

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

The previous Ishida WM-Ai/IP-Ai firmware **C2150x** has been superseded by firmware **C2542x**.

Procedure to install new WM-Ai / IP-Ai firmware

Refer to the appropriate *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. On the wrapper press the yellow **RETURN** button at the 0322 Go Back to Original Position screen to return all mechanical components to their home position.
3. Press the green **ENTER** button at the Date/Time confirm screen.
4. WM-Ai: Remove the access panel located on the upper right side behind the display.
IP-Ai: 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.
6. Press the **RETURN ARROW** key (upper right) to enter the Main menu.
7. Enter **495344** and press the **PLU** key to access 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. WM-Ai: Power off the wrapper. Wait 30 seconds and switch on the power.
IP-Ai: The scale will automatically reboot.
16. On the wrapper press the yellow **RETURN** button at the 0322 Go Back to Original Position screen to return all mechanical components to their home position.
17. Press the green **ENTER** button at the Date/Time confirm screen.
18. 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.
19. Press the **RETURN ARROW** key (upper right) to enter the Main menu.
20. Enter **495344** and press the **PLU** key to access hidden menu steps.
21. Press the **ADJUST** menu button, then select **DOWNLOAD**.
22. Press the **SUB APP** tab.
23. Select the program to be installed. It will be highlighted in yellow. Select only one Sub App program at a time.
24. Press **EXEC** to confirm the selection. Press **EXEC** to begin the firmware download.
25. The screen will show the firmware download progress. The download may take several minutes to complete.
26. When Re-Boot Check message 15029 is displayed, the firmware download is complete.
27. WM-Ai: Power off the wrapper. Wait 30 seconds and switch on the power.
IP-Ai: The scale will automatically reboot.
28. On the wrapper press the yellow **RETURN** button at the 0322 Go Back to Original Position screen to return all mechanical components to their home position.
29. Press the green **ENTER** button at the Date/Time confirm screen.
30. Repeat steps 19 ~ 28 to load any remaining Sub App and Sub Boot programs as needed.
31. Remove the USB memory stick.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

Table of Contents

Procedure to install new WM-Ai / IP-Ai firmware	1
Procedure to convert to 2020 Nutrition data format	2
Version C2542E.....	3
Version C2542D.....	6
Version C2542C.....	12
Version C2542B.....	13
Version C2542A.....	14
Version C2542	16
Version C2150Y.....	17
Version C2150X.....	18
Version C2150W.....	19
Version C2150V.....	20
Version C2150U.....	21
Version C2150T	22
Version C2150S.....	22
Version C2150R.....	22
Version C2150P.....	25
Version C2150N.....	25
Version C2150M	27
Version C2150L	29
Version C2150K.....	29
Version C2150J	29
Version C2150H.....	30
Version C2150G	32
Version C2150F	33
Version C2150E.....	34
Version C2150D.....	37
Version C2150C.....	38
Version C2150B.....	40
Version C2150A.....	43
Version C2150	43

Procedure to convert to 2020 Nutrition data format

See [C2150R item 1h](#) for detailed step by step instructions.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

Version C2542E

Release Date: November 2025

Use with SLP-5 **2.40t** or later ([strongly recommended](#) for compatibility)

Related Programs	P-1100B CPU	P-1100D/E CPU
Main:	C2543E	C2543E
Scale Driver:	J0834 (J0835)	J0834 (J0835)
OS:	J0829E	J1050A
BIOS:	J0825	J0825
FPGA App.:	J0910B (J0824)	J0973C (J0972A)
Keyboard:	J0823B	J0823B
Scale:	J0776G or later	J0776G or later
Wrap App.:		
P-1105:	J1237D (J0860A)	J1237D (J0860A)
P-1186:	J1225D (J1106K)	J1225D (J1106K)
Camera App.:	J0884D (J0846)	J0884D (J0846)
Printer App:		
WM-Ai:	J0909G (J0827)	J1003A (J0974A)
IP-Ai:	J0911C (J0827)	J1002A (J0974A)
Pop Printer App.:	J0949E (J0926) [J0935A]	J0949E (J0926) [J0935A]
{WM-Ai-P only}		

NOTES:

- After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- Do not select "STOP" when exiting the WiFi setting screen when the "SX" option is selected. This will cause the settings displayed on the screen to differ from the actual card settings.



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 wrapper before upgrading from firmware **C2150P** 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 previous version (C2542D)

- Added support for WPA2-PSK TKIP encryption in the WiFi configuration tab when the "SX" Silex SX-590 wireless card is installed.
- Fixed a bug that could trigger an infeed pusher bar motor overload error (0421-0003).
- Fixed a bug where the infeed pusher bar motor could stop shortly after starting and cause an error (0421-30**).

C2542x MAIN FIRMWARE RELEASE NOTES
WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

4. Fixed a bug where the film loading process could start before the film was properly set after moving to the loading position.
5. Added a "Markup Ratio" setting to the Frequent Shopper menu (Setup menu). This is applicable for Cost+10% or similar customers.
 - a. The Total Price markup calculation is: $\text{Total Price} + (\text{Total Price} \times \text{Markup Ratio} [\%]) - 0.0049$.
 - b. Round any one hundredths of a penny [third digit after the decimal] 0.0050 and higher to the next higher penny, 0.0049 or lower to the next lower penny.
 - c. The following examples show the markup and rounding for 10%.
 - i. Total Price is \$3.00
 - $3.00 + (3.00 \times 0.1) - 0.0049 = 3.2951$
 - Round UP to \$3.30
 - ii. Total Price is \$2.09
 - $2.09 + (2.09 \times 0.1) - 0.0049 = 2.2941$
 - Round DOWN to \$2.29
 - d. Four prices are available for Weighed items: the original price (cost) and the +10% markup price (consumer price) for both Total Price and Unit Price. Two prices are available for Fixed Price items: the original price (cost) and the 10% markup price (consumer price) for Total Price.
 - e. For Weighed items the markup Unit Price is calculated based on the weight.
 - f. The original price prints in the barcode. The POS calculates the markup as the consumer price.
 - g. Campaign PLUs designated as either Unit Price (Weighed items) or Fixed Price (Fixed Price items) support the Markup Ratio.
 - h. The Markup Ratio is available as 0% (default) to 99.9%.
6. Added two Print ID fields:
 - a. 256 (598 in SLP-5): +10% Total Price
 - b. 257 (599 in SLP-5): +10% Unit Price (calculated from dividing +10% Total Price by weight)
7. SLP-5 must be updated to support the two new Print ID fields. The new Print IDs are added as follows:
 - a. Open SLP-5 Setup Utility program.
 - b. From the Configuration menu, select **General Settings**.
 - c. Select the **Supported Functions** tab.
 - d. In the **General Operations** window, check Advanced Configuration Setting, click **OK**.
 - e. Close and reopen the Setup Utility program.
 - f. From the Configuration menu, select **Label Format**.
 - g. Double click "WM-AI/IP-AI".
 - h. In the Label Format Data window click the **Print ID Setup** button.
 - i. Click the **New** button.
 - j. Enter the following settings for the new Total Price +10% field:
 - i. Name = Total Price +10%
 - ii. Short Name = T.P. +10%

C2542x MAIN FIRMWARE RELEASE NOTES
WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- iii. Code = 598
- iv. Special Meaning = None
- v. Unit Type = Numeric
- vi. Click **OK**.
- k. Enter the following settings for the new Unit Price +10% field:
 - vii. Name = Unit Price +10%
 - viii. Short Name = U.P. +10%
 - ix. Code = 599
 - x. Special Meaning = None
 - xi. Unit Type = Numeric
 - xii. Click **OK**.
- l. Click the **Close** button, click the **Save** button, Click the **Close** button.



Weighed PLU



Fixed Price PLU

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

The screenshot shows the 'Edit Print ID' dialog box. The 'Name' field contains 'Total Price +10%', 'Short Name' contains 'T.P. +10%', 'Code' contains '598', 'Special Meaning' is set to 'None', and 'Unit Type' is set to 'Numeric'. There are 'OK' and 'Cancel' buttons at the bottom.

SLP-5 Total Price +10%

The screenshot shows the 'Edit Print ID' dialog box. The 'Name' field contains 'Unit Price +10%', 'Short Name' contains 'U.P. +10%', 'Code' contains '599', 'Special Meaning' is set to 'None', and 'Unit Type' is set to 'Numeric'. There are 'OK' and 'Cancel' buttons at the bottom.

SLP-5 Unit Price +10%

Version C2542D

Release Date: July 2025

Use with SLP-5 **2.40t** or later (strongly recommended for compatibility)

Related Programs *P-1100B CPU*

Main: **C2543D**
 Scale Driver: J0834 (J0835)
 OS: J0829E
 BIOS: J0825
 FPGA App.: J0910B (J0824)
 Keyboard: J0823B
 Scale: J0776G or later
 Wrap App.:
 P-1105: **J1237B (J0860A)**
 P-1186: **J1225B (J1106K)**
 Camera App.: J0884D (J0846)
 Printer App.:
 WM-Ai: J0909G (J0827)
 IP-Ai: J0911C (J0827)
 Pop Printer App.: J0949E (J0926) [J0935A]
 {WM-Ai-P only}

P-1100D/E CPU

C2543D
 J0834 (J0835)
 J1050A
 J0825
 J0973C (J0972A)
 J0823B
 J0776G or later
J1237B (J0860A)
J1225B (J1106K)
 J0884D (J0846)
 J1003A (J0974A)
 J1002A (J0974A)
 J0949E (J0926) [J0935A]

NOTES:

- After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- b) Do not select "STOP" when exiting the WiFi setting screen when the "SX" option is selected. This will cause the settings displayed on the screen to differ from the actual card settings.



