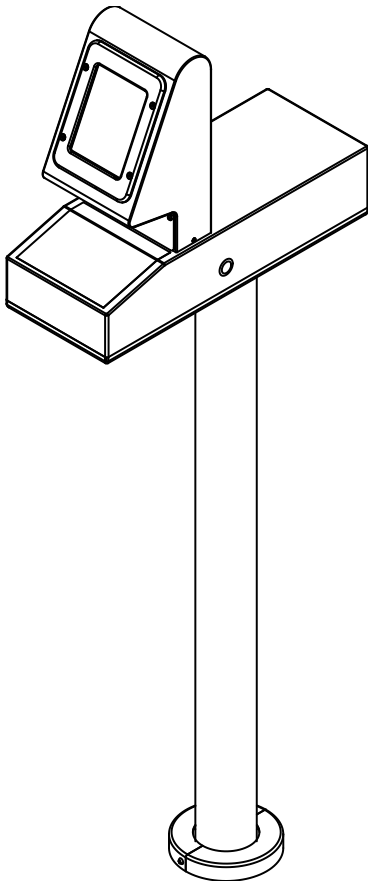
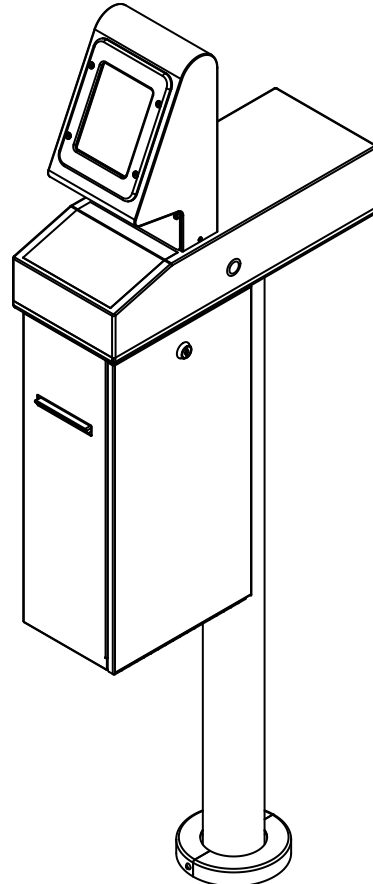


TAS12-AS1 & TAS12P-AS1
INTELLIGENT ADMISSION STATION



TAS12-AS1



TAS12P-AS1

Installation Instructions




Alvarado Manufacturing Company, Inc.
12660 Colony Street, Chino, CA 91710
Telephone: (909) 591-8431
Fax: (909) 628-1403
support@alvaradomfg.com
www.alvaradomfg.com

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Safety Icons

The following symbols are used throughout the manual to highlight important information and potential risks when installing, servicing or using the pedestal covered in this manual.

 WARNING	This symbol is used in this manual to warn installers and operators of potential harm. Please read these instructions very carefully.
 CAUTION	This symbol is used in this manual to designate potential conditions that may pose a risk to pedestrians, personnel, property and equipment. Please read these instructions very carefully.
NOTE	This symbol is used in this manual to designate useful information for the installer and operator. Please read these instructions.
	For questions, please contact Alvarado at (909) 591-8431, Monday – Friday 6:30am to 4:30 PST. Please read this manual completely before installing or operating the purchased product.



Introduction

This manual provides installation and troubleshooting instructions for Alvarado's TAS12-AS1 & TAS12P-AS1 Intelligent Admission Stations. Operation and advanced configuration instructions are outside the scope of this manual. At the end of the installation section, instructions are provided for powering up the device and performing a basic functions check. Please refer to other documentation for operation, advanced configuration, or other instructions that may be specific to your facility or deployment.

Additional copies of this manual can be obtained by contacting Alvarado.

Assumptions for Using this Manual

Alvarado's Intelligent Admission Stations are networked devices that communicate with Alvarado's GateLink10 access control software via wired or wireless TCP/IP.

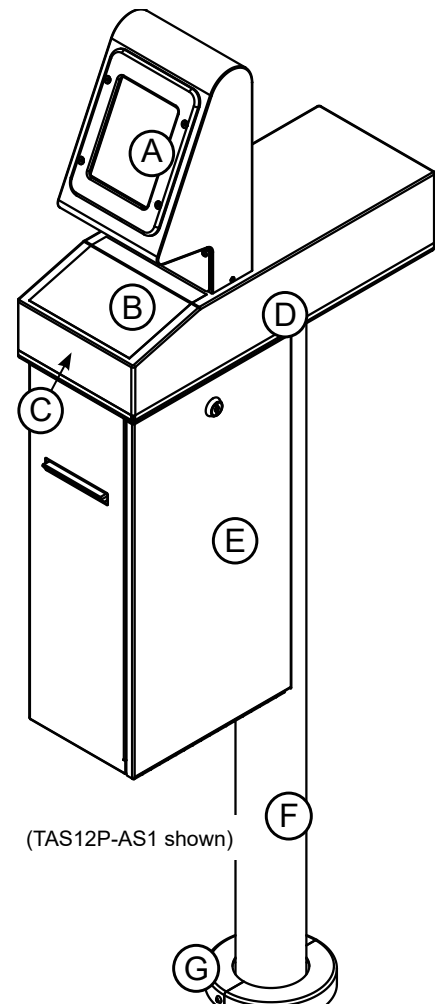
This manual assumes the following will be completed prior to operation:

- The facility's communication network and GateLink10 server are online and operational.
- The TAS12s are configured with the appropriate network settings for the facility.
- The Validation Service is running on the GateLink10 server.

TAS12-AS1 / TAS12P-AS1 Intelligent Admission Station

The TAS12-AS1 & TAS12P-AS1 are Intelligent Admission Stations that integrate a 1D/2D barcode scanner, color TFT display with touchscreen, built-in speaker, and an advanced controller that communicates with Alvarado server applications via wired or wireless TCP/IP. The TAS12P-AS1 includes a thermal printer for printing seat locators, receipts, and vouchers. The devices are attached to fixed pedestals and are used for both patron self-validation and attendant assisted entry applications.

Ⓐ	TAS12 - The TAS12 contains the barcode scanner and main controller that communicates to the GateLink10 server. The TAS12 controller also communicates with optional media reading devices (barcode reader, magnetic stripe reader) as well as the printer.
Ⓑ	Blackout Pad - The blackout pad is used to designate the barcoded ticket scanning area.
Ⓒ	Magnetic Stripe Reader (Optional) - The magnetic stripe reader is used to read the magnetic stripe on a credit card, season pass card, school ID card, or other credentials for Delivery ID.
Ⓓ	Pedestal Box - The pedestal box contains the power supply, primary power terminal block, fuse, power button, and TAS12 mounting hardware. The pedestal box is opened / closed using the provided security lock keys.
Ⓔ	Printer Box (TAS12P-AS1) - The printer box houses a Zebra KR403 thermal printer, printer paper roll, and printer power supply. The thermal printer is used to print tickets, seat locators, receipts, coupons, and vouchers.
Ⓕ	Pedestal - The pedestal is anchored to the floor.
Ⓖ	Base Cover - The two-piece 5 1/2" (142mm) OD stainless steel base cover is used to hide the pedestal base and protect against the build-up of dirt and debris.



