A)
Keyboard:	J0823B	J0823B
Scale:	J0776G or later	J0776G or later
Printer App:	J0911A or later (J0827)	J1002A or later (J0974A)

NOTE: After downloading the Main App program download the Printer (EC) and FPGA sub-app programs one at a time as needed. If the sub-app versions listed above are not installed the scale will not function correctly.



Caution

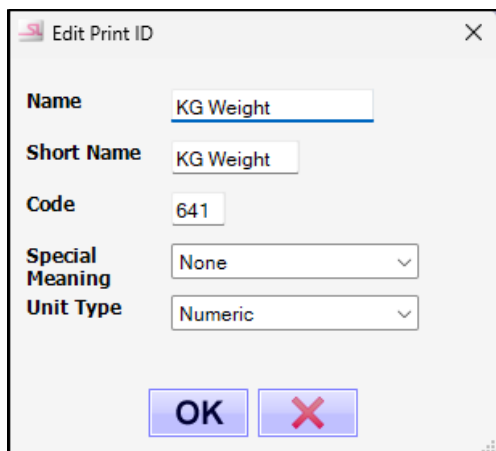
Memory initialization may be required when upgrading to this firmware version. Create a USB backup or use SLP-5 Maintenance Utility and SLP-5 to backup the scale before upgrading from firmware **C2150x** or an earlier version. Due to significant changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear** (Adjust menu → Memory Clear) & **System Data Init.** (Setup menu → File Save/Load → Scale Init. tab). [\[8.5.0.5\]](#)

The following lists the main changes from the standard firmware (C2484B).

1. Added the ability to print Kg weight converted from Lb weight. This is only supported for weighed items.
 - a. Conversion formula is 1 lb = 0.45359237 kg.
 - b. Converted Kg Print ID is 281 (641 in SLP-5).
 - c. These are the settings to add the Print ID to the SLP-5 Setup Utility → Label Format → WM-AI/IP-AI → Print ID Setup.

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Dialog box titled "Edit Print ID" with the following fields:

- Name: KG Weight
- Short Name: KG Weight
- Code: 641
- Special Meaning: None
- Unit Type: Numeric

Buttons: OK, Cancel (X)

Version C2484B

Release Date: April 14, 2023

Use with SLP-5 **2.50j** or later ([strongly recommended](#) for full compatibility)

Related Programs	<i>P-1100B CPU</i>	<i>P-1100D CPU</i>
Main:	C2485B	C2485B
Scale Driver:	J0834 (J0835)	J0834 (J0835)
OS:	J0829E	J1050A
BIOS:	J0825	J0825
FPGA App.:	J0910B (J0824)	J0973B (J0972A)
Keyboard:	J0823B	J0823B
Scale:	J0776G or later	J0776G or later
Printer App:	J0911A or later (J0827)	J1002A or later (J0974A)

NOTE: After downloading the Main App program download the Printer (EC) and FPGA sub-app programs one at a time as needed. If the sub-app versions listed above are not installed the scale will not function correctly.



Caution

Memory initialization may be required when upgrading to this firmware version. Create a USB backup or use SLP-5 Maintenance Utility and SLP-5 to backup the scale before upgrading from firmware **C2150x** or an earlier version. Due to significant changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear** (Adjust menu → Memory Clear) & **System Data Init.** (Setup menu → File Save/Load → Scale Init. tab). [\[8.5.0.5\]](#)

The following lists the main changes from the standard firmware (C2484A).

1. Fixed a bug where the LIST button to display previous Lot Numbers was unavailable when the scale was set for Traceability TYPE-1.
2. Fixed a bug where PLUs set as Fixed Price & Weigh (Fixed UPR) did not accept a fixed weight greater than "999" when sent from ScaleLink Pro 5 or other scale management software. Fixed weight values are now accepted up to "30000" or 30.000 lb. The maximum weight for a Fixed Price PLU remains "999" or 999 ounces.

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IP-Ai Pre-Pack Scale

Version C2484A

Release Date: August 24, 2022

Use with SLP-5 **2.50j** or later ([strongly recommended](#) for full compatibility)

Related programs

Main: **C2485A**
Scale Driver: J0834 (J0835)
OS: J0829E
BIOS: J0825
FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Printer App: J0911A or later (J0827)

NOTE: After downloading the Main App program download the Printer (EC) and FPGA sub-app programs one at a time as needed. If the sub-app versions listed above are not installed the scale will not function correctly.



Caution

Memory initialization may be required when upgrading to this firmware version. Create a USB backup or use SLP-5 Maintenance Utility and SLP-5 to backup the scale before upgrading from firmware **C2150x** or an earlier version. Due to significant changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear** (Adjust menu → Memory Clear) & **System Data Init.** (Setup menu → File Save/Load → Scale Init. tab). [\[8.5.0.5\]](#)

The following lists the main changes from the standard firmware (C2484).

