

C1991x MAIN FIRMWARE RELEASE NOTES

Uni-7 Series with PK-260A CPU Board

C1991x continues from B0674R as the standard Uni-7 firmware for the PK-260A CPU board.

Procedure to install new Uni-7 firmware. Refer to the *Uni-7 Setup Manual* for complete information.

1. Copy the Uni-7 scale firmware folder "Soft" onto an empty USB memory stick.
 - The folder and files must not be zipped.
 - The "Soft" folder must be the only data on the USB memory stick.
2. With the Uni-7 powered OFF raise the left side access panel.
3. Insert the Memory Stick in to the USB port.
DO NOT REMOVE the USB Memory Stick during the firmware update procedure.
4. Power up the Uni-7, press **ENTER** at the Date/Time confirm screen.
Note: Power up may take several minutes depending on the firmware version.
5. The upper display bar will be red indicating boot up from a USB Memory Stick.
Note: The scale will also be in "European" mode.
6. A warning message "Data Composition Is Different. Please Initialize the Memory" (0114-0000) may be displayed if the current and new firmware versions differ greatly. If this message appears press **OK** and skip to step 8.
7. Press the **MODE** key to enter the Main menu.
8. Enter **495344** and press the **PLU** key to access hidden menu steps.
9. Press the **ADJUST** menu button.
10. Scroll down and select **DOWNLOAD** (page 2/3).
11. At the DOWNLOAD (MAIN) screen press the **MAIN (ALL CLR)** button and press **EXECUTE**.
12. Press **EXEC** to begin clearing the Uni-7 Flash ROM memory.
13. After the flash ROM is cleared, the Uni-7 will return to the DOWNLOAD (MAIN) screen.
14. Press the **USB>MAIN (PRG+IMG)** button.
15. Press the firmware version to be installed. It will be highlighted.
16. Press **EXECUTE**.
17. Screen 15034-0000 "DATABASE VERSION IS DIFFERENT" may be displayed. Press **EXEC** to continue.
18. Press **EXEC** to begin the firmware download.
19. The screen will show the firmware download progress.
Note: The download may take a few minutes to begin and up to 20 minutes to complete.
Data transfer may be confirmed by the flashing light on the USB memory stick.
20. When message 15029-0000 is displayed, the firmware download is complete -- power the scale off.
21. Remove the USB Memory Stick.

Procedure to convert to 2020 Nutrition data format. See C1991L item 1h for detailed step by step instructions.

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PK-260A CPU Board

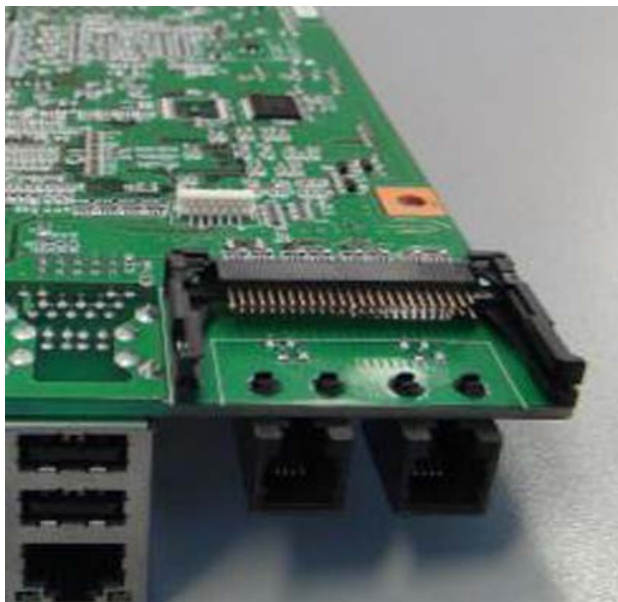
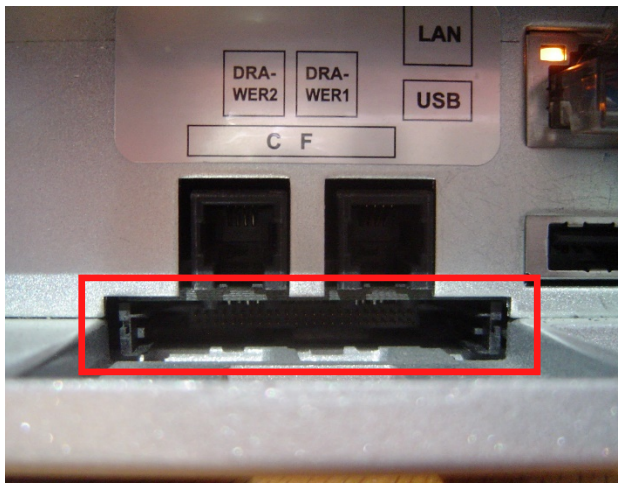
Firmware C1991x is designed for the original CPU board PK-260A. **This firmware is not compatible with the revised CPU board PK-260B.** And new firmware (C2032x) is not compatible with the original PK-260A CPU board.