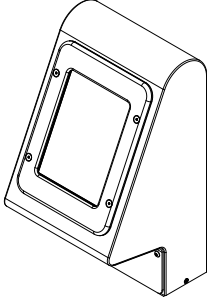
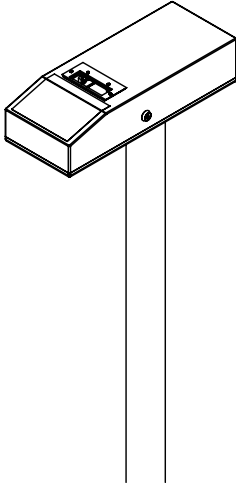
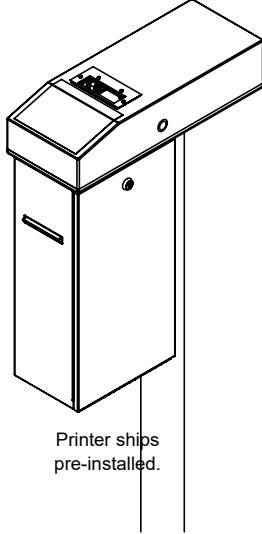
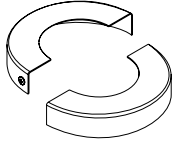


**Installation Tools**

- Tape Measure
- Chalk Line
- Pencil
- Drill
- Hammer Drill
- 5/8" Concrete Drill Bit
- Level
- Socket Wrench
- Torque Wrench (ft-lbs)
- 9/16" Socket
- Hammer
- #1 Small Phillips Head Screwdriver
- Precision Flat Head Screwdriver
- 5/32" Allen Wrench
- Clear RTV Silicone

Parts List

This product is shipped with all proper installation hardware and components. Make sure that none of these parts are missing and/or damaged before beginning installation. If there are parts missing and/or damaged, please stop the installation and contact Alvarado.

TAS12-AS1 / TAS12P-AS1 Illustrated Parts List

 <p>TAS12 (Qty 1)</p>	<p>TAS12-AS1</p>  <p>TAS12P-AS1</p>  <p>Printer ships pre-installed.</p> <p>Pedestal (Qty 1)</p>	 <p>Pedestal Base Cover (Qty 1)</p>  <p>Wireless Antenna* (Qty 1)</p> <p>*Wireless Option Only, Ships Pre-Installed.</p> <p>Also Included:</p> <p>3/8" x 2" Concrete Anchors (Qty 4)</p> <p>3/8" x 2 1/2" Anchor Bolts (Qty 4)</p> <p>3/8" Flat Washers (Qty 4)</p>
 <p>Blackout Pad (Qty 1)</p> <p>Ships Pre-Installed.</p>		

Before You Begin Installation

It is the customer's responsibility to ensure that all conduit and corresponding lines are installed prior to installing the TAS12-AS1. The conduit stub-up location should be dead-center of the pedestal. The maximum hole size for conduit is 2 1/4". It is recommended that a licensed electrician perform these steps. The following lines must be run before installing the pedestal:

- AC Power
- Shielded CAT6 Ethernet Cable (only if wired Ethernet is being used)



Installation Instructions

Pedestal Installation

Slab Requirements

- The slab must be a minimum of 4" thick. The pedestal may only be installed on concrete.
- Do not install the pedestal on asphalt.

Space Requirements

- Refer to the Plan, Elevation and Footprint drawings in Appendix A for product dimensions.
- The pedestal box lid (with TAS12 unit mounted) requires 18" of lateral clearance to fully open.
- The printer box door requires 21" of lateral clearance to fully open (TAS12P-AS1 only).

NOTE

Depending on the configuration ordered, the printer box door may open from the right- or left-hand side.

1. Determine where the pedestal will be installed. Once the installation location has been determined, use a chalk line to mark the centerline of the pedestal base [Figure 1].
2. Place the pedestal base over the intersecting lines.
3. Mark the center location of all four anchor holes for the pedestal base [Figure 2]. Set aside the pedestal base.
4. Using a $\frac{5}{8}$ " concrete drill bit, drill four anchor holes, 3" in depth, at the center of each marked location [Figure 3].

NOTE

The anchor holes must be clean before installing the anchor bolts. If the anchor holes are not clear of debris, the anchor bolts may not tighten correctly.

5. Insert one anchor into each drilled hole [Figure 3]. The threaded end of the anchor must be inserted into the hole first. Use a hammer to tap the anchor into place, if needed. Ensure that the anchors are flush with the concrete floor.

Fig. 1 Pedestal Base Dimensions

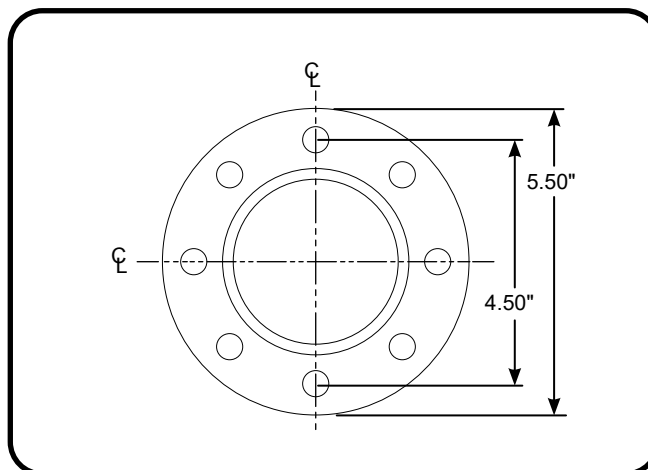


Fig. 2 Marking & Drilling Anchor Holes

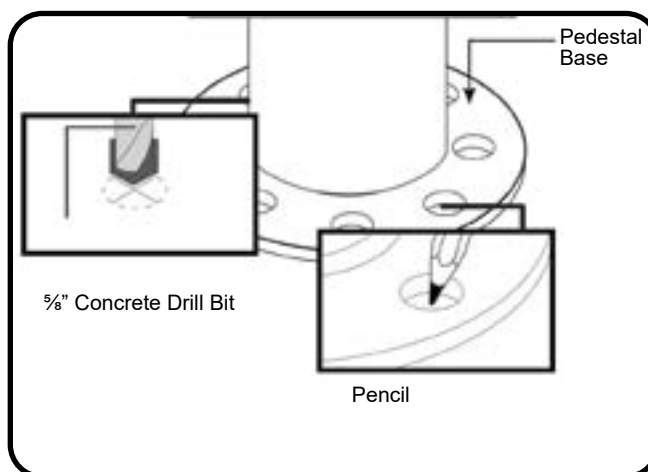
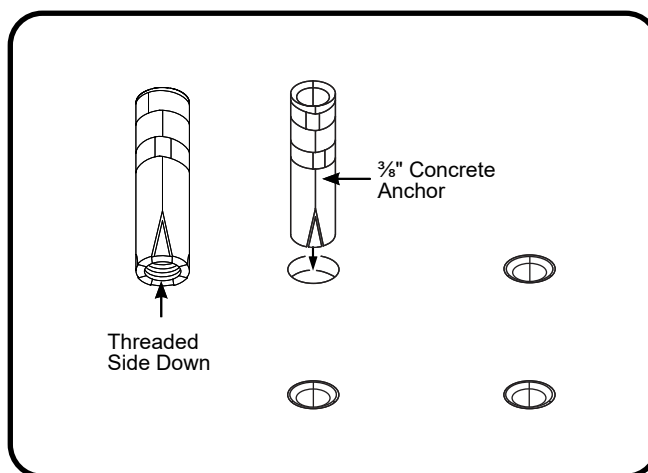