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 wrapper before upgrading from firmware **C2150P** 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). **[8.5.0.4]**

The following lists the main changes from the previous version (C2542C)

1. Support has been added for new main control boards (P-1186) and sub control boards (P-1206).
 - a. Main control board locations:
 - i. A100, A200, A300, A400 (WM-Ai-P), A600 (WM-Ai-B)
 - b. Sub control board locations:
 - i. A101, A102, A201, A202, A301, A401 (WM-Ai-P), A402 (WM-Ai-P),
 - c. Old main (P-1105) and sub control boards (P-1006) remain supported when using firmware version C2542E or later.

IMPORTANT: If a machine with a new main control board (P-1186) is running firmware that does not support the board, error "Problem On Wrapping Part" (0494-000x) will occur. The machine will not operate until the firmware is updated to a compatible version.

- d. New main control boards (P-1186) are factory installed from Serial No. 100773300.
- e. New main control boards (P-1186) and sub control boards (P-1206) are factory installed from Serial No. 100774845.
 - i. Machines with new main control boards can be identified by a "d" sticker above the serial number plate.



"d" sticker above serial number plate

Note: Old main control boards (P-1105) are intended for use only in the repair of older machines or in emergency situations where new main control boards (P-1186) are unavailable.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

2. Unsupported mixed configurations of old and new main and sub control boards:
 - a. The new sub control boards (P-1206) cannot be used with the old main control boards (P-1105).
 - i. Connecting a new sub control board (P-1206) to an old main control board (P-1105) will not damage the boards. Motor errors will occur because the stepping motors cannot be controlled.
 - b. The A200 (lower right) must be a new main control board (P-1186) if a mix of old and new boards are installed in the wrapper.
 - i. Downloading the wrap app sub application will fail if an old main (P-1105) control board is installed in the A200 location.
3. Wrap App sub application download behavior by board configuration:
 - a. All Main Control Boards Are Old (P-1105):
 - i. Only P-1105 wrapping machine applications appear in the download list.
 - ii. Firmware details screen shows the old board's application and boot versions.

SOFTWARE	VERSION	SOFTWARE	VERSION
MAIN	B0792S	WRAP APP.(BOOT)	J1237B(J0860A)
SCALE DRIVER (UPDATER)	J0834(J0835)	CAMERA APP.(BOOT)	J0884F(J0846)
OS	J1050A	PRINTER APP.(BOOT)	J1003A(J0974A)
BIOS			
FPGA APP.(BOOT)	J0973C(J0972A)		
KEY BOARD	J0823B	UNDER PRINTER APP. (BOOT)[FPGA]	H12969F (J0926)(J0935A)
SCALE	J0776K	POP PRINTER APP. (BOOT)[FPGA]	J0949E (J0926)(J0935A)

All main control boards are old (P-1105)

- b. All Main Control Boards Are New (P-1186):
 - i. Only P-1186 wrapping machine applications appear in the download list.
 - ii. Firmware details screen shows the new board's application and boot versions.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

FIRMWARE DETAILS		03-07-2025 (THU) 18:28	
TITLE SOFTWARE B0791S		AUDIT LOG	LICENSE
SOFTWARE	VERSION	SOFTWARE	VERSION
MAIN	B0792S	WRAP APP.(BOOT)	J1225B(J1106K)
SCALE DRIVER (UPDATER)	J0834(J0835)	CAMERA APP.(BOOT)	J0884F(J0846)
OS	J1050A	PRINTER APP.(BOOT)	J1003A(J0974A)
BIOS			
FPGA APP.(BOOT)	J0973C(J0972A)		
KEY BOARD	J0823B	UNDER PRINTER APP. (BOOT)[FPGA]	H12969F (J0926)(J0935A)
SCALE	J0776K	POP PRINTER APP. (BOOT)[FPGA]	J0949E (J0926)(J0935A)

All main control boards are new (P-1186)

- c. Mixed Boards (P-1186 + P-1105)
 - i. Both P-1186 and P-1105 wrapping machine applications are available in the download list.
 - ii. During download, each board stores the compatible application automatically.
 - iii. Under the program version column of the Firmware Details menu:
 - The wrapping machine application field shows “TOUCH HERE TO VIEW DETAILS”.
 - Tapping this opens a detailed pop-up showing versions for each board: A100, A200, A300, A400, A600.
 - “(UNKNOWN)” is displayed if the firmware for any old main control board has not been updated with the current sub app. After updating the sub-application “(UNKNOWN)” is replaced with “J1237x.”

C2542x MAIN FIRMWARE RELEASE NOTES
WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

FIRMWARE DETAILS03-07-2025 (THU) 18:35

TITLE SOFTWAREC2596B

AUDIT LOGLICENSE

SOFTWARE	VERSION	SOFTWARE	VERSION
MAIN	C2597B	WRAP APP.(BOOT)	TOUCH HERE TO VIEW DETAILS
SCALE DRIVER (UPDATER)	J0834(J0835)	CAMERA APP.(BOOT)	J0884F(J0846)
OS	C2593	PRINTER APP.(BOOT)	J1003A(J0974A)
BIOS		PRINTER 2	J0912
FPGA APP.(BOOT)	J0973C(J0972A)		
KEY BOARD	J0823B		
SCALE	J0776K	POP PRINTER APP. (BOOT)(FPGA)	J0949E (J0926)(J0935A)

New and old (P-1186 + P-1105) main control boards are mixed.

FIRMWARE DETAILS03-07-2025 (THU) 18:35

TITLE SOFTWAREC2596B

P-1186 Board:
Wrap and boot app displayed.
Firmware supports mixed board configuration.
Sub app updated.
P-1186 installed in A200 position (lower right).

SOFTWARE	VERSION	SOFTWARE	VERSION
MAIN	WRAP BOARD		
	[A100]	J1237A(J0860A)	TOUCH HERE TO VIEW DETAILS
SCALE DRIVER (UPDATER)	[A200]	J1225A(J1106K)	
OS	[A300]	J1237A(J0860A)	
BIOS	[A400]	J1237A(J0860A)	
FPGA APP.(BOOT)	[A600]	()	
KEY BOARD	J0823B		
		ER APP. (FPGA)	J0949E (J0926)(J0935A)

P-1105 Boards:
Wrap and boot apps displayed.
Sub apps updated to support mixed board configuration.

Detail screen displaying control board's currently installed wrap and boot apps.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

FIRMWARE DETAILS 04-07-2025 (FRI) 9:25

TITLE SOFTWARE C2596B

P-1186 Board:
Wrap and boot app displayed.
Firmware supports mixed board configuration.
Sub app updated.
P-1186 installed in A200 position (lower right).

SOFTWARE	VERSION	SOFTWARE	VERSION
MAIN	[A100]	(UNKNOWN)	
SCALE DRIVER (UPDATER)	[A200]	J1225A(J1106K)	
OS	[A300]	(UNKNOWN)	
BIOS	[A400]	(UNKNOWN)	J0912
FPGA APP.(BOOT)	[A600]	()	
KEY BOARD	J0823B		
		APP. A]	J0949E (J0926)[J0935A]

HERE TO VIEW DETAILS

P-1105 Boards:
Wrap and boot apps displayed as "(UNKNOWN)".
Sub apps not updated to support mixed board configuration.

Wrap and boot apps displayed as "(UNKNOWN)".

4. Enhanced support for pop labels exceeding the standard 60mm height limit.
 - a. To prevent the applicator from contacting the long label while moving to the pickup position the suction standby position is shifted to the right (away from the label) based on the label height.
 - i. When applying pop labels at the package edge (near the front cover), the applicator suction unit may contact the next label during pickup. To prevent this, position the labels application position slightly inward from the edge.
5. Fixed a bug where continuous pop labeling caused errors "Abnormal For Applicator" (0615-2xxx) and "Applicator Has Stopped" (0608-2000) on machines with a P-1186 main control board installed in the A400 position.
 - a. The return button may now be pressed to continue labeling.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

Version C2542C

Release Date: March 2025

Use with SLP-5 **2.40t** or later ([strongly recommended](#) for compatibility)

Related Programs	P-1100B CPU	P-1100D/E CPU
Main:	C2543C	C2543C
Scale Driver:	J0834 (J0835)	J0834 (J0835)
OS:	J0829E	J1050A
BIOS:	J0825	J0825
FPGA App.:	J0910B (J0824)	J0973C (J0972A)
Keyboard:	J0823B	J0823B
Scale:	J0776G or later	J0776G or later
Wrap App.:	J1011K (J0860A)	J1011K (J0860A)
Camera App.:	J0884D (J0846)	J0884D (J0846)
Printer App:		
WM-Ai:	J0909G (J0827)	J1003A (J0974A)
IP-Ai:	J0911C (J0827)	J1002A (J0974A)
Pop Printer App.:	J0949E (J0926) [J0935A]	J0949E (J0926) [J0935A]
{WM-Ai-P only}		

NOTES:

- After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- Do not select "STOP" when exiting the WiFi setting screen when the "SX" option is selected. This will cause the settings displayed on the screen to differ from the actual card settings.



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 wrapper before upgrading from firmware **C2150P** 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). [\[8.5.0.4\]](#)

The following lists the main changes from the previous version (C2542B)

- Added a Data Distribution function to allow the IP-Ai to send files to Uni-9 scales. Firmware C2540x must be installed in the Uni-9 scales.
 - The Data Distribution option is added to the Setup menu.
 - Machine tab: enter the IP addresses of the Uni-9 scales to receive the data sent from the IP-Ai.
 - Data tab: select which files to send to the Uni-9:
 - PLU
 - Extra Message 1
 - Ingredients

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- b. Send data to the Uni-9 by one of two methods.
 - i. Press the DATA DIST button on the Machine tab (Setup menu → Data Distribution).
 - ii. Press the DISTRIB. function key (#102) added to the to the main screen.
- c. Data sent to the Uni-9 overwrites records with the same number. Other existing records remain and are not deleted.