1. Fixed a bug where an error occurred when an .ABK file was send to the scale from the Maintenance Utility due to the Machine Type settings being out of range.

Version C2484

Release Date: July 25, 2022

Use with SLP-5 **2.50j** or later ([strongly recommended](#) for full compatibility)

Related programs

Main: C2485
Scale Driver: J0834 (J0835)
OS: J0829E
BIOS: J0825
FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Printer App: J0911A or later (J0827)

NOTE: After downloading the Main App program download the Printer (EC) and FPGA sub-app programs one at a time as needed. If the sub-app versions listed above are not installed the scale will not function correctly.

C2484x PACKING HOUSE FIRMWARE RELEASE NOTES

IP-Ai Pre-Pack Scale



Caution

Memory initialization is required when upgrading to this firmware version. Create a USB backup or use SLP-5 Maintenance Utility and SLP-5 to backup the scale before upgrading. Due to significant changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear** (Adjust menu → Memory Clear) & **System Data Init.** (Setup menu → File Save/Load → Scale Init. tab). [8.5.0.5]

The following lists the main changes from the standard firmware (C2150W).

1. This is the initial release of C2484 for the IP-Ai pre-pack scale. This firmware is not compatible with the WM-Ai auto wrapper.
2. Added a Hold function that retains temporary changes entered by the operator even after another PLU is called (Setup menu → Hold Data).
 - a. All temporary changes configured as "Hold" are held until released by pressing the  (Return Arrow) key to enter the menus or by powering off the scale.
 - b. In Operation mode, setting a field to "0" is treated as any other entry to hold.
 - c. There are 32 separate fields that may be set. The default setting is "No" (do not hold) for all fields.
 - d. The Hold Data menu is available without the service password but access may be controlled by using the Password feature (Setup menu).
 - e. The Hold Data settings are saved during a USB backup as part of the System file (Setup menu → File Save/Load).
 - f. Similar fields are included under a single setting as indicated below:
 - 1: Pack Date → holds Pack Date, Pack Date Print, Pack Time Select
 - 2: Shelf Life → holds Sell By Date, Sell By Date Print
 - 3: Tare → holds Tare1, Tare2
 - 30: Limit Wgt → holds Upper Weight, Lower Weight
 - 31: Target → holds Target1, Target2, Target Flag
3. Added Order Quantity Target / Total Label function. There are two target levels: Target 1 and Target 2. These can be used as "Box Total" and "Pallet Total" respectively. Target 1 can be used without setting Target 2.
 - a. Added a "Target" tab to the PLU editing screen where values can be programmed for Target 1 and Target 2.
 - b. Target values can be entered using the **Target** function key (#65) in operation mode. When programming the keys, set the Data value as "1" for Target 1 and "2" for Target 2.
 - c. Added a setting to specify the label format for Target 2 total label (SUBTTL2). Specify Target 1 and Target 2 total label formats in the Setup menu → Label Comb. → Change Format → Total (Label Group). Default format is 97.
 - d. When a target has been reached the "Target Achieved" screen is displayed.
 - e. At least one total label must be printed. Multiple total labels can be printed. Press the **NEXT** button to exit total label printing.
 - f. The **Run Total** function key (#12) can be used to halt a run before the Target 1 count has been reached. The "Subtotal Label Print" screen is displayed. Press **PRINT** to print total labels as needed and **OK** to exit. This will reset the Target 1 run to start from the beginning target count. The Target 2 count is not affected.

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- g. Operation example of printing sequence with Target 1 = 3, and Target 2 = 2
- 1st label: Target 1 = 3/3, Target 2 = 2/2
 - 2nd label: Target 1 = 2/3, Target 2 = 2/2
 - 3rd label: Target 1 = 1/3, Target 2 = 2/2
 - "Target Level 1 Achieved" is displayed
 - Press **Print** to print Target 1 total label, multiple labels may be printed
 - Press **Next** to continue
 - 4th label: Target 1 = 3/3, Target 2 = 1/2
 - 5th label: Target 1 = 2/3, Target 2 = 1/2
 - 6th label: Target 1 = 1/3, Target 2 = 1/2
 - "Target Level 1 Achieved" is displayed
 - Press **Print** to print Target 1 total label, multiple labels may be printed
 - Press **Next** to continue
 - "Target Level 2 Achieved" is displayed
 - Press **Print** to print Target 2 total label, multiple labels may be printed
 - Press **Next** to continue
 - 7th label: Target 1 = 3/3, Target 2 = 2/2
- h. Serial numbers can be set and printed for the Target 1 and Target 2 total labels.
- To set the serial numbers, press either of the Target function keys after a PLU is called. At the Target screen, enter the password 951753 and press the **PLU** key. Enter the starting serial numbers for "Subtotal Serial 1" and "Subtotal Serial 2" as needed.
 - Numbers range from "00000001" to "99999999" then rollover to start again.
 - Target 1 and Target 2 serial numbers are saved when the IP-Ai is powered off. Serial numbers are reset to 00000001 after a memory clear.
 - Label format Print IDs have been added for Target 1 and Target 2 serial numbers. These are the settings to add the Print IDs to the SLP-5 Setup Utility → Label Format → WM-AI/IP-AI → Print ID Setup.
 - SLP-5 Print ID 791 (317 at IP-Ai)
 - SLP-5 Print ID 792 (318 at IP-Ai)