Fig. 3 Inserting Anchors

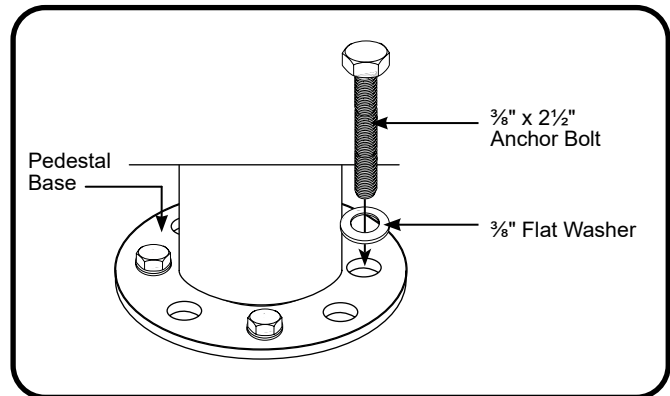




Pedestal Installation (cont.)

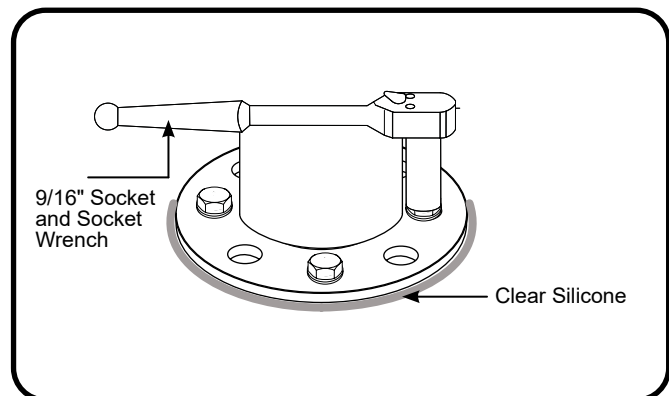
- Place the pedestal base back over the anchor holes and anchor it with four (4) $\frac{3}{8}$ " x $2\frac{1}{2}$ " anchor bolts and flat washers [Figure 4].

Fig. 4 Inserting Anchor Bolts



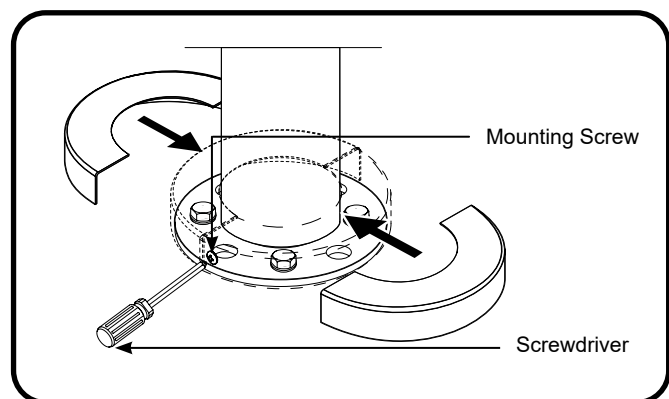
- Use a socket wrench with a $\frac{9}{16}$ " socket to snug the anchor bolts [Figure 5].
- Confirm that the pedestal base is level. Shim as needed.
- Using a torque wrench, torque the anchor bolts to 20 ft-lbs.
- Apply a thick bead of clear RTV silicone around the pedestal base [Figure 5].

Fig. 5 Completing Anchoring Process



- Place the two halves of the pedestal base cover over the pedestal base and align the mounting holes.
- Using a #1 Phillips head screwdriver, tighten the two mounting screws [Figure 6].

Fig. 6 Installing Base Cover

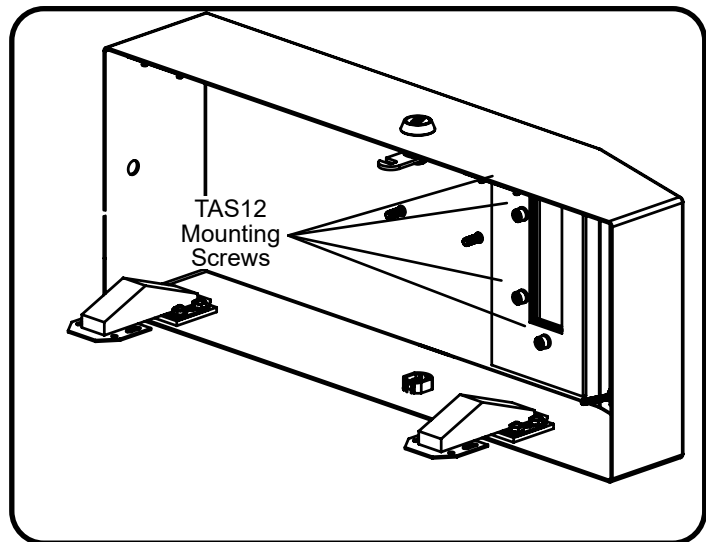




Mounting the TAS12 Unit

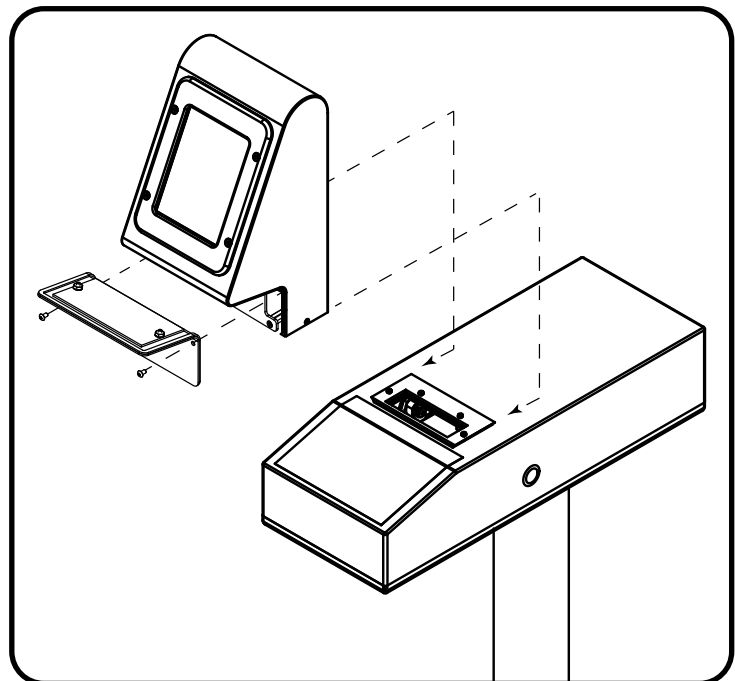
1. Unlock and open the pedestal box lid [Figure 7].
2. Using a 5/32" Allen wrench, loosen the four (4) TAS12 mounting screws that secure the stabilizer plates to the lid [Figure 7]. Do not completely remove the screws.
3. Gently close the pedestal box lid.