Version C2542B

Release Date: January 2025

Use with SLP-5 **2.40t** or later ([strongly recommended](#) for compatibility)

Related Programs	<i>P-1100B CPU</i>	<i>P-1100D/E CPU</i>
Main:	C2543B	C2543B
Scale Driver:	J0834 (J0835)	J0834 (J0835)
OS:	J0829E	J1050A
BIOS:	J0825	J0825
FPGA App.:	J0910B (J0824)	J0973C (J0972A)
Keyboard:	J0823B	J0823B
Scale:	J0776G or later	J0776G or later
Wrap App.:	J1011K (J0860A)	J1011K (J0860A)
Camera App.:	J0884D (J0846)	J0884D (J0846)
Printer App:		
WM-Ai:	J0909G (J0827)	J1003A (J0974A)
IP-Ai:	J0911C (J0827)	J1002A (J0974A)
Pop Printer App.:	J0949E (J0926) [J0935A]	J0949E (J0926) [J0935A]
{WM-Ai-P only}		

NOTES:

- a) After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- b) Do not select "STOP" when exiting the WiFi setting screen when the "SX" option is selected. This will cause the settings displayed on the screen to differ from the actual card settings.



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 wrapper before upgrading from firmware **C2150P** 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). [\[8.5.0.4\]](#)

The following lists the main changes from the previous version (C2542A)

1. Added support for P-1100E CPU board.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- Fixed a bug where the PLU name printed on a subtotal label was from the previous PLU.

Version C2542A

Release Date: July 2024

Use with SLP-5 **2.40t** or later (strongly recommended for compatibility)

Related Programs	P-1100B CPU	P-1100D CPU
Main:	C2543A	C2543A
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
Wrap App.:	J1011K (J0860A)	J1011K (J0860A)
Camera App.:	J0884D (J0846)	J0884D (J0846)
Printer App:		
WM-Ai:	J0909G (J0827)	J1003A (J0974A)
IP-Ai:	J0911C (J0827)	J1002A (J0974A)
Pop Printer App.:	J0949E (J0926) [J0935A]	J0949E (J0926) [J0935A]
{WM-Ai-P only}		

NOTES:

- After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- Do not select "STOP" when exiting the WiFi setting screen when the "SX" option is selected. This will cause the settings displayed on the screen to differ from the actual card settings.



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 wrapper before upgrading from firmware **C2150P** 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). **[8.5.0.4]**

The following lists the main changes from the previous version (C2542)

- Increased the vertical range the label applicator can be adjusted from ± 3.0 mm to ± 5.0 mm.
- Changed the description for label application direction from "HORI" / "VERT" to "STANDARD" / "TURN". Note that "STD." is used when there is limited space on the screen.

C2542x MAIN FIRMWARE RELEASE NOTES
WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

3. Changed the printing of Fixed Price items to require the PRINT key to be pressed to issue each label. Note that it is possible to print multiple labels, one at a time, by entering the number of labels before pressing the PRINT key.
4. Removed the option "ACCRUED" from function key #201: TODAY. The settings now toggle between "TODAY" and "REPACK".
5. Modified the operation of function key #201: TODAY to automatically change to "REPACK" when the Pack Date is manually changed by the operator.
 - a. Any of the following will trigger the automatic change:
 - i. When the date is entered directly in to the Pack Date field on the operation screen.
 - ii. When entering the Pack Date on the Date / Time setting screen and the "OK" button is pressed to exit.
 - iii. When a Pack Date is selected on the PREPACK / CALENDAR screen and the "OK" button is pressed to exit.

Note: reentering the original Pack Date will also cause the change to "REPACK".
 - b. The following will not change to "REPACK":
 - i. When an invalid Pack Date is entered.
 - ii. When changing the Pack Date to either PRINT or NO PRINT.
 - iii. When exiting the Date / Time setting or PREPACK / CALENDAR screen using the "Return" key.
6. Added a setting to select the format of the fixed bakery weight. The new Fixed Weight Format setting is in the Setup menu → Label Format → Print Control.
 - a. Changes affect Print ID 10C "WEIGHT (LB OZ)". This is a Variable Text field.
 - b. Selections are:
 - i. "lb oz" (default) – the format changes depending on the weight amount.
 - For less than 16 ounces, format: "xx oz".
Ex: 10 ounces → "10 oz".
 - For 16 ounces to 63 ounces, format: "xx oz(xx lb xx oz lb)".
Ex: 50 ounces → "50 oz(3 lb 2 oz)".
 - For 64 ounces or more, format: "xx lb xx oz".
Ex: For 70 ounces → "4 lb 6 oz"
 - ii. "lb" – the format is the same regardless of the weight amount.
 - For any ounce weight, format: "xx oz(xx.xx lb)".
Ex: For 50 ounces → "50 oz(3.13 lb)".

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

Version C2542

Release Date: December 2023

Use with SLP-5 **2.40t** or later ([strongly recommended](#) for compatibility)

Related Programs	P-1100B CPU	P-1100D CPU
Main:	C2543	C2543
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
Wrap App.:	J1011K (J0860A)	J1011K (J0860A)
Camera App.:	J0884D (J0846)	J0884D (J0846)
Printer App:		
WM-Ai:	J0909G (J0827)	J1003A (J0974A)
IP-Ai:	J0911C (J0827)	J1002A (J0974A)
Pop Printer App.:	J0949E (J0926) [J0935A]	J0949E (J0926) [J0935A]
{WM-Ai-P only}		

NOTES:

- After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- Do not select "STOP" when exiting the WiFi setting screen when the "SX" option is selected. This will cause the settings displayed on the screen to differ from the actual card settings.



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 wrapper before upgrading from firmware **C2150P** 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). [\[8.5.0.4\]](#)

The following lists the main changes from the previous version (C2150Y)

- Firmware C2542x is the continuation of WM-Ai / IP-Ai firmware C2150x.
- Added support for "WPA2 PSK TKIP" encryption when the "SX" option is selected (Setup menu → Machine No. → WiFi tab).

IMPORTANT: It is expected that updating the firmware to version C2542 or later will be sufficient for the WPA2 PSK TKIP encryption to function. If it does not, however, the firmware on the SX-590 WiFi board must then be updated to version 1.43. Contact Rice Lake for assistance.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

Version C2150Y

Release Date: April 18, 2023

Use with SLP-5 **2.40t** or later ([strongly recommended](#) for compatibility)

Related Programs	P-1100B CPU	P-1100D CPU
Main:	C2151W	C2151W
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
Wrap App.:	J1011K (J0860A)	J1011K (J0860A)
Camera App.:	J0884D (J0846)	J0884D (J0846)
Printer App:		
WM-Ai:	J0909G (J0827)	J1003A (J0974A)
IP-Ai:	J0911C (J0827)	J1002A (J0974A)
Pop Printer App.:	J0949E (J0926) [J0935A]	J0949E (J0926) [J0935A]
{WM-Ai-P only}		

NOTES:

- After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- Do not select "STOP" when exiting the WiFi setting screen when the "SX" option is selected. This will cause the settings displayed on the screen to differ from the actual card settings.



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 wrapper before upgrading from firmware **C2150P** 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). [\[8.5.0.4\]](#)

The following lists the main changes from the previous version (C2150V)

- Added "WEIGHT (USA)" [code 0EC] to the Custom Barcode ID list. This supports both single-range and dual-range weighing as illustrated in the examples below.
Examples: a. When the scale is configured for single-range a weight value of 0.01 Lb will print as "00001" in the custom barcode (when the weight value is 5 digits).
b. When the scale is configured for dual-range a weight value of 15.15 Lb will print as "15150" in the custom barcode
- 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

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack 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.

Version C2150X

Release Date: September 15, 2022

Use with SLP-5 **2.40t** or later (strongly recommended for compatibility)

Related Programs	<i>P-1100B CPU</i>	<i>P-1100D CPU</i>
Main:	C2151V	C2151V
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
Wrap App.:	J1011K (J0860A)	J1011K (J0860A)
Camera App.:	J0884D (J0846)	J0884D (J0846)
Printer App:		
WM-Ai:	J0909G (J0827)	J1003A (J0974A)
IP-Ai:	J0911C (J0827)	J1002A (J0974A)
Pop Printer App.:	J0949E (J0926) [J0935A]	J0949E (J0926) [J0935A]

NOTES:

- After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- If upgrading from C2150W or earlier be sure to upgrade the WM-Ai-P Printer App to J0909G and the IP-Ai Printer App to J0911C.
- Do not select "STOP" when exiting the WiFi setting screen when the "SX" option is selected. This will cause the settings displayed on the screen to differ from the actual card settings.



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 wrapper before upgrading from firmware **C2150P** 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). **[8.5.0.4]**

The following lists the main changes from the previous version (C2150W)

- Added support for the Silex SX-590 wireless card in addition to the Lantronix WiPort.
 - The "DEVICE" setting was added to the WiFi setting screen (Setup menu > Machine No.). The options are "WiPort" (default) and "SX".

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- b. The SX-590 card supports the following encryption. Unsupported encryption types are shaded out on the WiFi screen.
 - WEP128
 - WPA PSK (personal) TKIP
 - WPA2 PSK (personal) CCMP
 - c. The Uni-9 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.
2. Added support for the new P-1100D CPU board.

