

Implementation Document

Zebra MP7 Series Flatbed Scanner (with and without scale)

Target Technology Services

Last updated: December 10, 2020

Implementation Document

Overview

Target is executing Small Format Stores, Full Remodels, and Multi-Location Special Projects across the nation. This will take the unwavering commitment and proactive collaboration of the entire team. Challenges will be encountered, but please utilize this document as a guide to resolve these challenges and achieve success in every implementation.

This document provides a broad range of information around Target Zebra MP7 Series Flatbed Scanner (with and without Scale) installation. If further clarification is needed, please reach out to the appropriate Rollout and Deployment resource from the [Contacts](#) information.

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Purpose

This document describes the following for: Zebra MP7 Series Flatbed Scanner (with and without scale)

- Procurement
- Installation
- Support
- Removal and Disposition

Attachments

Are there any attachments related to this document? N/A

DEVICE OVERVIEW

OWNER

Rick Walstrom

PLATFORM AND DEVICE DESCRIPTION

Platform: POS

Product Category: Scanner

MANUFACTURER

Manufacturer Name: Zebra

Target's Universal Part Number: MP7 Series

Link to Target UPN List: (Not a user field, forthcoming)

VENDOR

Zebra

NETWORK

NA

ADDITIONAL INFORMATION

NA

DEVICE IMAGES

POS Zebra MP7 Flatbed Scanner



Image 1



Image 2



Image 3

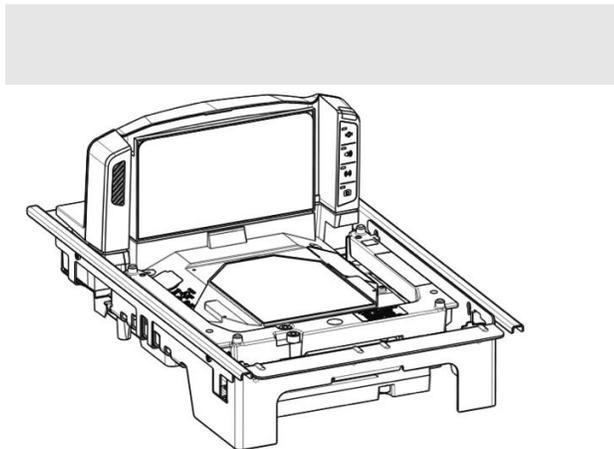


Image 4



Image 5

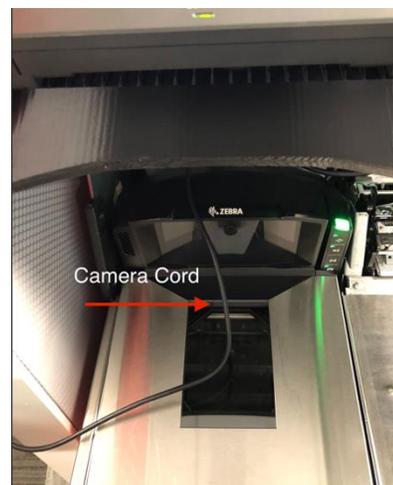


Image 6

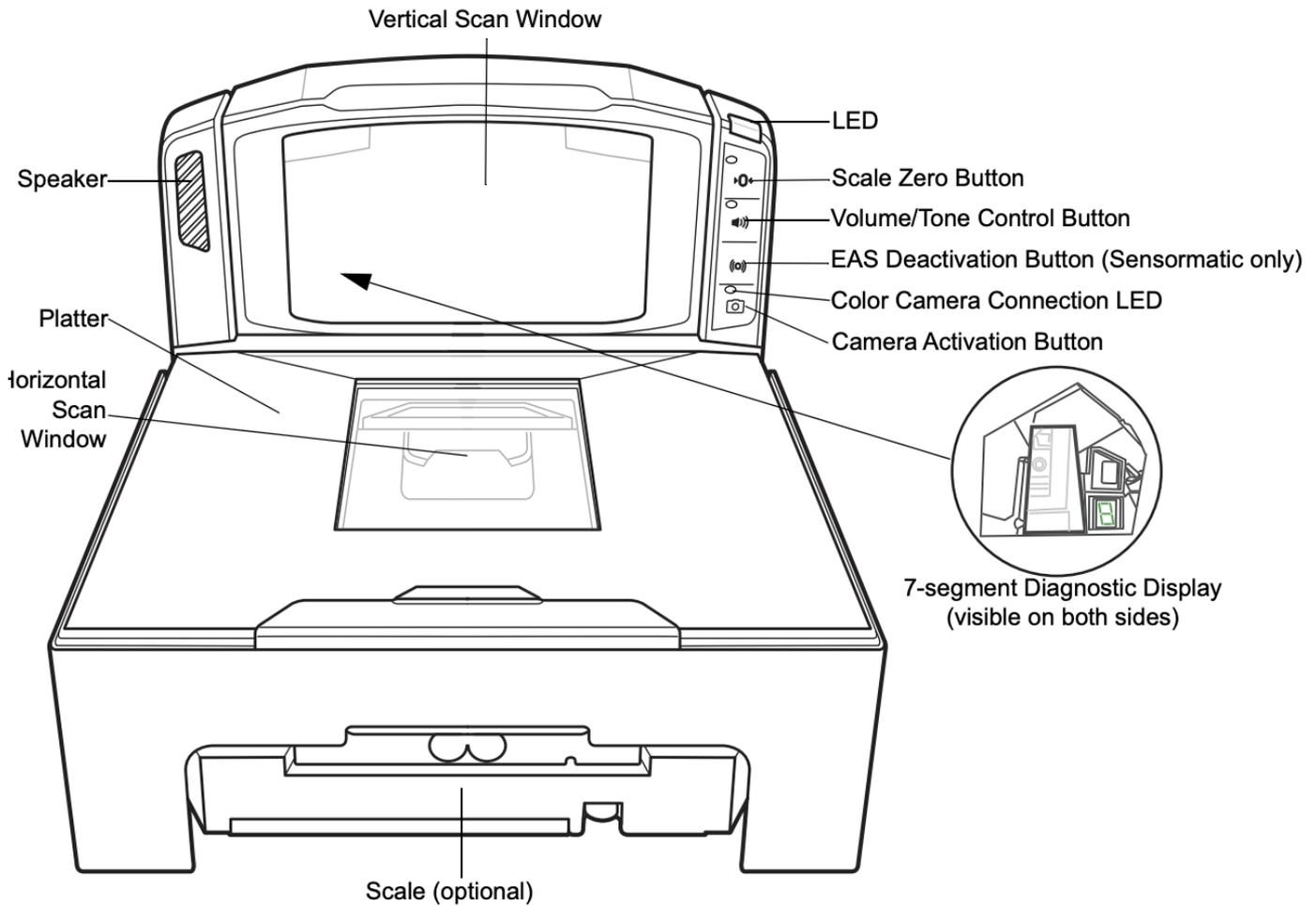


Image 7

Image	Description
Image 1	Scanner retail USB Cable
Image 2	Scanner retail USB Cable with part number
Image 3	Out of box image
Image 4	Retail Scanner without platter
Image 5	Scanner Platter
Image 6	Camera Cable
Image 7	Detailed view of MP7

PRE-INSTALL AND DEPENDENCIES

PRE-CONFIGURATION

Ensure these items are covered PRIOR to arriving at the store.

Tools Required

Keys for self checkout provided by store.

EAS Deactivator

Screw Driver Set

Lift Required?

No

ACCESS

Software Access

N/A

Other Access

Field rep access to POSCentral

PREPARE FOR ARRIVAL

Print the device installation instructions containing barcodes (this is necessary for scanning the required configuration barcodes).