The two CPU board versions can be easily identified by the expansion memory card slot located on the left side of the Uni-7. See the images on the next page.

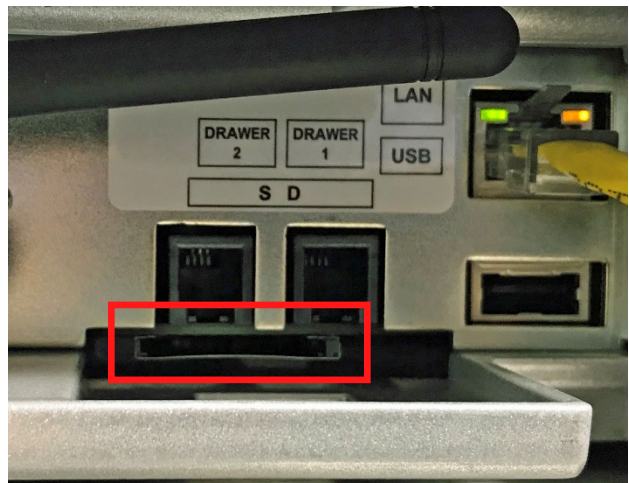
CF Memory Cards

The original PK-260A CPU board supports CF memory card sizes 512MB, 1GB, and 2GB (p/n 91870). The maximum CF card memory that can be recognized is 2GB. A larger capacity CF card may be used but only 2GB will be available.

C1991x PK-260A with CF Memory Card Slot



C2032x PK-260B with SD Memory Card Slot



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Version C1991M features & changes [8 November 2019]

Use with SLP-5 **2.40t** or later

Use with SLP-V **3.05g** or later (2020 Nutrition is not supported)

Related programs

Main: C1992M

OS: C0611F

PRINTER1 FPGA: B0612A

[Firmware Database Structure Version: 2.17.1991.1]



Caution

Memory initialization may be required when upgrading to this firmware version.

Use SLP-5 / Maintenance Utility or SLP-V / i-Support to backup the scale before upgrading from firmware **B0674x or C1991K**. Due to changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear & System Data Init.** (Adjust menu, Memory Clear)

The following lists the main changes from the previous version (C1991L)

1. Fixed a bug where nutrition text entered at the scale may not be saved properly. Text entered that was one character less than the maximum could have random characters appended at the end.

C1991x MAIN FIRMWARE RELEASE NOTES

Uni-7 Series with PK-260A CPU Board

Version C1991L features & changes [25 October 2019]

Use with SLP-5 **2.40t** or later

Use with SLP-V **3.05g** or later (2020 Nutrition is not supported)

Related programs

Main: C1992L

OS: C0611F

PRINTER1 FPGA: B0612A

[Firmware Database Structure Version: 2.17.1991.1]



Caution

Memory initialization is required when upgrading to this firmware version.

Use SLP-5 / Maintenance Utility or SLP-V / i-Support to backup the scale before upgrading from firmware **B0674x** or **C1991K**. Due to changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear & System Data Init.** (Adjust menu, Memory Clear)

The following lists the main changes from the previous version (C1991K)

1. Added support to print the new 2020 Nutrition data.
 - a. Nutrition editing screens (Program menu > Nutrition) are changed to two parts listing the new standard nutrition data fields plus a "free" table that can be used for miscellaneous additional values.
 - Form tab – for standard data fields
 - 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 new 2020 text format. The appropriate unit is automatically added: g, mg, %, etc.
 - d. The following nutrition data from the old format that are no longer required in the new 2020 Nutrition format are saved as follows.
 - Calories 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 C2032J, it is not possible to receive nutrition data in the old numeric format in to SLP-5.
 - f. If SLP-5 is configured for the old nutrition format and nutrition data are requested from a scale with C2032J 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 scale after a firmware update to C2032K. 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 C2032K or later firmware.
 - v. Clear the scale's memory: Adjust menu > Memory Clear.
 - vi. Reconfigure the scale for USA, etc. as needed.