Version C2150W

Release Date: January 22, 2021

Use with SLP-5 **2.40t** or later ([strongly recommended](#) for compatibility)

Related programs

Main: C2151U
Scale Driver: J0834 (J0835)
OS: J0829E
BIOS: J0825
FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Wrap App.: J1011K (J0860A)
Camera App.: J0884D (J0846)
Printer App:
 WM-Ai: J0909F (J0827)
 IP-Ai: J0911A (J0827)
Pop Printer App.: **J0949E** (J0926) [J0935A] {WM-Ai-P only}

NOTES:

- a) After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- b) If upgrading from C2150V or earlier be sure to upgrade the WM-Ai-P Pop Printer App to J0949E.



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 wrapper before upgrading from firmware **C2150P** 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**

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

(Adjust menu > Memory Clear) & **System Data Init.** (Setup menu > File Save/Load > Scale Init. tab). [8.5.0.4]

The following lists the main changes from the previous version (C2150V)

1. Updated the Pop printer sub app to version J0949E to address communication errors with the Pop printer.

Version C2150V

Release Date: October 10, 2020

Use with SLP-5 **2.40t** or later (strongly recommended for compatibility)

Related programs

Main: C2151U
Scale Driver: J0834 (J0835)
OS: J0829E
BIOS: J0825
FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Wrap App.: J1011K (J0860A)
Camera App.: J0884D (J0846)
Printer App:
 WM-Ai: J0909F (J0827)
 IP-Ai: J0911A (J0827)
Pop Printer App.: J0949C (J0926) [J0935A] {WM-Ai-P only}

NOTE:

1. After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.



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 wrapper before upgrading from firmware **C2150P** 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). [8.5.0.4]

The following lists the main changes from the previous version (C2150U)

1. Added a setting to select when accumulated subtotal data are cleared. Setup menu > Operation Setting > Print tab.
 - Print – when the subtotal label is printed
 - PLU Call – when a PLU is called (default)
 - Both – when the subtotal label is printed and a PLU is called

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

Note: Print a subtotal label with key 15: Run Total. The default subtotal label format is 97. The subtotal label format number is set in Setup menu > Label Comb. > Basic > Total

Version C2150U

Release Date: April 15, 2020

Use with SLP-5 **2.40t** or later (**strongly recommended** for compatibility)

Related programs

Main: C2151T
Scale Driver: J0834 (J0835)
OS: J0829E
BIOS: J0825
FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Wrap App.: **J1011K** (J0860A)
Camera App.: J0884D (J0846)
Printer App:
 WM-Ai: J0909F (J0827)
 IP-Ai: J0911A (J0827)
Pop Printer App.: J0949C (J0926) [J0935A] {WM-Ai-P only}

NOTES:

- a) After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- b) If upgrading from C2150T or earlier be sure to upgrade the WM-Ai Wrapper App to J1011K.



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 wrapper before upgrading from firmware **C2150P** 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). **[8.5.0.4]**

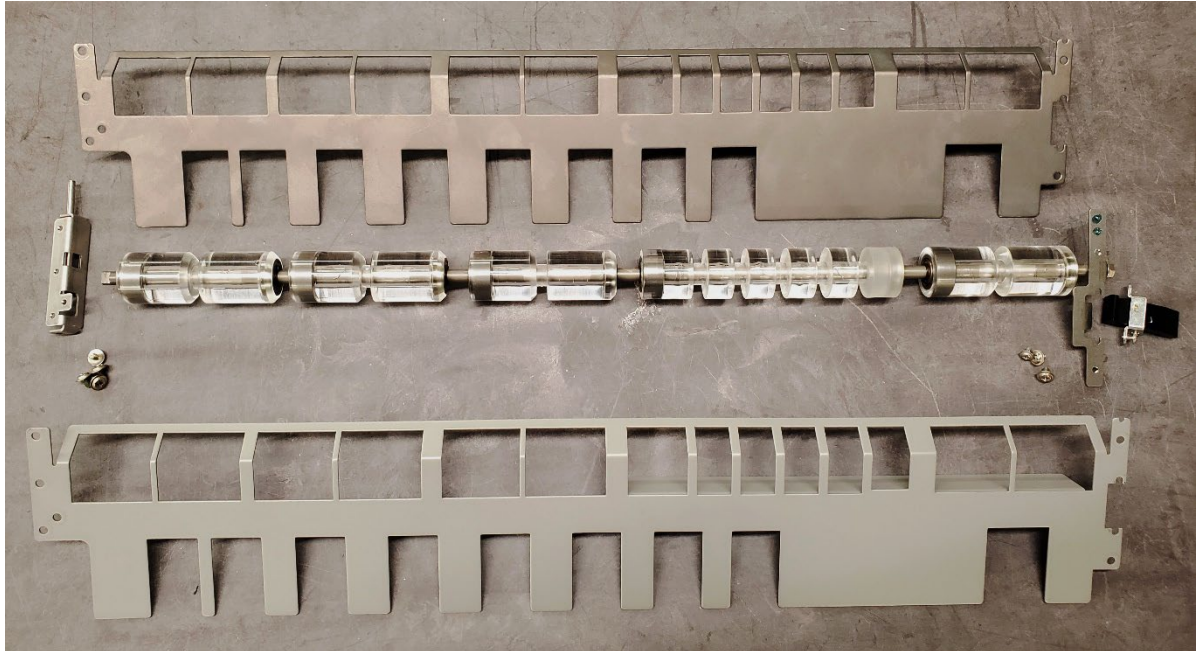
The following lists the main changes from the previous version (C2150R)

1. Added support for an updated Insertion Plate that is coated with a different material. An incorrect setting will affect film feeding. The updated insertion plate is factory installed on the WM-Ai-P model only from s/n 100504904, mfg. date October 2020. Adjust menu > Wrapping Machine > Film tab > Insertion Plate.
 - New – Set when the updated Insertion Plate is installed on an older wrapper
 - Old – Set when a wrapper has the original Insertion Plate (default)

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- SP – Set at the factory when new wrappers are built with the updated Insertion Plate
2. Fixed a bug where the last character of the date did not print when the Character Pitch spacing was set as zero (0).



Insertion Plate. Top: new coating (darker), bottom: original coating (lighter)

Version C2150T

Release Date: October 24, 2019

This version was not released for the USA as there were no relevant changes.

Version C2150S

Release Date: October 12, 2019

This version was not released for the USA as there were no relevant changes.

Version C2150R

Release Date: August 23, 2019

Use with SLP-5 **2.40t** or later (strongly recommended for compatibility)

Related programs

Main:	C2151P
Scale Driver:	J0834 (J0835)
OS:	J0829E
BIOS:	J0825

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Wrap App.: C2006S (J0860A)
Camera App.: J0884D (J0846)
Printer App:
 WM-Ai: J0909F (J0827)
 IP-Ai: J0911A (J0827)
Pop Printer App.: J0949C (J0926) [J0935A] {WM-Ai-P only}

NOTE:

- a) After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.



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 wrapper before upgrading from firmware **C2150P** 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).
[8.5.0.4]

The following lists the main changes from the previous version (C2150P)

1. Added support to print the new 2020 Nutrition data.
 - a. Nutrition editing screens (Program menu > Nutrition) are changed to two forms listing the new nutrition data fields plus a "free" table that can be used for miscellaneous additional values.
 - Form 1 tab – for single column format
 - Form 2 tab – for dual column format
 - Free tab – for miscellaneous fields
 - b. All values are converted to text to support decimals, percent symbols, etc.
 - c. When nutrition data is sent from SLP-5 in the old numeric format, it is converted and stored in the 2020 text format. The appropriate unit is automatically added: g, mg, or %.
 - d. The following nutrition data from the old format that are no longer required in the new 2020 Nutrition format are saved as follows.
 - Calorie From Fat → Nutr.Free1
 - Protein (%) → Nutr.Free2 (%)
 - Sugars (%) → Nutr.Free3 (%)
 - Vitamin A (%) → Nutr.Free4 (%)
 - Vitamin C (%) → Nutr.Free5 (%)
 - Sugar Alcohol → Nutr.Free1 (%)
 - e. After installing C2150R it is not possible to receive nutrition data in the old numeric format in to SLP-5.

C2542x MAIN FIRMWARE RELEASE NOTES
WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- f. If SLP-5 is configured for the old nutrition format and nutrition data are requested from a wrapper with C2150R installed, no data will be received in to SLP-5. There is no error.
 - g. SLP-5 can be changed between the old and new 2020 Nutrition format as follows: Open SLP-5 Setup Utility > General > General #2 tab > Enable "Nutrition: USA format (2020)"?
 - h. It is not possible to transfer old nutrition data by USB backup to the machine after a firmware update to C2150R. SLP-5 must be used to receive the old nutrition data **before** the update. And then send the nutrition data from SLP-5 after the update. Refer to the following steps.
 - i. Create a full USB backup.
 - ii. Configure SLP-5 for the original nutrition format. See step g. above.
 - iii. Receive all data into SLP-5.
 - iv. Install C2150R or later firmware.
 - v. Clear the wrapper/scale memory: Adjust menu > Memory Clear.
 - vi. Reconfigure the wrapper/scale for USA, etc. as needed.
 - vii. Load the full USB backup. The old style nutrition data will fail to load.
 - viii. Send nutrition data from SLP-5 to the wrapper/scale.
 - ix. Reconfigure SLP-5 for the 2020 Nutrition format
 - x. Receive the converted nutrition data from the wrapper/scale. See step g. above.
 - xi. Download updated label formats as needed to print the 2020 Nutrition format.
 - 2. Added 2020 Nutrition Print IDs 2C0 to 2EE (704 to 750 in SLP-5).
 - 3. Converted all original nutrition fields (Print IDs) to text format. This allows the option to print both the original and 2020 Nutrition data and formats during a transition period.
 - 4. Added support for an Ext. Format field in label formats. This field refers to another label format that overlays the main label format when more than the maximum 63 fields are required. There are two methods of overlaying a second "external" format on the original format.
 - a. Create the overlay format large enough for the required data - such as a nutrition panel. Then place the Ext. Format field where needed on the main label format. This is the method Rice Lake plans to use in the updated label library files.
 - b. Create the overlay format the same size as the original format. Then place the Ext. Format field at the top left corner of the main label format. That is, set the X Position as 0.0 and the Y Position as the label format height.
- Notes:**
- i. An Ext. Format button has been added to the Unit Type buttons on the left side of the SLP-5 Maintenance Utility label format editing screen. This is only available when using the default setup file provided with SLP-5 2.40b or later. If the previous setup file is selected when updating SLP-5 the Ext. Format field, as well as the 2020 Nutrition fields, will not be supported.
 - ii. The Ext. Format field can be made any size. Only the X and X coordinates are used to align the overlay label format. It is possible to set the X and X coordinates as zero to avoid confusion or unintentionally moving the field.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

In that case, the Ext. Format field can be edited by double clicking it in the List Units table. The List Units icon is at the top of the Maintenance Utility screen.