List of Inventory Required for Installation

Target Item #	Item Description
MP7000-LHU-C	MP7000 Scanner Only, w/ Integrated Camera Bundle
MP7001-LHUD-C	MP7000 Scanner / Scale, w/ Integrated Camera, w/ display Bundle
MP7001-LHU-C	MP7000 Scanner / Scale, w/ Integrated Camera, w/o display Bundle
MP7000-LHU	MP7000 Scanner Only, Camera Ready Bundle
MP7001-LHUD	MP7000 Scanner / Scale, Camera Ready Bundle (w/ display)
MP7001-LHU	MP7000 Scanner / Scale, Camera Ready Bundle (w/o display)
MP7000-LHS0M18WW	MP7000 Scanner only , Camera ready
MP7000-LHS0P18WW	MP7000 Scanner only with integrated Camera

MP7001-LHS0M18US	MP7000 Scanner / Scale, Camera ready
MP7001-LHS0P18US	MP7000 Scanner / Scale with integrated Camera
MX201-SI00WW	Scale Display - Single Sided
CBA-U23-S07ZBR	CABLE - SHIELDED USB: POWER PLUS CONNECTOR, 7FT. (2M), STRAIGHT, 12V
CBA-U52-S16PAR	CABLE,MP-6000 USB POWERPLUS 5M CABLE.
MX306-SA00WW	EAS Cable
MXC7000-P	Color Camera upgrade kit
MX308-SA00WW	Filler Plate

DEPENDENCIES

Bundle

NCR SCO installed and power available.

LIST OF POTENTIALLY RELATED DEVICES OR INVENTORY

Item	Included in the box? Enter Yes or No
NCR SCO	No
EAS or Connector installed in SCO fixture	No
Honeywell Hand Scanner (1900/1950)	No

ON-SITE INSTALL PROCESS

Follow the [Pre-Install and Dependencies](#) instructions before starting the installation.

CHECK IN

Do the following upon arrival:

- Check in with and introduce yourself to the store ETL-GE or store lead.
- Confirm the store number.
- Locate the new equipment being installed. Document any missing devices and communicate them to the deployment support vendor.
- Establish a work plan for install with the store lead.
- Explain to the LOD the purpose of your visit and that the LOD will need to close lanes to allow you to complete the install.

INSTALL THE NEW DEVICE

Installation Instructions

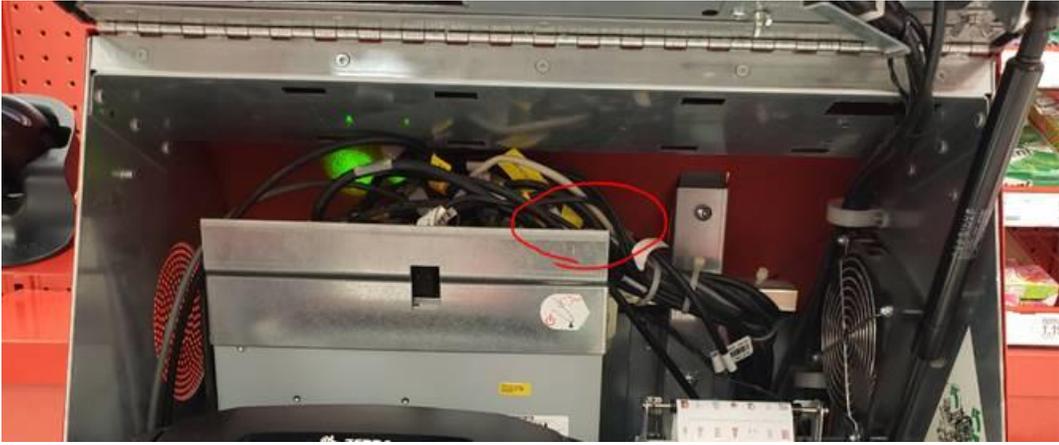
1. Locate new equipment to be installed.
2. Work with the LOD or site contact to establish a work plan for install.
3. Highly Suggested: Start with the busiest lanes first that will be used when the store opens.
4. Note operating status and condition of equipment. Identify any unique situations, configurations, or if EAS devices are missing.
 - a. Communicate unique scenarios to vendor deployment support.
 - b. Report any out-of-service or OBF/DOA POS devices or missing EAS devices to vendor deployment support.