The screenshot shows the 'Edit Print ID' dialog box with the following fields and values:

Field	Value
Name	Subtotal Serial No. 1
Short Name	Sttl SN No.1
Code	791
Special Meaning	None
Unit Type	Numeric

At the bottom, there are two buttons: 'OK' and a red 'X' button.

The screenshot shows the 'Edit Print ID' dialog box with the following fields and values:

Field	Value
Name	Subtotal Serial No. 2
Short Name	Sttl SN No.2
Code	792
Special Meaning	None
Unit Type	Numeric

At the bottom, there are two buttons: 'OK' and a red 'X' button.

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4. Added the ability to edit Extra Message 1, Extra Message 2, and Extra Message 3 from the operation screen.
 - a. To enable editing, set the Data value of the preset key as "1". Set the Data value as "0" to display the list of available Extra Messages as usual.
 - b. Press the key to edit the message linked to the PLU.
 - c. Two options are available for the function key description:
 - Set the split value equal to the key height to display the function key description such as "EDIT EXTRA MSG 1".
 - Set the split as zero to display the message text on the key.
5. Added data fields to the Custom Barcode options.
 - a. Julian Date and Clock Date. By combining the two it is possible to print YYYYDDD, YYDDD, and other permutations.
 - b. Trace Lot No. Set Trace Enable as "Yes" in a PLU and enter the Lot Number on the Traceability Data pop up screen. Use the Trace function key (#79) to review and edit the Lot Number.
6. Added support for odd digits in Code 128 barcode. Printing starts as Type-C first and for the last odd number digit, printing changes to Type-B. This function will automatically activate based on the digits of data.
7. Modified the Transaction Data .CSV output file to include "TargetCount1" and "TargetCount2" fields. The values in these fields reflect the current count when the label was printed.
8. Modified the serial number fields to increase from 6-digits to 8-digits.
9. Removed options to configuration various settings. The settings and fixed values listed below are required to support the total label function (Setup menu → Operation Settings → Print tab).
 - a. Target Complete → fixed as "Display Message"
 - b. Target Auto Setup → fixed as "Yes"
 - c. Subtotal Clear → fixed as "Both"
 - d. Auto Subtotal Label → fixed as "1"
10. Removed the 5 Tray/Price function to accommodate the Data Hold feature.
 - a. The following preset keys used for the 5 Tray/Price operation are no longer available.
 - 415: Price Grp
 - 416: Price Grp. (Price)
 - 417: Price Grp. (Symb.)
 - 418: Price Grp. (Tray)
 - b. Changed the Call Up Unit Price setting to be fixed at "Every U/P No.1". (Setup menu → Operation Settings → Call2 tab)
11. Changed the default setting for Weighted Items' Weight Range Check to "Yes" to accommodate the Data Hold feature (Setup menu → Operation Settings → Prod. tab).
12. Added support for the Silex SX-590 wireless card in addition to the Lantronix WiPort.
 - a. The "DEVICE" setting was added to the WiFi setting screen (Setup menu → Machine No.). The options are "WiPort" (default) and "SX".
 - b. The SX-590 card supports the following encryption. Unsupported encryptions types are shaded out on the WiFi screen.
 - WEP128
 - WPA PSK (personal) TKIP

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- WPA2 PSK (personal) CCMP
- c. The IP-Ai will automatically reboot after entering the settings for the SX-590 card and exiting.
- d. The SX-590 supports both the 2.4 GHZ and 5 GHZ frequency band, unlike the WiPort that supports only 2.4 GHZ.
- e. The SX-590 supports 802.11a/b/g/n/ac (1x1) compared to the WiPort that only works with 802.11 b/g.
- f. For identification purposes, scales with the Silex SX-590 installed from the factory use a white antenna.