Version C2150P

Release Date: June 20, 2019

Use with SLP-5 **2.20f** or later (strongly recommended for compatibility)

Note: Campaign support for 16:U/P and 17:PRICE is available from SLP-5 2.40c.

Related programs

Main:	C2151N
Scale Driver:	J0834 (J0835)
OS:	J0829E
BIOS:	J0825
FPGA App.:	J0910B (J0824)
Keyboard:	J0823B
Scale:	J0776G or later
Wrap App.:	C2006S (J0860A)
Camera App.:	J0884D (J0846)
Printer App:	
WM-Ai:	J0909F (J0827)
IP-Ai:	J0911A (J0827)
Pop Printer App.:	J0949C (J0926) [J0935A] {WM-Ai-P only}

NOTE:

- After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.



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 wrapper before upgrading from firmware **C2150G** 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). **[8.5.0.3]**

The following lists the main changes from the previous version (C2150N)

- Modified to reset the serial number when the machine is powered up and the maximum number of digits is exceeded. The serial number is in the range of 1 to 99999.

Version C2150N

Release Date: May 13, 2019

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

Use with SLP-5 **2.20f** or later (**strongly recommended** for compatibility)

Note: Campaign support for 16:U/P and 17:PRICE is available from SLP-5 2.40c.

Related programs

Main: C2151M
Scale Driver: J0834 (J0835)
OS: J0829E
BIOS: J0825
FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Wrap App.: C2006S (J0860A)
Camera App.: J0884D (J0846)
Printer App:
 WM-Ai: J0909F (J0827)
 IP-Ai: J0911A (J0827)
Pop Printer App.: J0949C (J0926) [J0935A] {WM-Ai-P only}

NOTE:

- a) After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.



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 wrapper before upgrading from firmware **C2150G** 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). **[8.5.0.3]**

The following lists the main changes from the previous version (C2150M)

1. Modified the Lot Number operation to display an error if the value is not set (blank or all zeros). This only applies when the Trace function key (key type 79) is configured as a split key with areas for a title (upper) and data (lower).
 - a. Error number is 0236-0000, LOT No. IS NOT PROGRAMED.
 - b. If the Trace function key is not split (title only), no error will occur.
2. Added the ability to print up to a 5-digit serial number on standard labels: Setup menu > Operation Setting > Prod tab.
 - a. The following parameters are available.
 - i. Label Serial Start No. Default is 1.
 - ii. Label Serial End No. Default is 99999.
 - iii. Label Ser. No. Daily Auto Clear.
 - No – Hold the serial number even if the machine is powered off (default).
 - Yes – Reset to the Start number once a day after the wrapper/scale is powered off.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- iv. Label Serial Count No. Set the increment value. Default is 1.
- b. Serial number Print ID is 241 (577 in SLP-5).
- c. When the ending number is reached the serial number restarts at the beginning number.
- d. The serial number is incremented even if an error occurs.
- e. The serial number is not incremented during wrap only, totals label print, or check label print.
- f. The serial number is reset to 1 after a memory clear.
- g. The serial number is not compatible with a custom barcode.

Version C2150M

Release Date: April 9, 2019

Use with SLP-5 **2.20f** or later (**strongly recommended** for compatibility)

Note: Campaign support for 16:U/P and 17:PRICE is available from SLP-5 2.40c.

Related programs

Main: C2151L
Scale Driver: J0834 (J0835)
OS: J0829E
BIOS: J0825
FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Wrap App.: **C2006S** (J0860A)
Camera App.: J0884D (J0846)
Printer App:
 WM-Ai: J0909F (J0827)
 IP-Ai: J0911A (J0827)
Pop Printer App.: J0949C (J0926) [J0935A] {WM-Ai-P only}

NOTES:

- a) After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- b) If upgrading from C2150L or earlier be sure to upgrade the WM-Ai Wrapper App to C2006S.



Caution

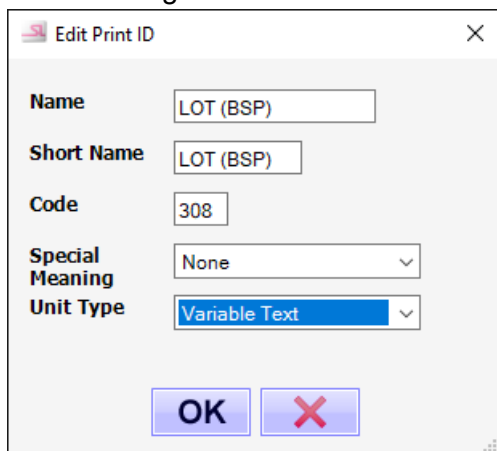
Memory initialization may be required when upgrading to this firmware version. Create a USB backup or use SLP-5 Maintenance Utility and SLP-5 to backup the wrapper before upgrading from firmware **C2150G** or an earlier version. Due to significant changes in the memory structure, after firmware installation 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). **[8.5.0.3]**

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

The following lists the main changes from the previous version (C2150J)

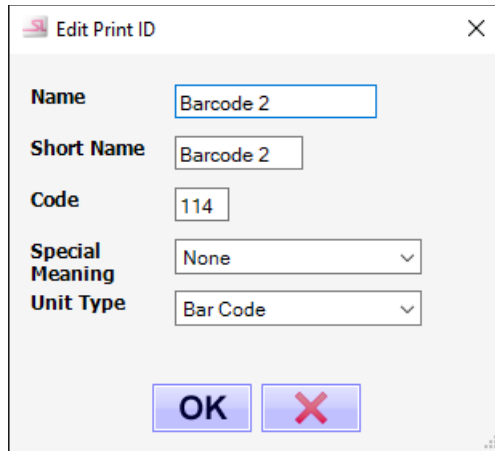
1. Modified the rear wrap plate operation in Label only mode to move forward to help support heavy trays and prevent them from tipping. This is part of Wrap App. C2006S.
2. Added an alternate method to enter and print a Lot Number using the Trace function key.
 - a. The Trace function key (key type 79) must be configured as a split key with areas for a title (upper) and data (lower).
 - b. Up to a six-digit Lot Number may be entered.
 - c. The Lot Number is cleared for the current PLU when the next PLU is called.
 - d. The PLU must be enabled for traceability, otherwise the Trace key is not available and shaded out. At the WM-Ai the setting is in the PLU on the Scheme tab > Trace Enable. In SLP-5 the field is Trace Flag.
 - e. If the split Trace function key is pressed without entering a number first, the standard Traceability edit/save screen is not displayed.
 - f. If the Trace function key is not split (title only), the standard Traceability edit screen is displayed when the key is pressed.
 - g. Label format Print ID 134: BSP LOT (308 in SLP-5) is used to print the Lot Number. The field is changed from Numeric to Variable Text for this version of Lot Number.



3. Added a feature to switch between UPC and GS1 barcode formats based on the total price. When the total price is 4-digits or less the standard UPC barcode format prints. For a 5-digit or 6-digit total price the GS1 barcode prints.
 - a. Added Print ID BARCODE2 72 (114 in SLP-5)
 - b. If the price exceeds 4-digits, Barcode2 will not print if it is not included in the label format.
 - c. When the total price is 7-digit or more neither barcode is printed.
 - d. BARCODE2 prints a custom barcode but operates separately from the standard Custom Barcode (Print ID 71 [113 in SLP-5])

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale



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

- Name: Barcode 2
- Short Name: Barcode 2
- Code: 114
- Special Meaning: None
- Unit Type: Bar Code

Buttons: OK, Cancel

Version C2150L

Release Date: May 24, 2018

This version was not released for the USA as there were no relevant changes.

Version C2150K

Release Date: May 1, 2018

This version was not released for the USA as there were no relevant changes.

Version C2150J

Release Date: March 20, 2018

Use with SLP-5 **2.20f** or later (**strongly recommended** for compatibility)

Note: Campaign support for 16:U/P and 17:PRICE is available from SLP-5 2.40c.

Related programs

Main: C2151J
Scale Driver: J0834 (J0835)
OS: J0829E
BIOS: J0825
FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Wrap App.: C2006R (J0860A)
Camera App.: J0884D (J0846)

Printer App:

WM-Ai: J0909F (J0827)

IP-Ai: J0911A (J0827)

Pop Printer App.: J0949C (J0926) [J0935A] {WM-Ai-P only}

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

NOTE:

- a) After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.



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 wrapper before upgrading from firmware **C2150G** 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). [8.5.0.3]

The following lists the main changes from the previous version (C2150H)

1. Fixed a bug where a tray could be weighed and labelled even if it was outside the upper/lower weight check range. This could occur if the stable weight was received at the exact time the previous tray was being discharged.