Note:

- After the store opens, work with the site contact to ensure pallets are not on the sales floor and clutter is kept to a minimum. Use a cart, flatbed or tubs instead of pallet jacks.
- Do not cut any old cables during the following steps. If a back out is needed, we must be able to reinstall old devices.
- Please Notify deployment support if you need to go back to the old device.



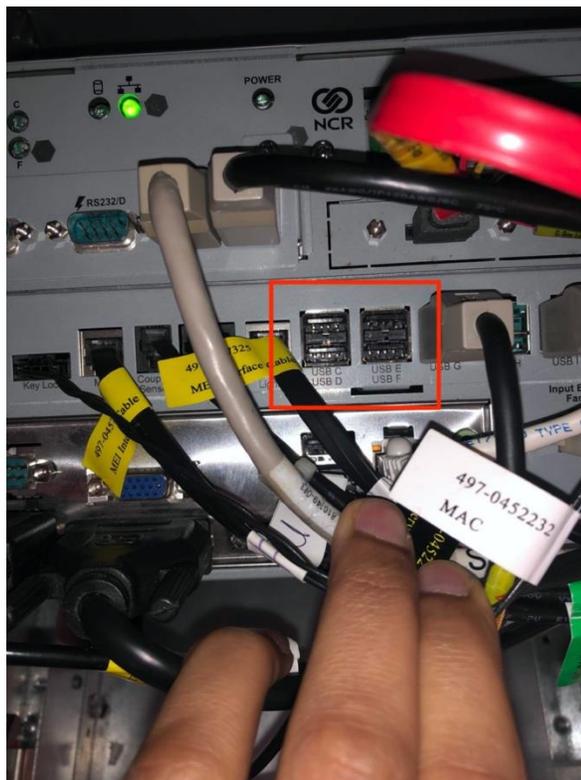
5. Open front cover by pressing on the lock on right side of SCO and lifting cover up, shown above.



6. Turn off SCO by pressing and holding power button for 3 seconds **OR LESS** (If you release too quickly the register will reboot). The power button is located on front right corner of the processor (refer to above images). Register will start to shut down and will display shutdown on display.



7. Remove old flatbed by lifting unit out of well (shown in the image above), set aside, unplug the 3 cables from the back of the flatbed scanner:
 - i. EAS antenna
 - ii. Handheld Scanner
 - iii. Flatbed USB cable from the flatbed sled
8. Tilt the processor tower out toward you.
9. Unplug the old flatbed USB Power Plus cable from processor tower.



10. Plug Honeywell Handheld scanner into any one of the top USB top ports, **labeled C-F located**

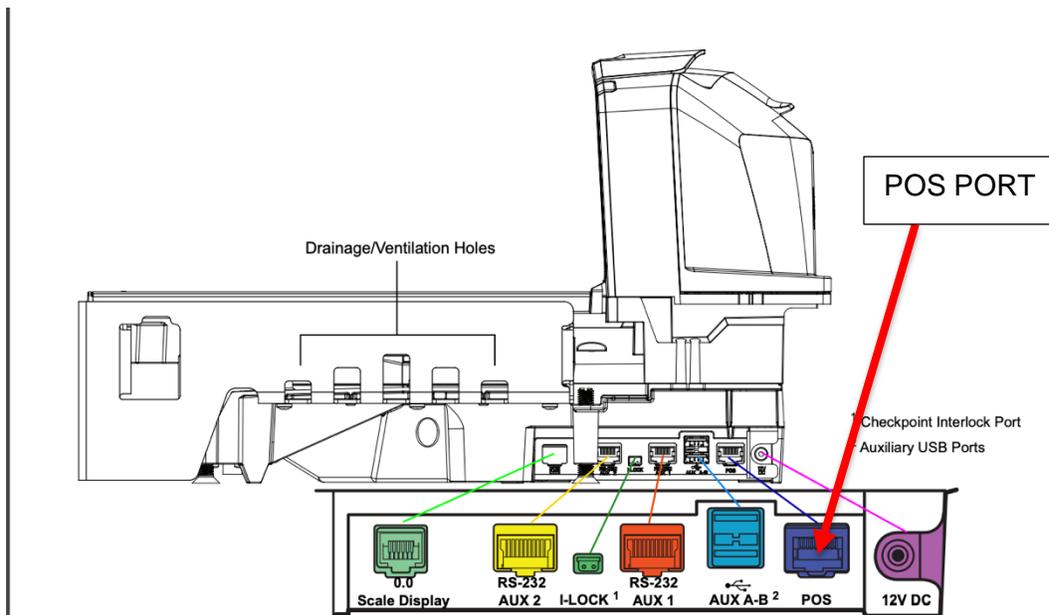
above in red box. If the cable is too short, check for a cable pinch located under the hand scanner stand on the side of the register and adjust as needed.

a. IMPORTANT NOTES:

- i. Make sure Honeywell hand scanner is plugged into the processor tower and **NOT** into the Zebra flatbed scanner.
- ii. Make sure the Honeywell scanner is **NOT** plugged into the motherboard USB ports located next to the ethernet port (i.e. below the RED box in the above picture).