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- vii. Load the full USB backup. The old style nutrition data will fail to load.
 - viii. Send nutrition data from SLP-5 to the scale.
 - ix. Reconfigure SLP-5 for the 2020 Nutrition format
 - x. Receive the converted nutrition data from the scale. See step g. above.
 - xi. Download updated label formats as needed to print the 2020 Nutrition format.
2. Added 2020 Nutrition Print IDs 2C1 to 2C8 and 2E4 to 2ED (705 to 712 and 740 to 749 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.

Version C1991K features & changes [10 October 2019]

Use with SLP-5 **2.30** or later

Use with SLP-V **3.05r** or later

Related programs

Main: C1992K

OS: C0611F

PRINTER1 FPGA: B0612A

[Firmware Database Structure Version: 2.17.1991.0]



Caution

Memory initialization may be required when upgrading to this firmware version.

Use SLP-5 / Maintenance Utility or SLP-V / i-Support to backup the scale before upgrading from firmware **B0674x or C1991G**. Due to changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear & System Data Init.** (Adjust menu, Memory Clear)

The following lists the main changes from the previous version (C1991J)

1. Fixed a bug where the scale would lockup after printing a receipt if the length of Footer 2 was very short.

Version C1991J features & changes [19 July 2019]

Use with SLP-5 **2.30** or later

Use with SLP-V **3.05r** or later

Related programs

Main: C1992J

OS: C0611F

PRINTER1 FPGA: B0612A

[Firmware Database Structure Version: 2.17.1991.0]



Caution

Memory initialization may be required when upgrading to this firmware version.

Use SLP-5 / Maintenance Utility or SLP-V / i-Support to backup the scale before upgrading from firmware **B0674x or C1991G**. Due to changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear & System Data Init.** (Adjust menu, Memory Clear)

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The following lists the main changes from the previous version (C1991H)

1. Fixed a bug where the Uni-7 Bakery model would display an Authentication error during power up. Changed to skip the comms check with A/B board that is not included in the Bakery version.
2. Fixed a bug where the Serial Number printed on the label as zero and did not increment.

Version C1991H features & changes [7 June 2017]

Use with SLP-5 **2.10n** or later

Use with SLP-V **3.05r** or later

Related programs

Main: C1992H

OS: C0611F

PRINTER1 FPGA: B0612A

[Firmware Database Structure Version: 2.17.1991.0]



Caution

Memory initialization is required when upgrading to this firmware version.

Use SLP-5 / Maintenance Utility or SLP-V / i-Support to backup the scale before upgrading from firmware **B0674x or C1991G**. Due to changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear & System Data Init.** (Adjust menu, Memory Clear)

The following lists the main changes from the previous version (C1991G)

1. Modified to display the Firmware Details in Adjust menu without entering the service password. Memory initialization is required to update the list of menu steps displayed without the service password.
2. Fixed a potential problem where the Flash ROM could be corrupted if the scale was powered off while the Sales Mode was being changed.
3. Fixed a bug where change was not calculated correctly in Cash Register mode when no receipt was printed.

Version C1991G features & changes [10 August 2016]

Use with SLP-5 **2.10n** or later

Use with SLP-V **3.05r** or later

Related programs

Main: C1992G

OS: C0611F

PRINTER1 FPGA: B0612A

[Firmware Database Structure Version: 2.17.1991.0]

C1991x MAIN FIRMWARE RELEASE NOTES

Uni-7 Series with PK-260A CPU Board



Caution

Memory initialization may be required when upgrading to this firmware version.

Use SLP-5 / Maintenance Utility or SLP-V / i-Support to backup the scale before upgrading from firmware **B0674x or C1991A**. Due to changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear & System Data Init.** (Adjust menu, Memory Clear)

The following lists the main changes from the previous version (C1991F)

1. Fixed a bug with Markdown Unit Price (-\$/Lb and -%/Lb) when the scale was set for single-range weighing. The weight value was used in place of the reduced unit price.

Version C1991F features & changes [8 April 2016]

Use with SLP-5 **2.10n** or later

Use with SLP-V **3.05r** or later

Related programs

Main: C1992F

OS: **C0611F**

PRINTER1 FPGA: B0612A

[Firmware Database Structure Version: 2.17.1991.0]



Caution

Memory initialization may be required when upgrading to this firmware version.