Version C2150H

Release Date: November 13, 2017

Use with SLP-5 **2.20f** or later (strongly recommended for compatibility)

Note: Campaign support for 16:U/P and 17:PRICE is available from SLP-5 2.40c.

Related programs

Main:	C2151H
Scale Driver:	J0834 (J0835)
OS:	J0829E
BIOS:	J0825
FPGA App.:	J0910B (J0824)
Keyboard:	J0823B
Scale:	J0776G or later
Wrap App.:	C2006R (J0860A)
Camera App.:	J0884D (J0846)
Printer App:	
WM-Ai:	J0909F (J0827)
IP-Ai:	J0911A (J0827)
Pop Printer App.:	J0949C (J0926) [J0935A] {WM-Ai-P only}

NOTE:

- a) After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and 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 wrapper before upgrading from firmware **C2150G** 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).
[8.5.0.3]

The following lists the main changes from the previous version (C2150G)

1. Eliminated case sensitive searches. This is only available when the configuration is set to search "ALL" text. [Setup menu > Operation Settings > Call1 tab > Find PLU = ALL]
2. Added support for standard prices in Campaign. Selections 16: U/P and 17: Price are added for Weighed and Fixed Price items respectively.
 - a. These selections can be used to increase or decrease the price.
 - b. The pre-markdown price fields do not print on the label with these selections.**Note:** From SLP-5 2.40c standard prices 16: U/P and 17: Price are supported.
3. Added the ability to change the Store Name and Address in operation mode by Shop No. preset function key.
 - a. Preset key 258: Shop No. is added.
 - b. Error 0219-0000 "Store Master Is Not Programmed" is displayed if the entered store number is not programmed.
 - c. If the Shop No. preset is pressed without a numeric entry a list of store names is displayed.
 - d. The selected store is set as the default and saved even after the machine is powered down.
 - e. Error 0341-0000 "Product Is Remaining On The Lift" occurs if the Shop No. preset is pressed while a tray is being wrapped.
4. Eliminated the need to enter a 6-digit password to access the menus or disable the Keylock.
 - a. In the Setup menu the Password and Keylock passwords are displayed as ***** regardless of the number of digits.
 - b. To eliminate a Password or Keylock password a single "0" may be entered.
5. Added a Movie preset function key to display videos. [Preset key 423: Movie.]
 - a. If added manually set the movie file name as "IMGSV****" where "****" is a unique number between 001 and 999.
 - b. When programming the Movie preset key enter the number in the Data field.
6. Removed the Film Tension adjustment from the Dial function key. [Preset key 267: Dial].
7. Improved the wording on various message screens.
8. Corrected the portion of the wrapper image that was highlighted during film loading [message 0597-0000].
9. Fixed a bug where foreign (2-byte) characters sent in the Nutrition data caused corrupted data.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

Version C2150G

Release Date: October 19, 2017

Use with SLP-5 **2.20f** or later ([strongly recommended](#) for compatibility)

Related programs

Main: C2151G
Scale Driver: J0834 (J0835)
OS: J0829E
BIOS: J0825
FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Wrap App.: **C2006R** (J0860A)
Camera App.: **J0884D** (J0846)

Printer App:

WM-Ai: **J0909F** (J0827)

IP-Ai: J0911A (J0827)

Pop Printer App.: J0949C (J0926) [J0935A] {WM-Ai-P only}

NOTES:

- a) After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- b) If upgrading from C2150F or earlier be sure to upgrade the WM-Ai Wrapper App to C2006R, the Camera App to J0884D, and the Printer App to J0909F.



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 wrapper before upgrading from firmware **C2150F** 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).
[8.5.0.2]

The following lists the main changes from the previous version (C2150F)

1. Updated the Wrapper App to version C2006R including multiple incremental changes.

C2006N

- Changed the film roll brake timing: a setting of 0 (zero) is equivalent to the previous setting of -5.
- Modified the allowed film roll brake setting range from -8 ~ +16 to -12 ~ +16.

NOTE: Readjustment of the film roll brake stop position and film centering / length is required after firmware update.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- Added running the film feed belts for 0.5 second after a film load to ensure the green belts are returned to the correct position.
- Reduced the film roll rotation speed for the first two film feeds after installing a new roll to more accurately measure the roll diameter.
- Modified the film roll brake logic to reduce the braking as the roll diameter decreases to maintain a relatively constant peeling position.
- Added 41: Film Belt to Adjust menu > Unit Action. This function is provided to check and adjust the alignment pulleys that center the green Film Feeder belts.

C2006P

- Fixed a bug where the insertion plate moved forward when not in the correct horizontal position and made contact with the Cutter Guard. This could cause the Cutter home position sensor flag to be bent.

C2006R

- Added error 0421-3*** Infeed Pusher Bar Motor Is Abnormal where 3*** indicates excessive resistance at startup. This is to prevent premature wearing of the Centering Conveyor shaft and sprockets.

CAUTION: Align or replace the Centering Conveyor shaft and sprockets as needed.

- Improved control of the Lift change solenoid.
2. Fixed a bug in the communication protocol where 7-digit and 8-digit Extra Messages 1-3 were not received correctly.
 3. Fixed a bug where the Screen Capture feature did not work.
 4. Fixed a bug where error 0448-0001 "Do Not Put Your Hand Into The Machine" occurred when wrapping large trays at high speed.
 5. Fixed a bug where large trays wrapped at low speed with a pop label would stop infeeding and wrapping.
 6. Fixed a bug where wrapping and labeling would stop with a No Response From Scale error when using a 101.5mm label.
 7. Fixed a bug where the wrapper would lock up if the model was set as AT type (two printers) when the wrapper was an AS type (single printer). If the second main printer is not connected it will be ignored.
 8. Updated firmware loading to check for compatibility. Error 0116 Wrong Software Was Installed occurs when attempting to download firmware between the Ishida WM-Ai and MT880.

Version C2150F

Release Date: September 26, 2017

Use with SLP-5 **2.20f** or later (strongly recommended for compatibility)

Related programs

Main:	C2151F
Scale Driver:	J0834 (J0835)
OS:	J0829E
BIOS:	J0825

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Wrap App.: C2006L (J0860A)
Camera App.: J0884C (J0846)
Printer App:
 WM-Ai: J0909E (J0827)
 IP-Ai: J0911A (J0827)
Pop Printer App.: J0949C (J0926) [J0935A] {WM-Ai-P only}

NOTE:

- a) After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.



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 wrapper before upgrading from firmware **C2150** 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). [\[8.5.0.1\]](#)

The following lists the main changes from the previous version (C2150E)

1. Fixed a bug where a temporary Pack Date change made when a PLU was set for Rewrap mode did not revert to the clock's internal date after calling the next item.

Version C2150E

Release Date: February 16, 2017

Use with SLP-5 **2.20f** or later ([strongly recommended](#) for compatibility)

Related programs

Main: C2151E
Scale Driver: J0834 (J0835)
OS: J0829E
BIOS: J0825
FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Wrap App.: **C2006L** (J0860A)
Camera App.: J0884C (J0846)
Printer App:
 WM-Ai: J0909E (J0827)
 IP-Ai: J0911A (J0827)
Pop Printer App.: J0949C (J0926) [J0935A] {WM-Ai-P only}

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

NOTES:

- a) After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- b) If upgrading from C2150D or earlier be sure to upgrade the Wrapper App to C2006L.



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 wrapper before upgrading from firmware **C2150** 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). [\[8.5.0.1\]](#)

The following lists the main changes from the previous version (C2150D)

1. Modified communication download to ignore the following PLU settings sent from the PC and maintain the current settings.

PRINT tab:

- a. 1st Label Attach Type
- b. 1st Label Bar Print
- c. Print Mode
- d. 1st Label Print

WRAP tab:

- a. Tray No.
- b. Wrap Mode
- c. Volume
- d. Paste Mode
- e. Direction
- f. Tray Vol. Detect.
- g. Feed Speed
- h. Wrap Speed
- i. Tray Auto Detect.
- j. Tray Centering
- k. Tray Outfeed Stop
- l. Tray Hold

2. Fixed a bug where the Tare Adjust setting was named incorrectly (Setup menu > Machine No. > PC Com).

3. Added support for GS1 to Custom Barcode and Label Format (Setup menu).

Note: When the barcode is less than 14 digits, "(01)" is automatically added in front of the OCR numbers.

- a. Enabled printing of custom barcode with GS1 Expanded format.
- b. Added **3E: GS1 Expanded** to the Unit Type list in Label Format. Print ID is 71 (113 in SLP-5): Custom Barcode.
- c. Setting details for GS1 MAX SEGMENTS:

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- i. Valid values are 0 (default), 2, 4, 6, and 8. Any higher value is treated as 8 due to print head width limitation.
- ii. Examples:

- Barcode data: (01) 00000000000000 (3203) 0012340

Segment	Barcode printing
8	1 layer
6	2 layers
4	2 layers

- Barcode data (01) 00000000000000 (3922) 012345(15) 130906

Segment	Barcode printing
8	2 layers
6	2 layers
4	3 layers

- iii. The maximum number of layers has been increased from two (2) to eleven (11) for GS1 EXPANDED STACKED. If the number of layers exceeds eleven (11) the OCR will print but the barcode will be blank.

Segment	OCR Max. Digits
8	40
6	30
4	18 *
2	10

* When the number of segments is four (4) the OCR Max. Digit is 18 rather than 20 for legibility.