11. Plug Zebra scanner camera single USB into any open **labeled C-F** located **above in red box.**
(this only applies to scanners with camera cable)

12. Plug Retail USB Cable into POS Port on the scanner (refer to image below)



13. Remove the cable that was previously attached, plug Zebra scanner **Retail USB** cable into Port G.



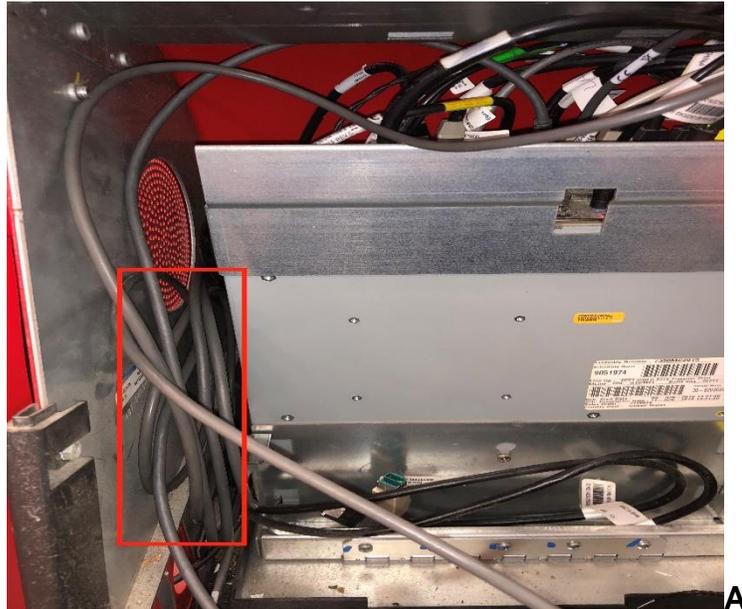
14. Plug in EAS cable. Attach the male cable from the new scanner and female cable from existing register as shown in the image above.
15. Wipe the area behind the bottom half of the monitor clean using cart wipe or equivalent.



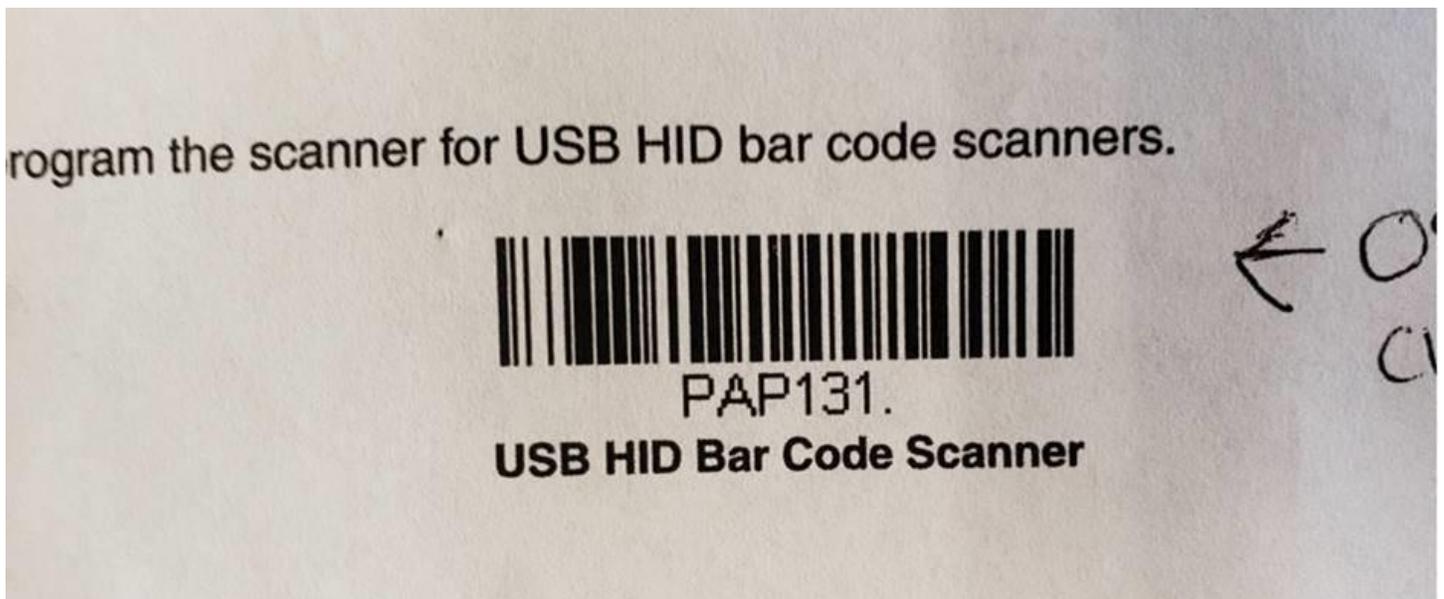


16. Take out the filler plate, make sure it fits, and verify the surface behind the monitor is **dry**. Take off the seal and make sure the sticky side is facing you. Using both hands, attach the sticky side of the filler plate onto the surface behind the monitor and hold for at least 10 seconds.
17. Install the Zebra scanner into cavity. *****DO NOT PLACE ANYTHING ON SCANNER BED*****. Excess Zebra scanner USB cables can be coiled and tucked into the left side of the SCO or coiled and left under the entire Zebra scanner unit. There is enough room for them to lay between the tray and the unit underneath as shown below.





18. Check cables for pinching
19. Cover Zebra Scanner with scanner platter
20. Power on the register by pushing the power button - located on front right corner of the processor. Place a **lane is temporarily closed** sign on the unit while it is rebooting.
21. Close SCO unit cover.
22. Wait about 20 minutes for the register to come up.
23. Use the Honeywell hand scanner to scan the barcode below **2 times**. **The scanner will play a single tone indicating the barcode was successfully scanned.**



24. Reboot the SCO by pressing the power button located on front right corner of the processor.
25. **Contact Deployment support to validate the register is online and ready to test.**
26. Team Member logs into register after boot up.

Zebra Flatbed Scanner-Scale Calibration

Read Instructions Thoroughly Before Starting

- First, if working with a new MP70xx out of the box, you will need to calibrate the scale before starting. 30lb. of calibrated weights will be needed, 25lb. will be used for calibration, and 30lbs will be used for testing. You can also follow the instructions included in the MP7000 integration guide, or follow the simplified steps below. It would help if you exercised the scale from 0.00 to 30.00lb (full capacity) at least 3 times before entering calibration, by placing the entire scale weights box on the platter 3 times.