Fig. 7 TAS12 Mounting Screws



4. Place the TAS12 onto the lid and slide the unit forward [Figure 8]. The base plate will act as a guide. The dovetail plates will slide under the base plate until they are flush with the front edge of the base plate.
5. Use a 2 mm hex key to attach the scan window plate to the TAS12.
6. Gently open the pedestal box lid, while supporting the TAS12 unit.
7. Use a 5/32" Allen wrench and tighten the four (4) TAS12 mounting screws to secure the TAS12 to the pedestal lid.

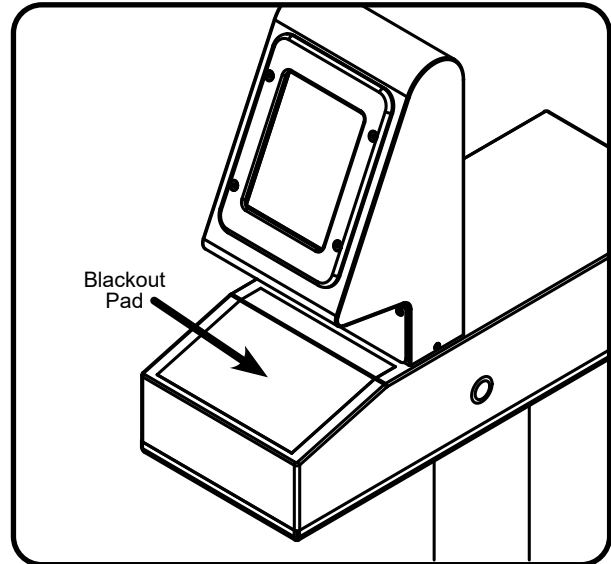
Fig. 8 Mounting TAS12 Unit





Mounting the TAS12 Unit (cont.)

- Remove the plastic backing off the self-adhesive blackout pad. Center the blackout pad under TAS12 and press firmly into place [Figure 9].

Fig. 9 Blackout Pad

(TAS12-AS1 shown)

Wiring Instructions Primary Power

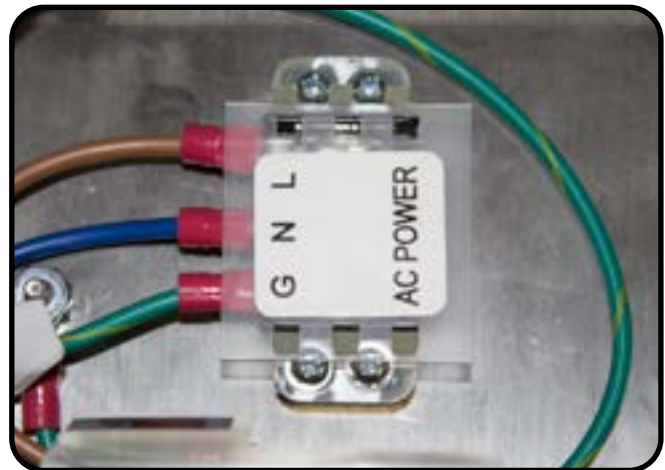
WARNING

Ensure primary power is turned OFF at the circuit breaker.

NOTE

It is recommended that a licensed technician perform the following steps.

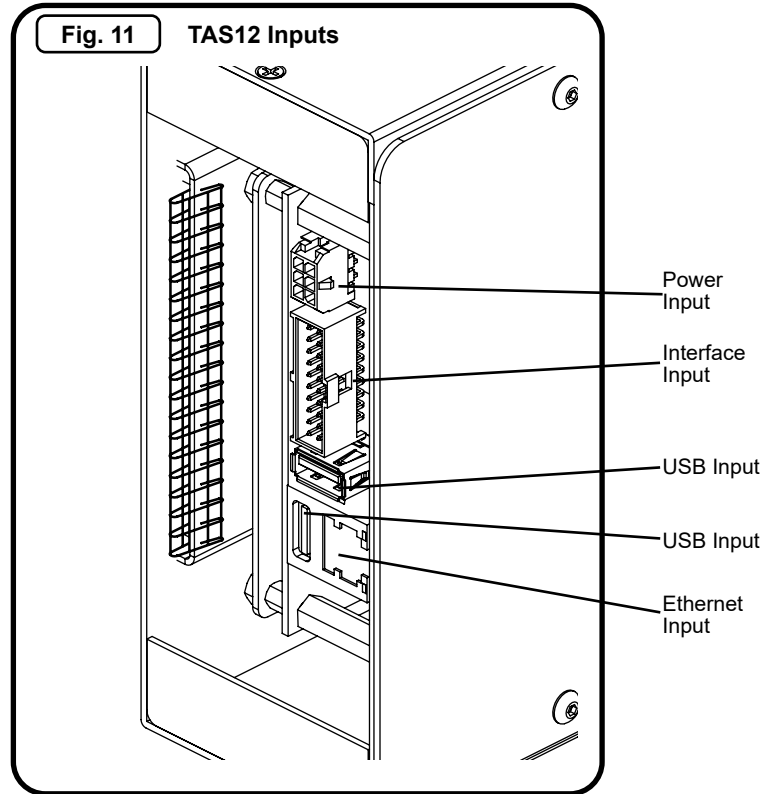
- Locate the terminal block inside the pedestal box. [Figure 10].
- Remove the protective cover from the terminal block.
- Attach ring connectors to the primary power LINE, NEUTRAL, and GROUND wires.
- Using a precision screwdriver, connect the LINE, NEUTRAL, and GROUND primary power wires to the terminal block. Refer to [Table 1] for 110V & 220V power configurations.
- Install the protective cover onto the terminal block.

Fig. 10 Primary Power Terminal Block**Table 1** 110V & 220V Power Configurations

	110V	220V
(L)INE	BLACK	BROWN
(N)EUTRAL	WHITE	BLUE
(G)ROUND	GREEN	GREEN / YELLOW

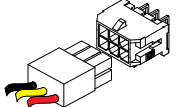

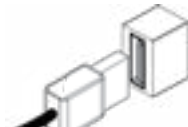
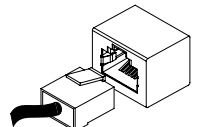
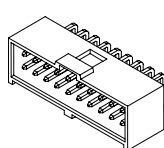
**TAS12 Wiring****NOTE**

Power to the pedestal must remain OFF while wiring the TAS12.

**NOTE**

USB inputs are interchangeable.

Locate the following cables in the pedestal box. Use the instructions below to complete TAS12 wiring.

	<p>Power Cable - Supplies power to the TAS12 unit. The power cable has 3 wires - red, black, and yellow.</p> <ol style="list-style-type: none"> 1. Locate the power supply's 6-pin power cable connector (A) and plug it into the TAS12 power input (A).
	<p>Media Reader USB Cable (Optional) - Allows an optional media reader such as an RFID or magnetic stripe reader to communicate with the TAS12.</p> <ol style="list-style-type: none"> 2. Locate the media reader's USB cable (B) and plug it into TAS12 USB input (B).
	<p>Thermal Printer USB Cable (TAS12P-AS1 only) - Allows the TAS12 unit to communicate with the thermal printer.</p> <ol style="list-style-type: none"> 3. Locate the thermal printer's USB cable (C) and plug it into TAS12 USB input (C).
	<p>Shielded CAT6 Ethernet Cable (Wired communication only) - Used for communication with local area network.</p> <ol style="list-style-type: none"> 4. Locate the Ethernet cable (D) that was run up into the pedestal box and connect it to the TAS12 Ethernet input (D).
	<p>Interface Input - Allows the TAS12 to communicate with a peripheral device (i.e. turnstile or gate). This input is only used when the TAS12 unit is controlling a peripheral device.</p> <ol style="list-style-type: none"> 5. Locate the 20-pin connector (E) coming from the peripheral device and plug it into the interface input located on the TAS12 (E).