- iv. The barcode length (height) includes the barcode and OCR.
 - v. The barcode will adjust automatically based on the barcode unit length.
 - vi. When the barcode exceeds the maximum lines, it will not print but the OCR numbers will print.
 - vii. A setting for "OCR Yes/No" is available in the GS1 Expanded field parameters in the label format.
- d. Limitations.
- i. When the barcode length setting in the label format is smaller than the minimum print height for the barcode and OCR, the OCR printing will overlap the barcode.
 - ii. When the barcode length setting in the label format is smaller than the minimum print height the barcode will print at the minimum height.
- e. The weight value will print correctly in a custom barcode in the lower weight range (0.005 Lb increments). In the upper weight range (0.01 Lb increments), however, the weight will print as "0" (zero).
4. Added label format Print ID 283 (643 in SLP-5): GTIN (CUSTOM) to support a 12-digit OCR. The OCR prints independent of the barcode in the following data format: FCCCCPPPPc/d, where:
- F: flag code (1 digit)
 C: POS code (5 digits)
 P: price (5 digits)
 c/d: check digit (1 digit)

Notes: a. In the label format, change the Unit Type from "020: Text Variable" to "001: Standard Numeric" to print the OCR field.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- b. Change the OCR Style setting to "UPC 12" (Setup menu > Barcode > POS Code tab).
- c. The contents of the OCR format are fixed.

Version C2150D

Release Date: January 15, 2017

Use with SLP-5 **2.20f** or later (strongly recommended for compatibility)

Related programs

Main: C2151D
Scale Driver: J0834 (J0835)
OS: J0829E
BIOS: J0825
FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Wrap App.: C2006K (J0860A)
Camera App.: J0884C (J0846)
Printer App:
 WM-Ai: **J0909E** (J0827)
 IP-Ai: J0911A (J0827)
Pop Printer App.: J0949C (J0926) [J0935A] {WM-Ai-P only}

NOTES:

- a) After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- b) If upgrading from C2150C or earlier be sure to upgrade the WM-Ai Printer App to J0909E.



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 wrapper before upgrading from firmware **C2150** 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). **[8.5.0.1]**

The following lists the main changes from the previous version (C2150C)

1. Modified the on-line status check to use a basic Ping. The machine is judged to be on-line when a reply to the Ping is received. Previously the on-line check expected a reply from host software.

Notes: a. The on-line status is automatically checked based on the Com Check Time Out setting (Setup menu > Machine No. > PC Com tab). The

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- interval range is 30-999 seconds. If changed, the machine must be rebooted to be recognized.
- b. A manual ping check at the wrapper or from a PC will not change the status indicator.
 - c. The status indicator is green when connected and orange when not connected.
 - d. If the Com Check Time Out interval is set to "0" the status indicator will remain green.

Version C2150C

Release Date: December 21, 2016

Use with SLP-5 **2.20f** or later (strongly recommended for compatibility)

Related programs

Main: C2151C
Scale Driver: J0834 (J0835)
OS: J0829E
BIOS: J0825
FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Wrap App.: C2006K (J0860A)
Camera App.: J0884C (J0846)
Printer App:
 WM-Ai: J0909D (J0827)
 IP-Ai: J0911A (J0827)
Pop Printer App.: **J0949C** (J0926) [J0935A] {WM-Ai-P only}

NOTES:

- a) After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- b) If upgrading from C2150B or earlier be sure to upgrade the Pop Printer App to J0949C.



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 wrapper before upgrading from firmware **C2150** 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). **[8.5.0.1]**

The following lists the main changes from the previous version (C2150B)

C2542x MAIN FIRMWARE RELEASE NOTES
WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

1. Added a preset key to display the date and time of the last PLU file and/or Ingredient file update received by the scale. Preset key ID is 505: MASTER RECEIVE TIME.
Notes:
 - a. The date and time status is updated only when the PLU file or Ingredient (Extra Message 2) file is received.
 - b. The date and time indicate the end of the transmission.
 - c. The date and time will be updated even when only partial data is successfully received.
 - d. Until the first file download is received the preset key displays "No Receive".
 - e. The date and time format is the same as the current date and time displayed in the upper right of the main display.
2. Added a setting to display a calendar when making a temporary date change. The calendar is called by pressing Pack Date or Sell By Date preset keys. The new Calendar Input setting is in the Setup menu > Operation Setting > Input tab.
Notes:
 - a. Default setting is No.
 - b. The Pack Date and Sell By Date are set separately.
 - c. Press the OK button to accept the change or the Return Arrow to quit.
 - d. Use the "<" (previous) and ">" (next) buttons to change the month.
 - e. The calendar range is limited to one year from the current date.
 - f. A future Pack Date cannot be selected.
3. Modified the Meat Cut Test data entry screen to prevent entering a value in for Product Cost. The field is grayed out and the default is fixed at \$1.00.
4. Fixed a bug where the wrapper operates incorrectly when a Film Over error occurs.
5. Fixed a bug where a "Set Scale Plate" message was displayed with any error message if the tare weight was more than 0.300 lb.
6. Fixed a bug where the firmware could not be updated in the A100 I/O board when it was replaced. An incorrect response will be ignored at power up to allow firmware to be downloaded to the A100 board.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

Version C2150B

Release Date: November 7, 2016

Use with SLP-5 **2.20f** or later ([strongly recommended](#) for compatibility)

Related programs

Main:	C2151B
Scale Driver:	J0834 (J0835)
OS:	J0829E
BIOS:	J0825
FPGA App.:	J0910B (J0824)
Keyboard:	J0823B
Scale:	J0776G or later
Wrap App.:	C2006K (J0860A)
Camera App.:	J0884C (J0846)
Printer App:	
WM-Ai:	J0909D (J0827)
IP-Ai:	J0911A (J0827)
Pop Printer App.:	J0949B (J0926) [J0935A] {WM-Ai-P only}

NOTES:

- After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.
- If upgrading from C2150 or earlier be sure to upgrade the Wrapper App to C2006K, the Pop Printer App to J0949B, and the Pop Printer FPGA App to J0935A.



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 wrapper before upgrading from firmware **C2150** 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). [\[8.5.0.1\]](#)

The following lists the main changes from the previous version (C2150)

- Added a Tare Adjust setting to determine if the tare weight sent as dual-range is to be converted to single-range. The default setting is No. (Setup menu > Machine No. > PC Com tab).
- Modified communications to stop checking if the Tare Weight value received in the PLU file is valid.
- Modified the Fixed Weight in ounces programmed in a Fixed Price item to convert to decimal pounds and print in the standard weight field. The original "Weight Lb Oz" fixed weight Print ID 10C (268 in SLP-5) is still available and, if assigned to a label format, will simultaneously print the fixed weight in ounces.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

4. Fixed a bug where the fixed weight amount entered for a Case Weight (Fixed UPR) item was not accumulated in the totals.
 5. Modified the LEFT(-) / RIGHT(+) ADJ. values for the Pop Label Applicator Paste Position Adjust from $\pm 8\text{mm}$ to $\pm 12\text{mm}$. The increased values are due to the additional length of the Pop Applicator shaft compared to the main Applicator. The main Applicator adjustment values remain at $\pm 8\text{mm}$.
 6. Fixed a bug where the rotation selected on the Label Applicator Pos. tab was not carried to the Label Applicator Action tab. Previously, the rotation on the Label Applicator Action tab always started at 0 Deg.
 7. Fixed a bug where the Applicator would stop mid-cycle for the last tray when the "Target Completed" message was displayed in target mode.
 8. Changed the background color when editing reverse text to prevent white characters from matching the background and being "invisible".
 9. Updated the Wrapper App C2006K with the following changes.
 - Fixed a bug where error 0402-0000 No Response From Wrapper occurred with model WM-Ai-P for a very specific set of circumstances:
 - Film Width: 250mm
 - Film Material: PVC3
 - Tray Size: approximately 200mm x 120mm x 30mm
 - Wrapping Speed: Middle
 - Outfeed Speed: High
 - Modified the discharge pusher travel distance to push large trays out farther.
 - Changed the threshold for automatic selection of Large Lift from tray width (front to back) more than 165mm to more than 170mm to reduce film tearing. A similar change was made for torque wrapping mode from more than 170mm to 180mm.
 10. Added automatic backup and restore of settings stored in the wrapper and applicator control boards. When a board is replaced, saved backup settings will download to the new board automatically.
 - Automatic settings backup occurs in the following cases.
 1. After the initial installation of main firmware C2150B or later is complete and the wrapper is rebooted.
 2. Any time a change is made to the wrapper and applicator settings that are saved in the backup.
 - Automatic settings restore occurs in the following cases.
 1. After a wrapper or applicator board is replaced and the firmware sub app is installed.
 - a. After installing a sub app message 15064-0001 Execute Data Restore is displayed.
 - b. Restore executes automatically after memory is initialized on the replacement wrapper or applicator board.
 - c. Rebooting the WM-Ai is not necessary after the restore is complete.
- 15064-0001 EXECUTE DATA RESTORE
FOLLOWING PROCESSES ARE COMPLETED.
1. DOWNLOAD: APPLICATOR APP AND WRAPPER APP TO A NEW CIRCUIT BOARD.
 2. INITIALIZE: MEMORIES OF A NEW CIRCUIT BOARD.

3. DATA RESTORE: BACKUP DATA TO WRAPPER AND APPLICATOR.
[OK]
2. When the Restore button is pressed at the Init. Tab.
 - a. Backed up settings will be restored when the Restore button is pressed followed by the Exec button.
 - b. Message 15064-0000 Check Data Restore is displayed.
15064-0000 CHECK DATA RESTORE
IS IT OK TO RESTORE DATA OF WRAPPER AND APPLICATOR FROM BACKUP DATA?
[EXEC] [STOP]
 - c. When the wrapper or applicator is initialized, the following message appears. These can be selected whether initializing backup data or not.
Wrapper Initialization
15024-0001 CHECK INITIALIZATION
IS IT OK TO INITIALIZE DATA OF WRAPPER?
IT ALSO CLEARS BACKUP DATA.
[EXEC] [STOP]
Applicator Initialization
15027-0001 CHECK INITIALIZATION
IS IT OK TO INITIALIZE DATA OF APPLICATOR?
IT ALSO CLEARS BACKUP DATA.
[EXEC] [STOP]
- The following wrapper and applicator settings are automatically backed up and available for restore.
 1. Machine Details
 - a. Adjust > Machine Type > Detail
 - Variation
 - Centering
 - Change Film
 - Non-Film Error
 - Ejection Dir.
 - Film Set Pos. Sel.
 - Printer 1 Pos. Sel.
 2. Wrapping Settings
 - a. Adjust > Wrapping (Film)
 - Upper Film Width
 - Lower Film Width
 - b. Adjust > Wrapping (Lift)
 - Original Lift Pos.
 - c. Adjust > Wrapping (Roll)
 - Upper Roll Stop Pos.
 - Lower Roll Stop Pos.