NOTE: *The unit must be at normal room temperature before calibrating (this takes at least 30 minutes). Also, verify proper installation height in the check-stand and ensure there is no rocking motion when pressing on opposite corners of the scale.*

- To begin calibration, HOLD both the **ZERO** and **VOLUME** buttons simultaneously for over 5 seconds until a beep sounds (if no beep is heard, try again – the buttons must be pressed at the same time), then quickly tap the same 2 buttons again within 2 seconds to confirm calibration mode.



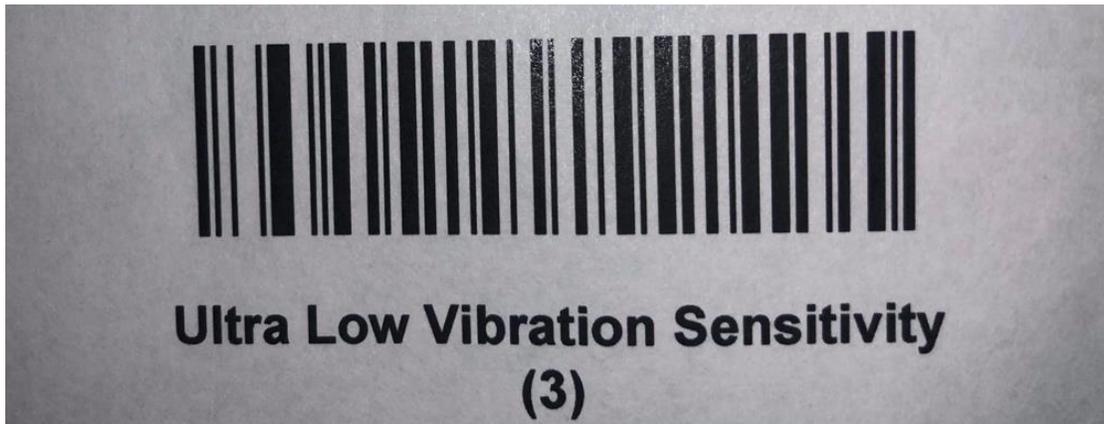
A 5-beep sound sequence will sound if the calibration mode is successfully entered.

NOTE: *You will have to complete each step **within 30 seconds or it will time out**, and be sure to wait for each prompt on the 7-segment display to advance, or you will have to start over.*

- The 7-segment display in the vertical window should be scrolling “**C, 0, 0, Lb.**” at this point.

NOTE: *You can scan any needed scale configuration barcodes at this point.*

- Scan this barcode on the flatbed scanner



- Ensure the platter is installed on the scale properly and that nothing is on it, or touching the scale, then press the top **“ZERO”** button. The scale should respond with a single tone. The 7-segment display should then be displaying **“C, 2, 5, Lb.”**.
- Place 25Lb of weight with calibrated scale weights onto the center of the scale platter, allow it to **settle for a second or two**, then press the **“ZERO”** button. The MP7000 should issue a single tone again and at that point the 7-segment display should show **“C, a, l”**.
- Remove the 25lbs. of weight and then hit the **“ZERO”** button and the scale should respond with 3 quick beeps and reboot the scale. The calibration is complete.
- Test with the POS application once the device is configured and the setup completes. The calibration is complete if your testing validated a successful calibration, if not, repeat the calibration steps.
- Record the current programming cycle count and calibration cycle count to report to Weights and Measures when placing the unit in service. These are visible on the 7 segment display by pressing and holding (continuously holding) the **“ZERO”** button, and those values will cycle through on that display as a **“P#”** (program count) and **“C#”** (calibration count) to represent those values.

POST INSTALL

- Contact Deployment Support after each register is complete to validate the register is online and ready to use.
- Test every new flatbed scanner or scanner/scale after its installation and report the result to vendor deployment support.

Testing New Scanners

Test the different POS elements after each scanner is installed:

- Flatbed scanner OR Flatbed scanner with scale
- Handheld scanner

Flatbed Scanner

After the register boots back up and you have the ok from deployment support to proceed:

- Push Volume button 2 times and verify the volume does **NOT** change
 - If the volume changes, reboot the register.
- Have a team member login by having them enter their credentials.
- Scan an item using the flatbed scanner.
- Verify that the flatbed had an audible beep.
- Verify that the item appeared on the register monitor.
- Scan the 2D barcode below and verify the item appears on screen.



Note: If the flatbed scanner did not beep, or the scanned item did not appear on the register screen, work with deployment support to troubleshoot the scanner.

Honeywell Hand Scanner

Scan an item using the hand scanner and verify the following:

- The hand scanner beeped.
- The item appeared on the register monitor.
- Using Hand scanner, scan the 2D barcode verify the item appears on the screen.



Note: If the scanner did not beep, or the scanned item did not appear on the register screen, work with deployment support to troubleshoot the scanner.

Scanner/Scales (Super Targets only)

Place an item to weigh on the scale and enter the PLU number (ex: weighted banana will be 4011) and check the following:

- Verify weight appears on the register screen.

Note: If the above did not happen, work with deployment support to troubleshoot the scanner.

Void the Transaction

After the above elements are tested, void the entire transaction on the SCO:

1. Have Team Member log into Store mode and void the ENTIRE transaction

Repeat this testing for all installed scanners and complete the checklist on page 3.

EAS Testing Deactivation to Verify Operation Steps

To verify proper functionality at all Deactivator/POS locations:

1. Place the DV-1000 test unit on top of the scanner glass/Deactivator Pad.
29. Press and hold the center button.
 - If the green light illuminates steady and a tone sounds, the deactivation device is working properly and deactivating tags.
 - If red light illuminates, change the battery in DV1000.
 - No light indicates either battery is dead or there is no detection field present.

Note: If you don't have the DV 1000 Deactivation Device Tester, store can order it via GoCart, part # 7651919.