Loading Printer Paper (TAS12P-AS1)

The Zebra KR403 printer is compatible with several types of direct thermal paper. For typical seat locator/receipt printing applications, Alvarado recommends the following product or its equivalent:

Manufacturer: Zebra (www.zebra.com)

P/N: 10007008

Width: 3.125 in. (79.4 mm)

Thickness: 3.5 mil

Roll Length*: 645' (196.5 m)

Core Diameter: 1"

*Paper rolls up to 7" in diameter (roughly 885' of paper) may be used. Contact Zebra for information on custom paper roll stock.

If you have questions regarding paper compatibility, contact Alvarado or Zebra Technical Support for assistance.

1. Power ON the TAS12P-AS1. (See instructions on page 11.)
2. Use the pedestal lid key to unlock and open the printer box door.

NOTE

Depending on the configuration ordered, the printer box door may open from the right- or left-hand side.

3. Insert paper roll as shown in [Figure 12]. The paper should feed from the back of the of the roll (closest to the pedestal post).
4. Slide the paper up the feed ramp until it is grabbed by the printer. A blank ticket will be cut and deposited to the printer bezel.

Fig. 12 Loaded Printer Paper



(Shown with the printer box open from the right-hand side.)



Portable TAS12-AS1s

Portable Pedestal

Portable AC-powered pedestals operate the same as standard pedestals, except for two major differences:

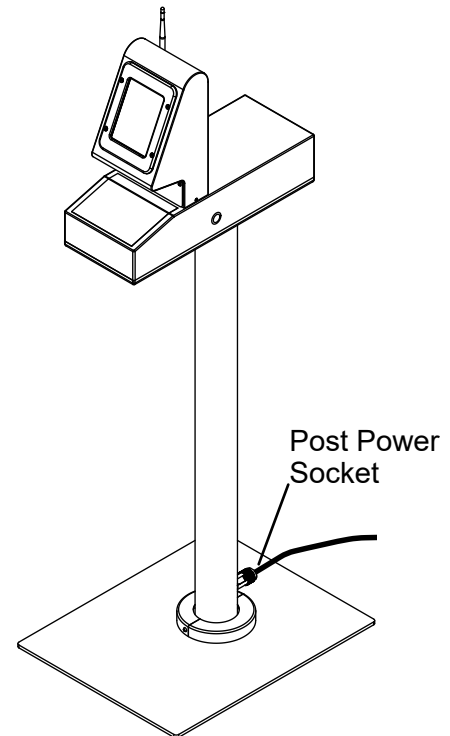
- They are installed on a portable baseplate instead of mounted to the floor.
- They receive power from a power socket on the post instead of being directly connected to power.

Portable AC-powered pedestals do not ship with power cables. Instead, each pedestal ships from the factory with a disassembled Neutrik connector. Use the connector to create power cables per your facility's requirements and specifications. See "Appendix B - Assembling the Neutrik Connector" on page 22 for assembly instructions.

WARNING

It is recommended to avoid connecting or disconnecting the Neutrik connector from the post power socket while the cable is plugged into a power source. Disconnect it from power first.

Fig. 12a TAS12-AS1 AC Portable



Portable Battery-Powered Pedestal

Battery-powered pedestals receive power from a removable lithium-ion battery mounted to the pedestal post.

A fully charged battery will power the pedestal for about 18 hours while it performs normal scanning operations. As batteries age and are discharged and recharged multiple times, the operating time off a full charge decreases. It typically takes about 3 hours to charge a battery completely. Check the current battery level by pressing the indicator button.

To charge the battery, either:

- Plug the charging cable into the charging port on the side of the battery, near the bottom. See the image to the right.
- Use the supplied key to operate the battery release. Unscrew the cable from the bottom of the battery, remove the battery, and take it to a charger.

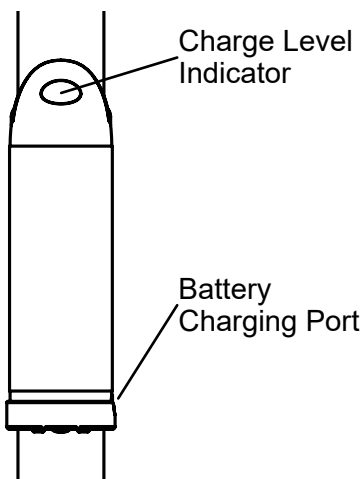
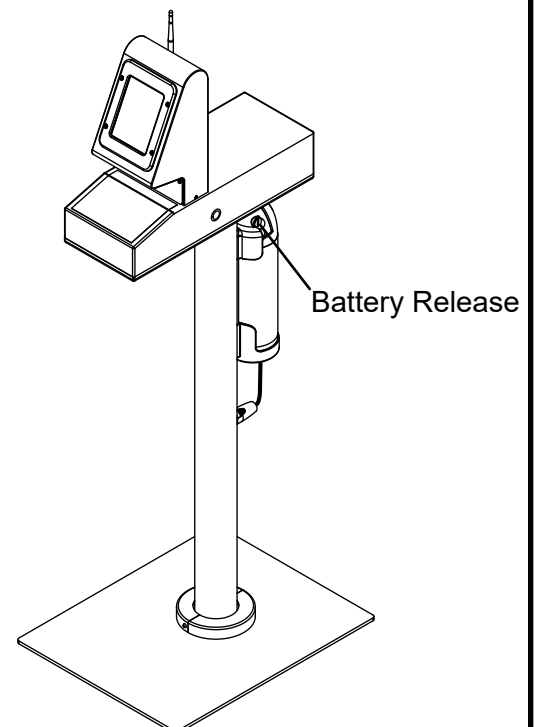


Fig. 12b TAS12-AS1 Battery Portable





Post-Installation Functions Check Power On

NOTE

The following is assumed:

- The facility's communication network and GateLink10 server are online and operational.
- The TAS12-AS1's are configured with the appropriate network settings for the facility.
- The Validation Service is running on the GateLink10 server.

1. Using a slim object, such as a pencil or pen, power on the TAS12-AS1 by pressing the recessed ON/OFF button on the rear side of the pedestal box [Figure 13].
2. Upon powering on, the TAS12-AS1 will begin the boot up process. The entire boot up process will take approximately 40 seconds to complete. At the end of the boot up process, the TAS12 touch screen will display the "PLEASE SCAN TICKET" message [Figure 14].

NOTE

TAS12 display messages can be customized. The display message may differ from that shown above.

Fig. 14

Example 'Please Scan Ticket'
Display Message



Fig. 13 Power Button



(TAS12P-AS1 shown)



Perform Device Tests

NOTE

The use of a stylus (not included) is recommended for all touch screen operations.

1. Tap the TAS12 screen to bring up the Login Screen [Figure 15]. To confirm the TAS12 is connected to the network, verify the online status icon in the top-right corner is GREEN [Figure 15].
2. Using the onscreen number pad, enter the numeric Login ID. Press the **ENTER** key. This will bring up the TAS12 Functions Menu.