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- Upper Roll Pos.
 - Lower Roll Pos.
 - Plate Return Delay
 - Lower Roll Load Pos.
3. Applicator Settings
- a. Adjust > Label Applicator (Pos.)
 - Paste Pos.
 - X
 - Y
 - Z
 - b. Adsorb Pos. Adj.
 - Left(-)/Right(+) Adj.
 - Front(-)/Back(+) Adj.
 - Left(-)/Right(+) Adj.
 - Upper(-)/Lower(+) Adj.
 - c. Paste Pos. Adj.
 - Left(-)/Right(+) Adj.
 - Front(-)/Back(+) Adj.
 - Left(-)/Right(+) Adj.
 - d. Printer settings for the following angles.
 - Printer 1: 0° and -90°
 - POP Printer: 0°, 90°, 180°, and -90°
 - e. Adjust > Label Applicator (Init.)
 - Fan Off Time
 - Volume
 - Paste Ctrl.
 - Paste H Adj.
 - Label Wait Stand

Version C2150A

C2150A was not released.

Version C2150

Release Date: April 15, 2016

Use with SLP-5 **2.20f** or later (strongly recommended for compatibility)

Related programs

Main: C2151
Scale Driver: J0834 (J0835)
OS: J0829E

C2542x MAIN FIRMWARE RELEASE NOTES

WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

BIOS: J0825
FPGA App.: J0910B (J0824)
Keyboard: J0823B
Scale: J0776G or later
Wrap App.: C2175 (J0860A)
Camera App.: J0884C (J0846)
Printer App:
 WM-Ai: J0909D (J0827)
 IP-Ai: J0911A (J0827)
Pop Printer App.: C2162 (J0926) [J0935] {WM-Ai-P only}

NOTES:

- a) C2150 supports only the WM-Ai-P. It does not support the standard WM-Ai or the IP-Ai pre-pack scale.
- b) After downloading the Main App program download the Printer (EC), Wrapper (Pack Machine), Pop Printer, Camera, and FPGA sub-app and sub-boot programs one at a time as needed. Power the wrapper off after each sub app download.



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 wrapper before upgrading from previous firmware. 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). [\[8.4.0.1\]](#)

The following lists the main changes from the previous version (B0752P)

1. This is the initial release to support the Pop Label printer and applicator.
Note: Some label application positions are not available due to the possibility the main and pop label applicators may contact each other (error 0623).
2. Added firmware download for the Pop Label printer when Pop Printer Connect is set as Yes (Adjust menu > Machine Type > Auto Single).
 - a. Pop Printer App (Sub App tab)
 - b. Pop Printer FPGA (Sub Boot tab)
3. Modified or added firmware sub apps to support the Pop Label printer (Adjust menu > Download):
 - a. Wrapper: C2175 (Sub App tab: "Pack Machine")
 - b. Pop Printer: C2162 (Sub App tab)
 - c. Pop Printer FPGA: J0935 (Sub Boot tab)
4. Added Pop Label printer and applicator settings to various menus.
 - a. Adjust menu > Printer: Printer = POP
 - b. Adjust menu > Label Applicator: Printer = POP
 - c. Adjust menu > Unit Action > Label App tab:
 - i. 14: Left and Right Move (5)
 - ii. 15: Up and Down Move (5)
 - iii. 16: Axis Direction Move (5)
 - iv. 17: Appl (5) All
 - d. Setup menu > Label Format: Printer = POP

C2542x MAIN FIRMWARE RELEASE NOTES
WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- e. Setup menu > Label Comb: Label Group = Sub
- f. Program menu > Tray
- g. Operation mode > instructions and images for label loading
5. Added default data for the Pop Label printer and applicator.
 - a. Added format 45 with Logo Image 2 as a default label format.
 - b. Added Pop Label configuration (Setup menu > Label Comb.). Label format 45 is set as the default for the Pop Label printer.
 - c. Added Logo Image 2 function key to the default right side keyboard.
6. Added a new printing parameter to support poor quality thermal Pop labels. Select 150LA-1 in Label Type for Pop Label printer (Adjust menu > Printer > Label Type tab)
7. Changed the display and printing of SubTotal (Run Total) data in operation mode.
 - a. Display the SubTotal function key even when there are no data.
 - b. Allow printing of a SubTotal label even when there are no data. If there are no data "0" is printed.
 - c. SubTotal data are automatically cleared when a new PLU is called.
 - d. The following fields are printed on the SubTotal label.
 - PLU Description
 - Pack Date, Pack Time, and Sell By Date
 - Pack Date and Pack Time are printed even if disabled in the PLU.
 - SubTotal Quantity, SubTotal Weight, and SubTotal Price
 - Unit Price
 - Print the current unit price when the SubTotal function key is pressed.
 - Weighed and Case Weight items: print the programmed unit price.
 - Fixed Price items: print the calculated unit price.
 - Fixed Price and Weigh items: no not print a unit price.
 - Use the markdown unit price if set.
 - Do not print the calculated unit price if it is less than 0.01 or more than 999.99.
 - The Cal Unit Price and Markdown Unit Price fields are not required on the SubTotal label.
 - Store Name and Address
 - Barcode
 - Print the same barcode format as the standard label.
8. Add a setting to display a pop-up screen to enter the weight when a PLU set as Fix UPR (Case Weight) is called.
 - a. Setup menu > Operation Setting > Prod. tab > Fix UPR Pop Up
 - b. Default = No.
9. Added a Calculated Unit Price for fixed price items.
 - a. The Cal. Unit Price field must be added to a label format.
 - b. Label Format Print ID is: 1A8 (424 in SLP-5) with Unit Type set as Numeric.
 - c. The Calculated Unit Price is determined by dividing the total price by the fixed weight.
 - d. The price does not print if it is less than 0.01 or more than 999.99.
 - e. If a markdown price is set it is used for the calculation.
 - f. The Calculated Unit Price will display and print in the Label Format menu.

C2542x MAIN FIRMWARE RELEASE NOTES
WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale

- g. The Calculated Unit Price is not displayed in operation mode.
- 10. Added the ability to print the 10-digit barcode programmed in the PLU as a separate field. Label Format Print ID is: 1A9 (425 in SLP-5) with Unit Type set as Numeric.
- 11. Modified "M" mark to print when a price or tare weight change is made in operation mode. Even if the original value is re-entered prior to printing the "M" mark will print on the label.
 - a. Label Format Print ID is: 1AA (426 in SLP-5) with Unit Type set as Fixed Text (Title).
 - b. Changes to any of the following will trigger the "M" mark print
 - Sales mode
 - Unit price
 - Fixed price
 - Markdown price
 - Tare weight
- 12. Modified the display during a Meat Cut Test. The title bar across the top of the display is changed to yellow. A CUT TEST END button has been added at the upper right.
- 13. Modified the Meat Cut Test data entry screen to support Product Cost. Entry range is \$1.00 to \$999999.99.
- 14. Modified communication to ignore the Open Price setting when a PLU file download is received. Existing PLUs maintain the current setting. New PLUs use the PLU Initial Data setting (Setup menu).
- 15. Modified the Production Mode to always return to "Today" when a PLU is called. Previously "Rewrap" would remain selected when a new PLU was called.
- 16. Changed the process for sending and receiving PLU Tare values. To support the machine set to single-range weighing while the PLU management software is dual-range the last digit of Tare and Tare2 is modified.
Examples. PC send to machine: Last digit is cut and the value divided by 10.
Tare 0.120 Lb. is converted and saved as 0.12 Lb.
Tare 0.015 Lb. is converted and saved as 0.02 Lb.
PC receive from machine: Zero (0) digit is added.
Tare 0.12 Lb. is converted and received as 0.120 Lb.
Tare 0.02 Lb. is converted and received as 0.020 Lb.
- 17. Removed the option to temporarily disable printing the Weight and/or Price. When the Weight or Price area on the display is touched without entering a numeric value an error beep occurs.
- 18. Modified the temporary Pack Date change to prevent entering a future date.
- 19. Modified the temporary date entry to allow setting Pack Date and Sell By Date in the past. It is not possible to set the Sell By Date earlier than the Pack Date.
- 20. Added support to allow transaction data to be received in to the host PC. Prod. Tran. Send must be set to "No Send" (Setup menu > Machine No. > PC Com tab). If set to "Send" an error will occur.

C2542x MAIN FIRMWARE RELEASE NOTES
WM-Ai & WM-Ai-P Auto Wrappers and IP-Ai Pre-Pack Scale



© Rice Lake Weighing Systems Specifications subject to change without notice.
Rice Lake Weighing Systems is an ISO 9001 registered company.

230 W. Coleman St. • Rice Lake, WI 54868 • USA
U.S. 800-472-6703 • Canada/Mexico 800-321-6703 • International 715-234-9171 • Europe +31 (0)26 472 1319

www.ricelake.com/retail

www.ricelake.mx

www.ricelake.eu

www.ricelake.co.in