NEW KEEPSAFE D2 RF EAS DEACTIVATOR TESTER:

KEEPSAFE™ D2 RF TESTER

INSTRUCTIONS

TO TEST RF DEACTIVATOR PAD:

1. While positioned above the deactivator pad, press and hold tester button to activate.



2. Lower tester towards deactivator pad until tester visually and audibly alarms. This indicates that the RF deactivator is functioning properly.



3. When the tester is removed from deactivator field, the tester will automatically stop alarming. Release the tester button to make it inactive.



Note: The D2 Tester is capable of testing surface, under, side, or dual plan mounted deactivators.

TO TEST RF ANTENNA/GATE SYSTEM:

1. To test RF Gate, you do not need to hold tester button. Just enter the field with tester and the gate will alarm.



2. If your gate does not alarm when you enter the field, you can test in order to determine if the gate is active by pressing the tester button to activate the device. If a frequency is detected, the tester will visually and audibly alarm in the same manner as it does with a deactivator.



Back Out Process

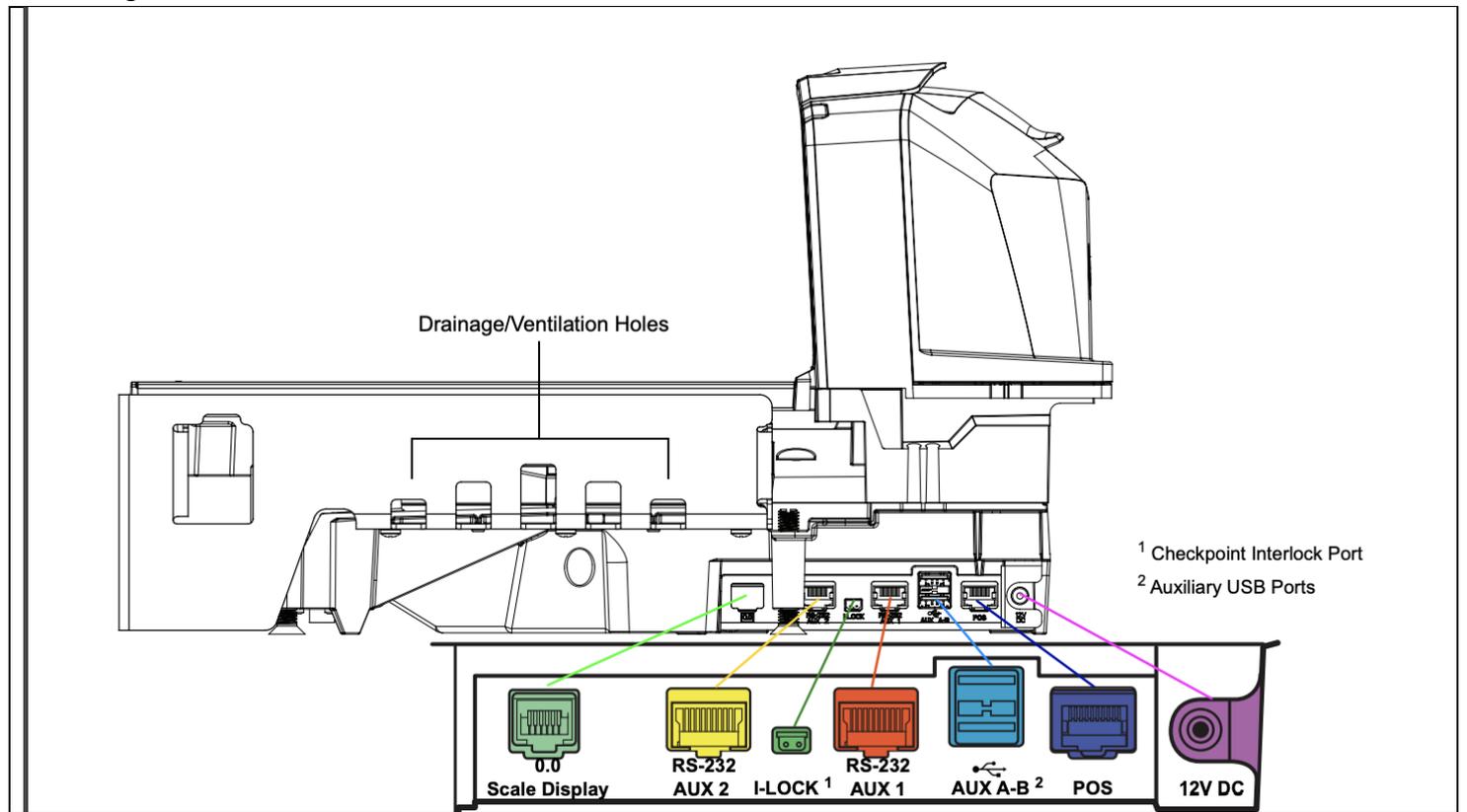
If any of the new scanners are not working, re-install the old scanner (with the same scanner number in its correct location with original cables). Verify the installation was successful prior to leaving the store by scanning a barcode. When they are restored, Target will sign-off that they are functional prior to you leaving the store.

Pack Up and Palletize, and place on CRC pallet, Old Equipment:

- Using packing material from new equipment, modify the packing material to fit the old equipment and box up.
- Palletize equipment. Include Pallet Sign on all four sides of the de-installed hardware pallet with the store and quantity filled out.
 - OBF Devices need to be palletized & labeled separately.
 - Work with your deployment support to leverage the MAC/ATR form(s) to request/return new/OBF units.
 - Overage devices need to be palletized separately and labeled for 'Special Shipment'
 - Work with your deployment support to get a label created for overage devices
- Shrink wrap palletized and label boxes to ready for shipment
 - Take deliverables photo of where palletized, labeled, and shrink wrapped equipment is located – CRC Pallet located in stores' back room. Please ask a team member for help locating.
- Do NOT leave old hardware on sales floor.

Cable Connection

Port Diagram



CONFIGURATION

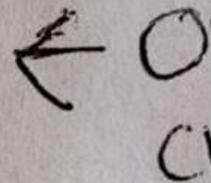
Barcode configuration for Honeywell hand scanner

rogram the scanner for USB HID bar code scanners.



