



CRANE PAYMENT INNOVATIONS

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ALIO Note Installation and User Guide



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SERIAL NUMBER CONFIGURATION

WWYLCCPPPPP

WW - Week Manufactured (01 through 52)

Y - Year Manufactured (2 for 2002)

L - Manufacturing Location

CC - Configuration Code

PPPPP - Sequential Production Number

INTRODUCTION:

ALIO Note is the next generation cashless and telemetry system from CPI that combines a telemeter, antenna, card reader and a full color display into a single device.

Specifications:

Input Voltage	20-42 VDC
Input Current	Max – 1 Amp
Operating Temperature	(-15°) - +60°C
Dimensions (bezel)	160mm x 80mm x 40mm
Weight (bezel & Hub)	379 Grams (0.83 Lbs.)

Parts List:

Part Description	Part Number
MDB Cable	250670036C
DEX Cable	215637033C
Mounting Plate	250038091

WARNINGS:

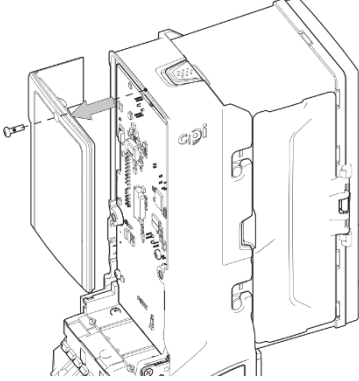
When mounting the ALIO Note bezel onto the Talos bill validator ensure that all power is off.

Observe ESD precautions when mounting the ALIO Note to the Talos bill validator. Serviceman should be properly grounded.

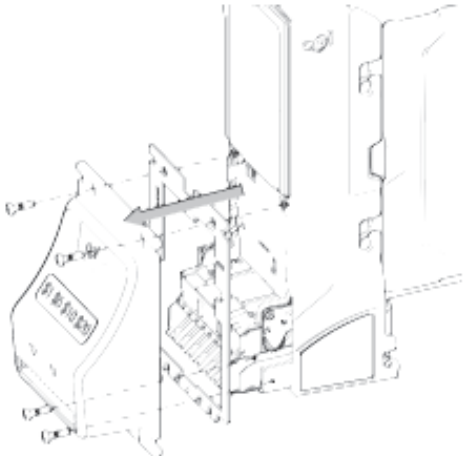
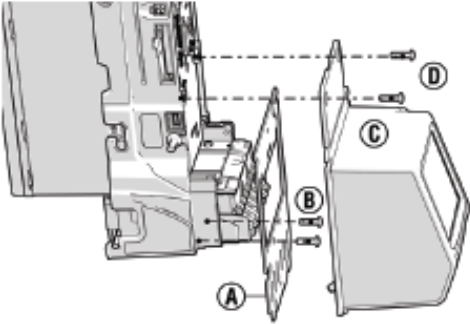
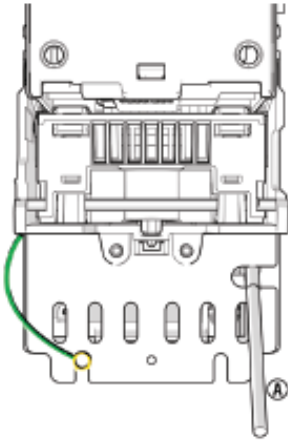
CLEANING:

If the bezel should need cleaning use only mild soap & warm water. Do not use abrasive or flammable cleaners.

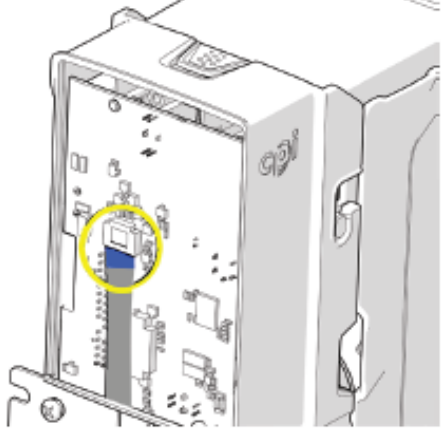
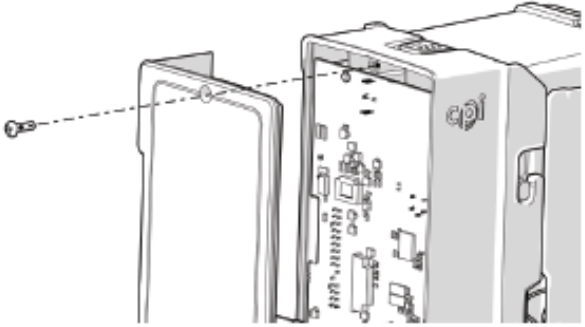
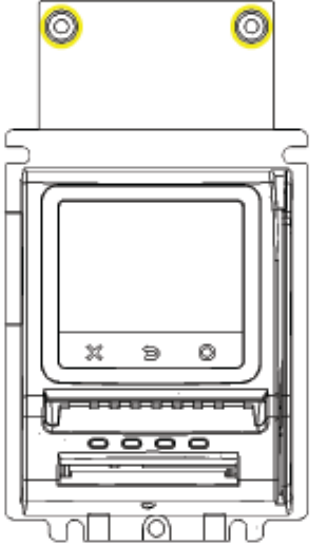
INSTALLATION:

	Step	Process
1	Turn off power to the vending machine	
2	Remove the existing bill validator	Unscrew the four hex nuts from the mounting posts with the 11/32 nut driver, and disconnect any cabling.
3	Remove the existing telemeter	<p>Disconnect all connections to the telemeter and remove the antenna from the top of the vendor.</p> <p>Because ALIO Note's antenna is contained within the bezel, there is no need to run an antenna through the top of the machine.</p> <p>When removing an existing antenna, follow your company's procedure for sealing the antenna hole.</p>
4	Remove the Bill Validator control board cover.	<p>Unscrew the control board cover, and pull to remove. If the existing bezel is connected to the control board via a ribbon cable, disconnect the ribbon cable before proceeding.</p> 

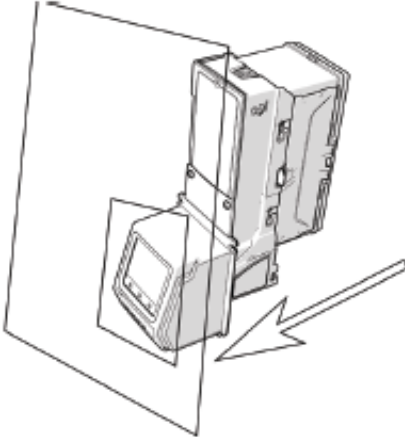
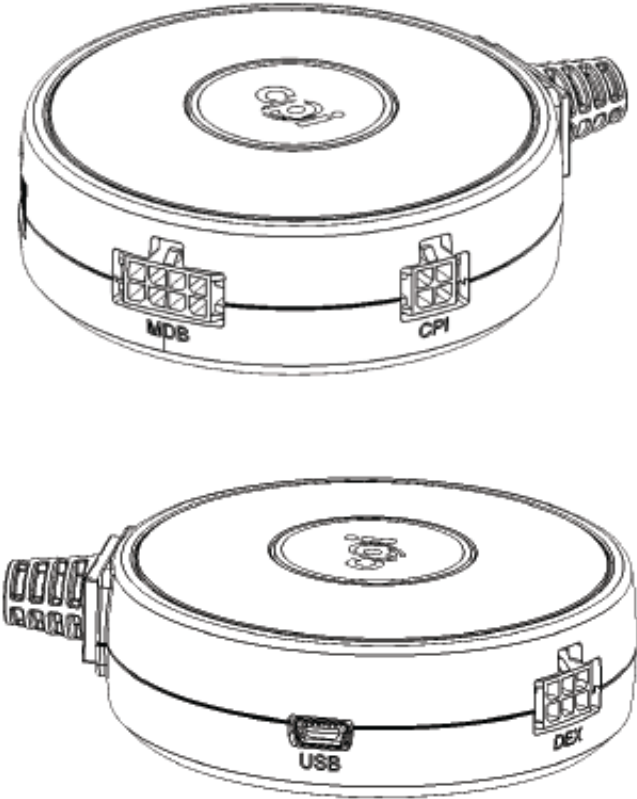
INSTALLATION CONTINUED:

	Step	Process
5	<p>Unscrew the bezel screws and remove the bezel and the mounting plate.</p>	
6	<p>A - Place ALIO's mounting bracket (A) on the validator</p> <p>B - Secure the mounting bracket with mounting bra screws</p> <p>C - Place ALIO over the mounting bracket.</p> <p>D - Secure ALIO with the bezel screws.</p>	
7	<p>Route the Connection Hub cable through the cable management slot in the mounting bracket.</p> <p>Note that the green grounding wire should be secured to a vending machine mounting post when installed.</p>	

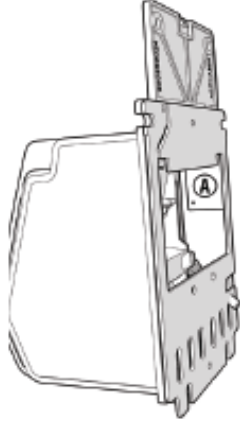
INSTALLATION CONTINUED:

	Step	Process
8	Attach the bezel's ribbon cable to the bill validator's control board	 A perspective view of the bill validator's internal control board. A yellow circle highlights a blue ribbon cable connector on the board, which is being aligned with a corresponding port on the bezel's ribbon cable.
9	Reattach the control board cover	 A perspective view of the control board with the cover being reattached. A dashed line indicates the cover being moved into position over the board. A screw is shown being inserted into the cover to secure it.
10	Secure ALIO with the two remaining bezel screws	 A top-down view of the ALIO (Application Load Interface Overlay) component. Two yellow circles highlight the locations where the remaining bezel screws should be inserted to secure the component.

INSTALLATION CONTINUED:

	Step	Process
11	<p>Mount ALIO through the back of the vendor door, and secure using four hex nuts on the vendor's mounting posts.</p>	
12	<p>Mount ALIO Connection Hub. It can be magnetically mounted inside the machine anywhere it will not impede operation.</p> <p>Route all connections to ALIO Hub, using zip ties and snips for cable management if necessary.</p> <p>ALIO Hub is the small puck attached to ALIO Note. This hub houses all connections for other vendor peripherals. Each connection is unique and labeled for easy routing.</p> <p>Note: There is no antenna installation required</p>	

INSTALLATION CONTINUED:

	Step	Process
13	Note: There is no antenna to install. ALIO's antenna (A) is pre-installed inside the main housing.	
14	Restore power to the vending machine and follow your company's procedure for activating a telemeter.	

OPERATION:

ALIO Note is fully configured for operation from the factory and once mechanically installed onto Talos bill validator and powered it will connect to the cellular network ready for use. Detailed information of connection status can be viewed by pressing the red "X" on the ALIO Note display 5 times. The display will reconfigure to indicate the status.

Once connected, **"Please Tap or Swipe Card"** will be displayed and the ALIO Note is ready to accept cards for transactions.

DIAGNOSTICS:

Once ALIO is installed, you can perform basic diagnostics on the device by pressing or holding the large button in the center of ALIO Hub:

ALIO Hub Button	Action
Press once	Force Fill - checks communication between the telemeter and server.
Hold for three seconds	Access the service tech menu on the display. You can use the capacitive touch buttons on the display to perform basic service tasks.
Hold for ten seconds	Reboots ALIO

LEDS STATUS:

ALIO Hub has an LED ring around the CPI logo that will change colors, depending on the current state of ALIO.

LED Ring Color	Status
Solid White	Boot in progress
Blinking White	Establishing connection to cellular network
Solid Green	Boot complete, fully operational and connected to APN
Blinking Green	DEX Attempt in Progress
Blinking Red	Failed to DEX
Solid Red	Fault on unit, error.

TROUBLESHOOTING:

Hold ALIO Hub button for three seconds to access the driver menu, then scroll to the alarm section to view recent issues. The steps below will also help to confirm proper installation.

Before Installation

1. Confirm the Asset or Equipment Number and make sure you are at the correct machine

After Installation

1. Confirm the vending machine firmware is approved by CPI and matches the asset assigned in the vendor system
2. Confirm that ALIO powers up properly after restoring power to the vendor

Confirm Connections

1. Confirm all connections are routed to ALIO Hub and are firmly secured
2. Confirm there is only one DEX jack active in the machine (on VMC or extended)
3. Check all connections on the VMC MDB line

Regulatory:

ALIO Note, FCC ID: QP8ALIONOTEVZ (Verizon Network Operation)

ALIO Note uses radio energy to communicate vending transaction activities to a remote host. CPI has not approved any changes or modifications to ALIO Note. Any changes or modifications could void the user's authority to operate the equipment. See 47 CFR Sec. 15.21

ALIO Note complies with 47 CFR Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesirable operation.

Guidance – Pacemakers, Potential Interference –

Radiofrequency energy (RF) from cell phones can interact with some electronic devices. This type of interference is called electromagnetic interference (EMI). For

this reason, FDA helped develop a detailed test method to measure EMI of implanted cardiac pacemakers and defibrillators from cell phones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical Instrumentation (AAMI). This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from cell phone EMI.

The FDA continues to monitor the use of cell phones for possible interactions with other medical devices. Should harmful interference be found to occur, FDA will conduct testing to assess the interference and work to resolve the problem.

For more information reference sources for pacemakers can be found at U.S. Food and Drug Administration web site: www.fda.gov , see Radiation-Emitting Products and procedures, Interference with Pacemakers and Other Medical Devices

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