Use SLP-5 / Maintenance Utility or SLP-V / i-Support to backup the scale before upgrading from firmware **B0674x or C1991A**. Due to changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear & System Data Init.** (Adjust menu, Memory Clear)

The following lists the main changes from the previous version (C1991E)

1. Changed default brightness of the LCD display from 50 to 25 (Adjust menu > Display Check). The brightness range is 15 to 63 but the OS limits display brightness to "25".
Note: A memory clear is required to set the new display brightness default and range.

Version C1991E features & changes [22 January 2016]

Use with SLP-5 **2.10n** or later

Use with SLP-V **3.05r** or later

Related programs

Main: C1992E

OS: C0611E

PRINTER1 FPGA: B0612A

[Firmware Database Structure Version: 2.17.1991.0]



Caution

Memory initialization may be required when upgrading to this firmware version.

Use SLP-5 / Maintenance Utility or SLP-V / i-Support to backup the scale before upgrading from firmware **B0674x or C1991A**. Due to changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear & System Data Init.** (Adjust menu, Memory Clear)

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The following lists the main changes from the previous version (C1991D)

1. Fixed a bug where the markdown did not work correctly for Fixed Price items in a Campaign.

Version C1991D features & changes [8 January 2016]

Use with SLP-5 **2.10n** or later

Use with SLP-V **3.05r** or later

Related programs

Main: C1992D

OS: C0611E

PRINTER1 FPGA: B0612A

[Firmware Database Structure Version: 2.17.1991.0]



Caution

Memory initialization may be required when upgrading to this firmware version.

Use SLP-5 / Maintenance Utility or SLP-V / i-Support to backup the scale before upgrading from firmware **B0674x** or **C1991A**. Due to changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear & System Data Init.** (Adjust menu, Memory Clear)

The following lists the main changes from the previous version (C1991C)

1. Modified operation to change the total price of a Fixed Price item set for markdown for when the quantity is changed. This works for both PLU and Campaign markdowns.
 - a. This was done by allowing the following discount methods to also work with a Fixed Price item.
 - 4: Special Unit Price
 - 5: - \$ U/P
 - 6: - % U/P
 - b. Price change by quantity also works for @/for price calculation. For any partial values the price will round up, the same as with standard prices.

Example:

- PLU = Fixed Price
- Quantity = 1
- Price = \$6.00
- Markdown = -\$2.00
- Total Price = \$4.00

Change to Quantity = 2

- Price = \$12.00
- Markdown = -\$4.00
- Total Price = \$8.00

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Version C1991C features & changes [15 December 2015]

Use with SLP-5 **2.10n** or later

Use with SLP-V **3.05r** or later

Related programs

Main: C1992C

OS: C0611E

PRINTER1 FPGA: B0612A

[Firmware Database Structure Version: 2.17.1991.0]



Caution

Memory initialization may be required when upgrading to this firmware version.

Use SLP-5 / Maintenance Utility or SLP-V / i-Support to backup the scale before upgrading from firmware **B0674x or C1991A**. Due to changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear & System Data Init.** (Adjust menu, Memory Clear)

The following lists the main changes from the previous version (C1991B)

1. Added Serial Number (241) to the list of items available in Custom Barcode (Setup menu).

Version C1991B features & changes [7 June 2015]

Use with SLP-5 **2.10i** or later

Use with SLP-V **3.05r** or later

Related programs

Main: C1992B

OS: C0611E

PRINTER1 FPGA: B0612A

[Firmware Database Structure Version: 2.17.1991.0]



Caution

Memory initialization is required when upgrading to this firmware version.

Use SLP-5 / Maintenance Utility or SLP-V / i-Support to backup the scale before upgrading from firmware **B0674x or C1991A**. Due to changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear & System Data Init.** (Adjust menu, Memory Clear)

The following lists the main changes from the previous version (C1991A)

1. Added a "Markup Ratio" setting to the Frequent Shopper menu (Setup menu). This is applicable for Cost+10% or similar customers.