PAP131.

USB HID Bar Code Scanner



TROUBLESHOOTING

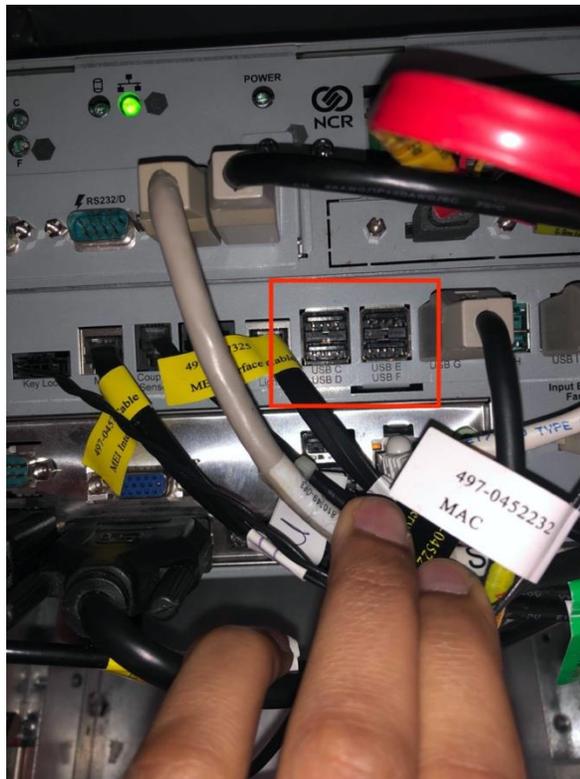
Issue	Solution
All issues	Contact Vendor Deployment Support for all troubleshooting issues and to validate the install in POSCentral.

If the flatbed scanner is still not functioning after rebooting, try the steps below:

- If there is a red light on the scanner, make sure all cables are connected to their corresponding ports and plugged in. Then reseal all scanner cables.
- Reboot the register. If it is not working after the reboot test the scanner in the known working register - if it is not working consider Out of Box Failure.
- If the scanner worked in another register, swap the scanner back into the original lane. Contact vendor deployment support to confirm that the swapped back register displays in POSCentral.
- Blow out the USB/Power connection on the POS
- Reconnect scanner
- Follow original installation steps
- If the scanner is still failing, request deployment support rebuild the register (this takes approximately 2 hours).

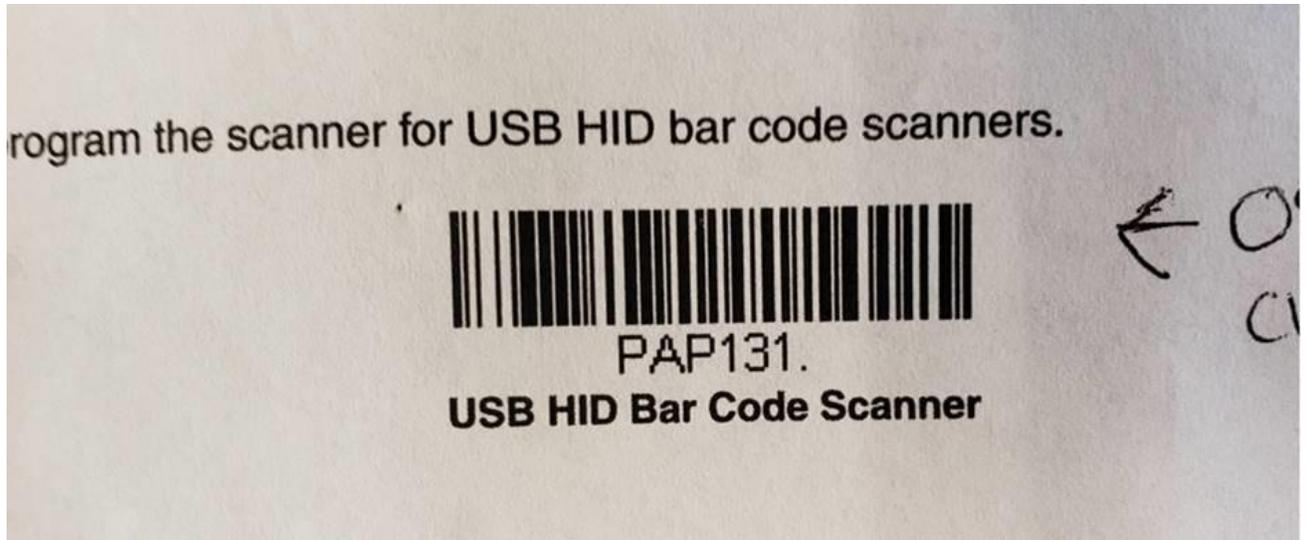
If the hand scanner is not working after rebooting, try the steps, below:

- Verify hand scanner is plugged into one of the USB ports shown below labeled C-F in the red box



- Verify hand scanner has power by pulling the trigger
- Swap the hand scanner out with another working hand scanner and reboot

- Connect Hand Scanner to a different USB port labeled C-F located above in red box.
- If the scanner is powered up and there is a negative beep and/or if the back light of the scanner is flashing red then try these steps.
 1. With the register fully booted up and either logged in or on the Lane Closed screen, use the Honeywell hand scanner to scan the barcode below **2 times**. **The scanner will play a single tone indicating the barcode was successfully scanned.**



2. Restart the register

Bill Acceptor Error:

NOTE: the tech will *normally* see a generic error screen instructing a *team member to log in* rather than the Lane Closed screen. After a team member logs in, and they see the Bill Acceptor or similar error as shown below.