NOTE

The factory default Login ID is **123**. If Login IDs have been configured in Gatelink 10, contact your system administrator to obtain your Login ID.

3. From the TAS12 Functions Menu, press the **DEVICE TESTS** button [Figure 16]. This will bring up the **Device Tests** menu.
4. Perform the following Device Tests [Figure 17]:
 - **Set Green LED On** - Press this button to test the green attendant notification LED [Figure 13]. Press the button a second time to turn the LED off.
 - **Set Yellow LED On** - Press this button to test the yellow attendant notification LED [Figure 13]. Press the button a second time to turn the LED off.
 - **Set Red LED On** - Press this button to test the red attendant notification LED [Figure 13]. Press the button a second time to turn the LED off.
 - **Print Ticket (TAS12P-AS1 only)** - Press this button to print a test ticket from the integrated printer.
 - **Activate Relay** - If the TAS12 unit is being used to control a peripheral device such as a turnstile or gate, this test button will send a test activation signal to the peripheral device.
5. Press the **CLOSE** button on each screen until the "PLEASE SCAN TICKET" message is displayed on the TAS12 screen.

Fig. 15 Login Screen

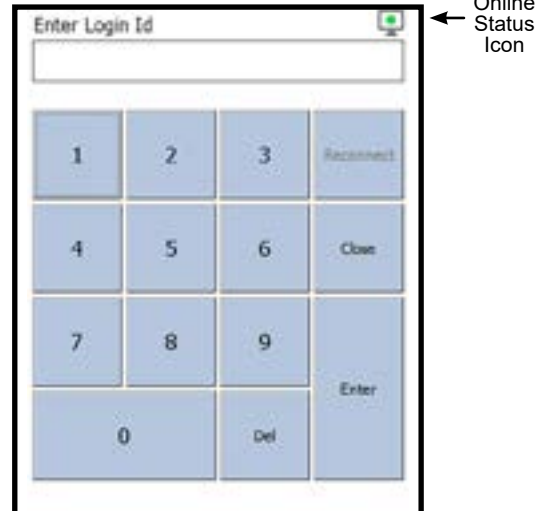
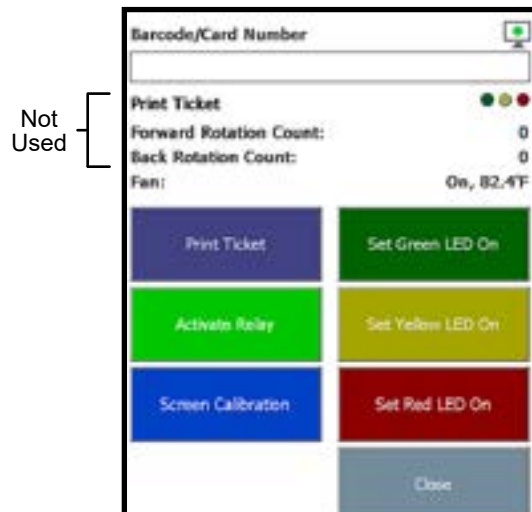


Fig. 16 TAS12 Functions Menu (TAS12P-AS1 shown)



Fig. 17 Device Tests Screen



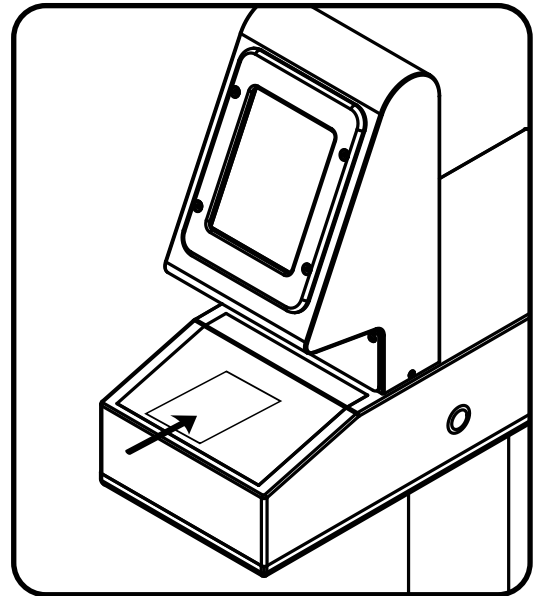


Scan a Sample Barcoded Ticket

1. Scan a sample barcoded ticket.

To scan, place the barcoded ticket on the blackout pad facing up and towards the unit [Figure 18]. The scanner will beep when the ticket has been scanned. After scanning, the barcode is sent to the GateLink10 server for validation.

- If the ticket is valid, a chime will sound, "PLEASE ENTER" will display on the TAS12 screen, and the attendant notification lights will show GREEN, prompting entry.
- If the ticket is invalid, an alert will sound, "PLEASE SEE ATTENDANT" will display on the TAS12 screen, and the attendant notification lights will show solid RED.

Fig. 18**Scanning a Ticket**

Validate a Magnetic Stripe Card (TAS12P-AS1 Option)

NOTE

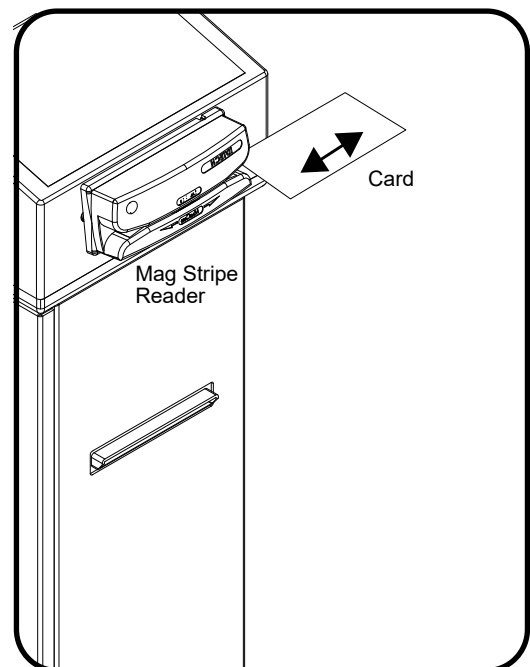
Ensure paper is loaded in the thermal printer.

1. Slide the card through the magnetic stripe reader with the magnetic stripe facing down [Figure 19]. The TAS12 will beep when the magnetic stripe has been read. After reading, the data is sent to the GateLink10 server for validation.
 - If the card is valid, a chime will sound, "PRINTING" will display on the TAS12 screen, and the ticket(s) will print and deposit at the printer bezel.
 - If the card is invalid, an alert will sound and "INVALID SCAN" will display on the TAS12 screen.

NOTE

The graphic error message may differ depending on the reason for the invalidation.

2. Scan the printed ticket by placing the barcode on the blackout pad facing up and towards the unit [Figure 18].
 - When validated, a chime will sound, a "PLEASE ENTER" graphic will display on the TAS12 screen, and the attendant notification lights will show GREEN, prompting entry.

Fig. 19**Swiping a Mag Stripe Card**

**Troubleshooting**

After performing a troubleshooting step, make sure to cycle the power to the TAS12-AS1. This re-initializes power to the components allowing the change to take effect.