Notes:

- a. The Total Price markup calculation is: Total Price + (Total Price x 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

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- $2.09 + (2.09 \times 0.1) - 0.0049 = 2.2941$
- 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%.
- 2. 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)
- 3. SLP-V and SLP-5 must be updated to support the two new Print ID fields. The new Print IDs are added as follows:
 - a. Open SLP-V or 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 "Uni-5/Uni-7".
 - h. In the Label Format Data window click the **Print ID Setup** button.
 - i. Click the **Add** (SLP-V), **New** (SLP-5) button
 - j. Enter the following settings for the new Total Price +10% field:
 - i. Name = Total Price +10%
 - ii. Short Name = T.P. +10%
 - 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:
 - i. Name = Unit Price +10%
 - ii. Short Name = U.P. +10%
 - iii. Code = 599
 - iv. Special Meaning = None
 - v. Unit Type = Numeric
 - vi. Click **OK**.
 - l. Click the **Exit** button, click the **Save** button, Click the **Exit** button.
 - m. Close the Setup Utility program.

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Weighed PLU



Fixed Price PLU

Edit Print ID

Name: Total Price +10%

Short Name: T.P. +10%

Code: 598

Special Meaning: None

Unit Type: Numeric

OK Cancel

SLP-V Total Price +10%

Edit Print ID

Name: Unit Price +10%

Short Name: U.P. +10%

Code: 599

Special Meaning: None

Unit Type: Numeric

OK Cancel

SLP-V Unit Price +10%

Version C1991A features & changes [21 May 2015]

Use with SLP-5 **2.10i** or later

Use with SLP-V **3.05r** or later

Related programs

Main: C1992A

OS: C0611E

PRINTER1 FPGA: B0612A

[Firmware Database Structure Version: 2.17.1991.0]

C1991x MAIN FIRMWARE RELEASE NOTES

Uni-7 Series with PK-260A CPU Board



Caution

Memory initialization **is required** when upgrading to this firmware version.

Use SLP-5 / Maintenance Utility or SLP-V / i-Support to backup the scale before upgrading from firmware **B0674x** or **C1991**. Due to changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear & System Data Init.** (Adjust menu, Memory Clear)

The following lists the main changes from the previous version (C1991)

1. Added GS1 Databar format to the custom barcode.
 - a. Added GTIN Print ID 258 (600 in SLP-5). Set "258: GTIN" at the Custom Barcode, and set "GS1 EXPANDED" as the ID for "Custom Barcode". Then set the custom barcode number to print it.
 - b. Variable length FNC is not supported therefore the number of digits for Price, Weight, etc. must be assigned by the AI code.
 - c. Up to 11 levels of GS1 Expanded Stacked may be printed. The OCR printed under the barcode will automatically line feed to print in the proper position based on the length of the OCR. If the number of layers exceeds eleven (11) the OCR will print but the barcode will be blank.
 - d. The following field selections are added to the Custom Barcode:
 - i. C/D unit for GTIN (Check Digit Calculation unit for 13-digit GTIN)
 - ii. GTIN unit (captured from the left)
 - GTIN = 13-digit POS Code + C/D to make 14 digits.
 - 13 digits are from the PLU barcode and the C/D is calculated by Modulus 10 formula which is the standard calculation used for EAN.
2. Added the ability to print up to a 6-digit serial number on standard labels: Setup menu > Operation Setting > Serial tab.
 - a. The following parameters are available.
 - i. Start Number. Default is 1.
 - ii. End number. Default is 999999.
 - iii. Error Roll Back.
 - No – Increment the serial number even if an error occurred (default).
 - Yes – Do not increment the serial number if an error occurred.
 - iv. Daily Auto Reset.
 - No – Hold the serial number even if the scale is powered off (default).
 - Yes – Reset to the Start number once a day after the scale is powered off.
 - 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. If a transaction is deleted by the Void key the serial number does not increment.
 - e. Serial number is added to the following: Custom Barcode, Production Transaction Data, and Subtraction mode.

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Version C1991 features & changes [28 November 2014]

Use with SLP-5 **2.10i** or later
Use with SLP-V **3.05r** or later

Related programs

Main: C1992
OS: C0611E
PRINTER1 FPGA: B0612A

[Firmware Database Structure Version: 2.17.1991.0]



Caution

Memory initialization is required when upgrading to this firmware version.

Use SLP-5 / Maintenance Utility or SLP-V / i-Support to backup the scale before upgrading from firmware **B0674x**. Due to changes in the memory structure, after firmware installation a standard memory clear will be necessary: **Master Data Clear & System Data Init.** (Adjust menu, Memory Clear)

The following lists the main changes from the previous version (B0674R)

1. Firmware C1991x is the continuation of Uni-7 firmware B0674x.
2. Modified the Search function to find upper- and lower-case characters.