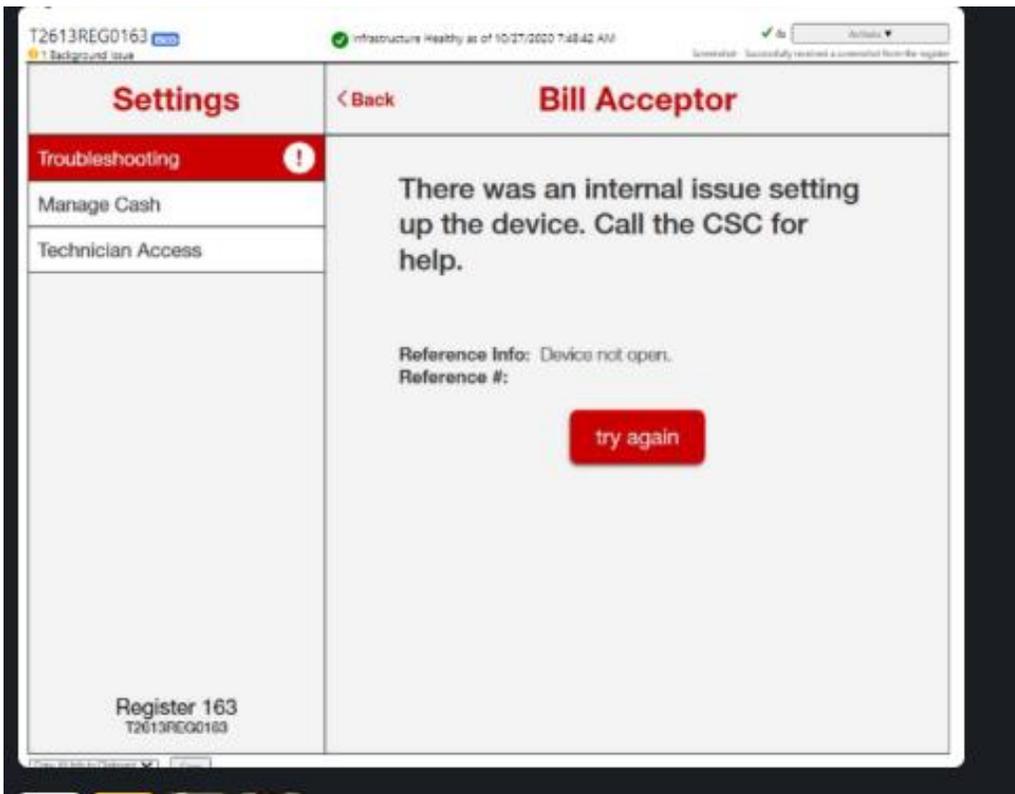
Was the problem was present **prior** to installation?

Yes

-Have the store call CSC and create a ticket.

No

-Verify all cables in the register are seated properly and then reboot. If the problem persists, have the store call CSC and create a ticket.



Flatbed side connections

Data USB Cable

Provides both power and connectivity. ***** This new cable that comes with the flatbed must be used; tech cannot re-use old cables***.** This cable must go into the POS port on the scanner.



Camera Cable

This is the cable for image scanner.



SUPPORT AND ESCALATION

Escalation Contact Information	When to Contact
• Vendor Deployment Support	Check in and initial troubleshooting
• Vendor Deployment support Level 2	When directed by deployment support
• Infrastructure Portfolio – POS team	After all troubleshooting steps have failed and L2 directs to contact POS.

OUT OF BOX FAILURE

OUT OF BOX FAILURE CRITERIA

The following criteria must be met before a device can be deemed an Out of Box Failure (OBF). Contact deployment support for additional instruction:

If the scanner is not powered up or working after troubleshooting then it is OBF.

Can be considered an OBF within 30 days of install.

OUT OF BOX FAILURE REQUIRED DATA

- Serial # of unit (located underneath the “platter”)
- Model # of unit
- Details on the issues of the flatbed, how the flatbed is behaving, what errors they’re seeing, what lights are on/off, etc.
- Details on the troubleshooting steps the tech performed

TROUBLESHOOTING STEPS REQUIRED

Go to Page 27 - Troubleshooting

REORDER PROCESS

How to Order a Replacement Device

See RMA section below

Responsible Party

See RMA section below

When the Replacement is needed

Submit replacement request by noon CENTRAL TIME, for next day delivery

CHARGEBACKS

NA

RETURN MERCHANDISE AUTHORIZATION (RMA) PROCESS

How to Return Equipment

Contact Vendor Deployment Support

Where to Ship Defective Equipment

Contact Vendor Deployment Support

DEFINITION OF DONE

VERIFICATION AND VALIDATION

Turn on the register:

- Must hear a beep when the register turns on and confirm there is a “GREEN” light on the flatbed scanner.



- Register will go through a full hardware detection (approx. 20 minutes) and should come up working showing a “GREEN” light.
- The lane light will be red, when the register is closed. Once the Team Member opens the lane, the light will change from red to green.
- Follow test procedure from post-install section to see if scanner is working fine.
- Verify with the Store Lead that the register is operating normally
-

Required Information

Vendor Deployment Support should see that the scanner or scanner/scale is "attached" and reporting a serial number in POSCentral.

CHECK OUT

Checkout with vendor deployment support before leaving the store.

DELIVERABLES

Submit deliverables immediately after installation (with Deployment Support).

DE INSTALLATION AND REMOVAL

***** There is nothing to replace this device at this time. *****

Scrub/Wipe Information

NA

Recycle and Shipping Information

NA

Data Destruction Log

NA

Closing Store

The scanner will be remain installed in the SCO.

Reason for Removal

NA

UPDATES

Date of Update	Change Description	Changed By
07/29/2020/	Converted to form template	Wren Howell, Quinlan McWilliams
8/4/20	Additional P&E review	Kirk Ingram
	review	Allie loveland
9/11/20	Bundle Review	Tiffany Eckberg
	final review	Allie loveland
10/29/20	clarify installation instructions, add 2D barcode for scanning	Quinlan McWilliams, Christopher Curtis, Arnab Pal

Have all fields been completed? Type Yes or No, then click inside the next field to finish Yes

Update the Table of Contents before saving

CONTACTS

TargetDeploymentSupport@Crosscom.com