TAS12 Display

Issue	Possible Cause	Solution
The TAS12 display is black with horizontal colored lines.	TAS12 display was not initialized properly when powering on.	Power OFF the TAS12-AS1 for 10 seconds, then power ON [Figure 13].
	The TAS12 power cable is not seated properly or is damaged.	Check that the power cable is firmly seated in the TAS12 power input [Figure 11A]. Inspect the cable for damage, replace if necessary.
	The display ribbon cable is not seated properly.	Check that the display ribbon cable is firmly seated in both connectors [Figure 23].
	The power supply is faulty.	Contact Alvarado to obtain a new power supply.
The TAS12 display is black and the fans are running.	TAS12 display was not initialized properly when powering on.	Power OFF the TAS12-AS1 for 10 seconds, then power ON [Figure 13].
	The TAS12 power cable is not seated properly or is damaged.	Check that the power cable is firmly seated in TAS12 power input [Figure 11A]. Inspect the cable for damage, replace if necessary.
	The display power cable is not seated properly.	Check that the display power cable is firmly seated in both connectors [Figure 21].
	The TAS12 display is faulty.	Replace the TAS12 display.
The TAS12 display is white and the fans are running.	TAS12 display was not initialized properly when powering on.	Power OFF the TAS12-AS1 for 10 seconds, then power ON [Figure 13].
	The display ribbon cable is not seated properly.	Check that the display ribbon cable is firmly seated in both connectors [Figure 23].
	The TAS12 power cable is not seated properly or is damaged.	Check that the power cable is firmly seated in the TAS12 power input [Figure 11A]. Inspect the cable for damage, replace if necessary.
The TAS12 display is upside down.	DIP switch SW2 on the backplane board is improperly configured.	Correctly configure the SW2 DIP switch [Figure 25A].
TAS12 touch screen does not respond correctly to touch input.	The screen is out of calibration.	Recalibrate the touch screen using the TAS12.
The TAS12 touch screen does not respond to touch input at all.	TAS12 display was not initialized properly when powering on.	Power OFF the TAS12-AS1 for 10 seconds, then power ON [Figure 13].
	The touch screen board cable is not seated properly.	Check that the touch screen board cable is firmly seated in both connectors [Figure 24].

TAS12 Scanner

Issue	Possible Cause	Solution
Tickets seem difficult or slow to scan.	The scanner window is dirty.	Clean the scanner window.
The scanner does not power on.	The scanner power cable is not seated properly.	Check that the scanner cable is seated in both connectors [Figure 22].
The scanner beeps but the operator screen does not display the ticket number.	The Ethernet cable is loose or damaged.	Reconnect or replace the Ethernet cable [Figure 11D].

**Troubleshooting (cont.)****TAS12 Power**

Issue	Possible Cause	Solution
The TAS12 does not power up.	The TAS12 power cable is not seated properly or is faulty.	Check that the power cable is firmly seated at the power supply and TAS12 power input [Figure 13]. Inspect the cable for damage, replace if necessary.
	The power is OFF at the circuit breaker.	Verify power is ON at the circuit breaker.
	The fuse is blown.	Check the fuse and replace if necessary. Replace with a 3A slow blow fuse [Figure 20].
	The power supply is defective.	Replace the power supply [Figure 20].

Magnetic Stripe Reader (TAS12P-AS1)

Issue	Possible Cause	Solution
The magnetic stripe reader is not reading the card.	The magnetic stripe reader is dirty.	Clean the magnetic stripe reader using a magnetic stripe reader cleaning card.
	The magnetic stripe reader USB cable is loose or damaged.	Re-seat the USB cable in the connector [Figure 11B].
	The magnetic stripe reader was not initialized properly when powering on.	Power OFF the TAS12P-AS1 for 10 seconds, then power ON [Figure 13].
	The magnetic stripe reader or main controller is faulty, or is not configured properly.	Contact Alvarado for advanced troubleshooting instructions.

Network Communication

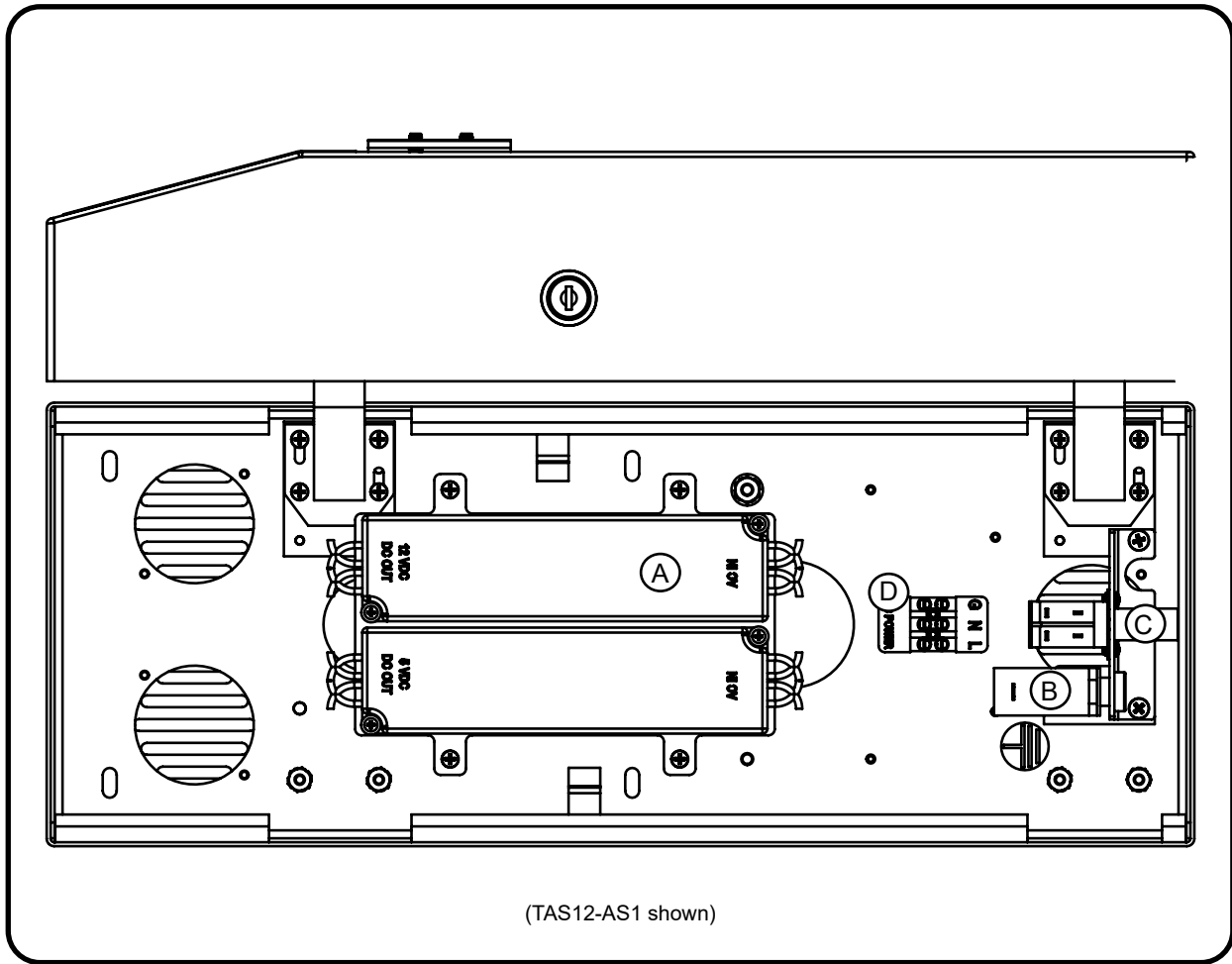
Issue	Possible Cause	Solution
There is no network connectivity.	The TAS12 Ethernet cable is loose or damaged.	Reconnect the TAS12 Ethernet cable [Figure 13]. When network connectivity has been reestablished, the TAS12 Ethernet port's green LINK light will illuminate.
	The TAS12's device IP is not recognized by the GateLink10 server or is on the wrong network.	Seek direction from your system administrator to resolve this issue.

If this troubleshooting guide did not resolve your issue, contact Alvarado Technical Support for further assistance. Replacement parts can be obtained by contacting Alvarado Technical Support.



Troubleshooting (cont.)

Fig. 20 Pedestal Box Components



A	Power Supply
B	Fuse (3A slo blow)
C	Power Button
D	Primary Power Terminal Block

NOTE Cables not shown.



Troubleshooting (cont.)

Fig. 21 TAS12 Electronics Assembly

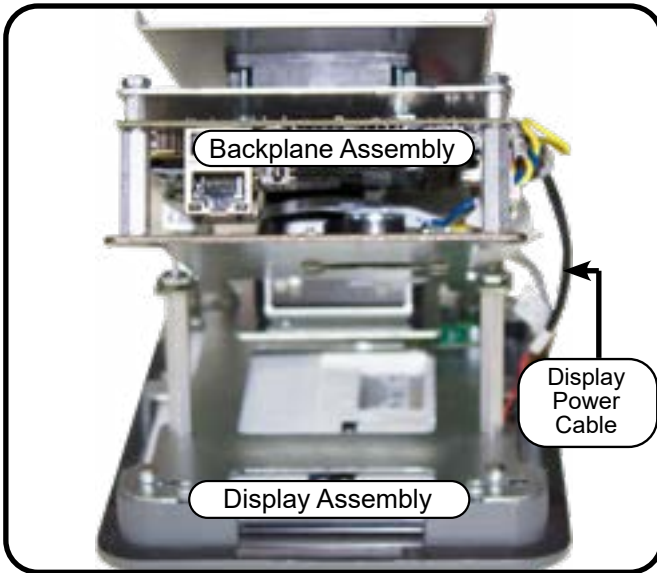


Fig. 22 TAS12 Scanner Cable

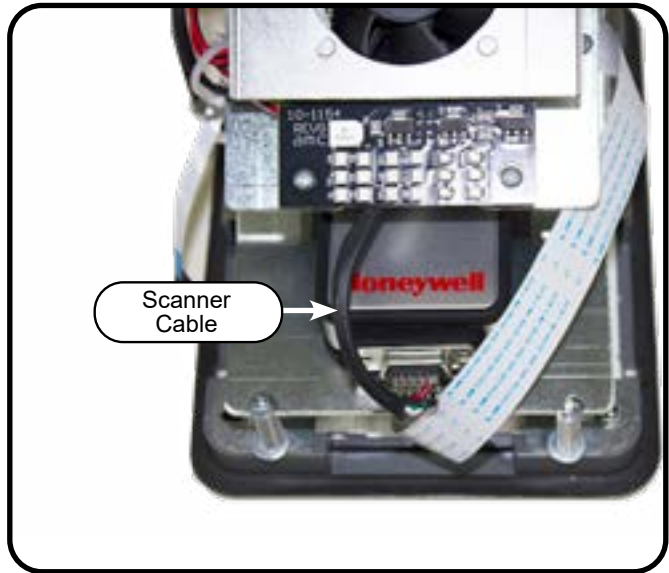


Fig. 23 TAS12 Display Ribbon Cable

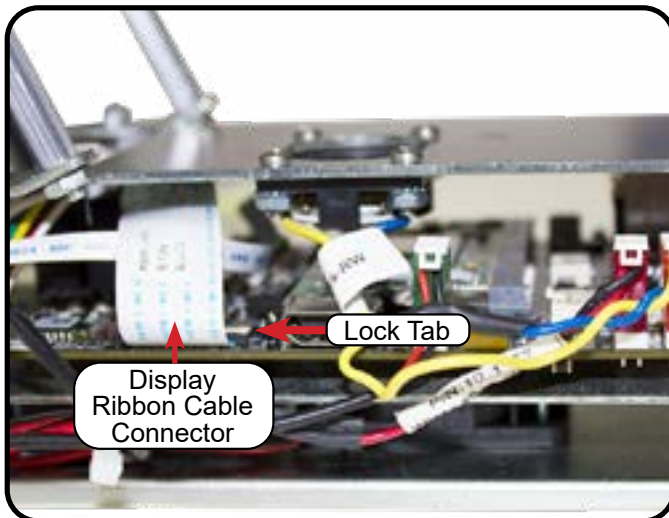
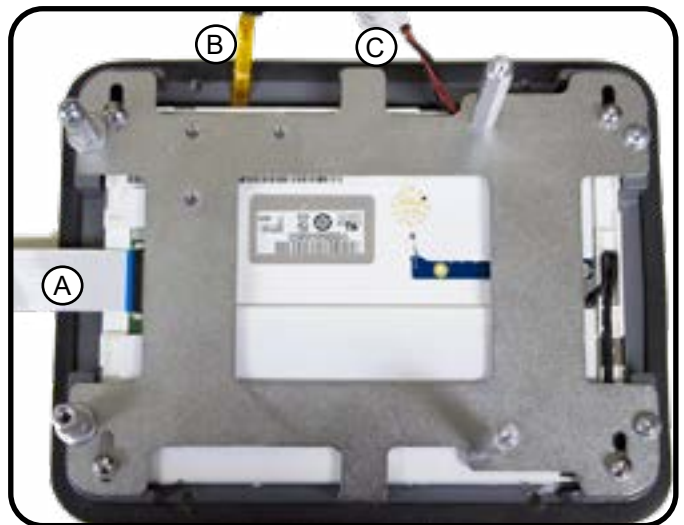


Fig. 24 TAS12 Touch Screen Board



A	Touch Screen Display Ribbon Cable
B	Touch Screen Touch Input Cable
C	Touch Screen Power Cable



Troubleshooting (cont.)

Fig. 25 TAS12 Backplane Board

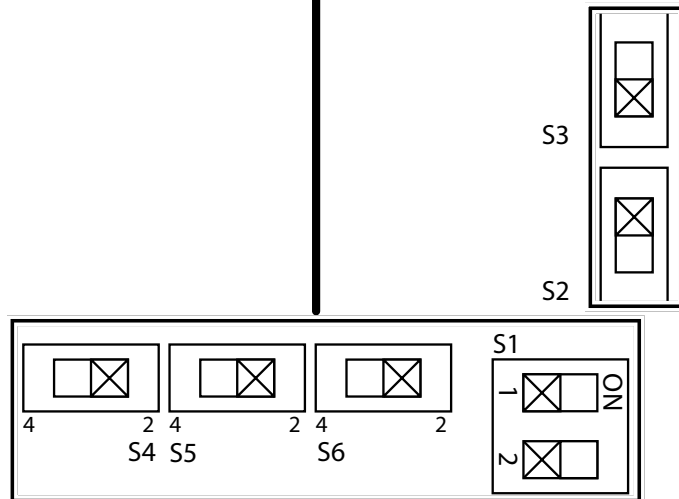
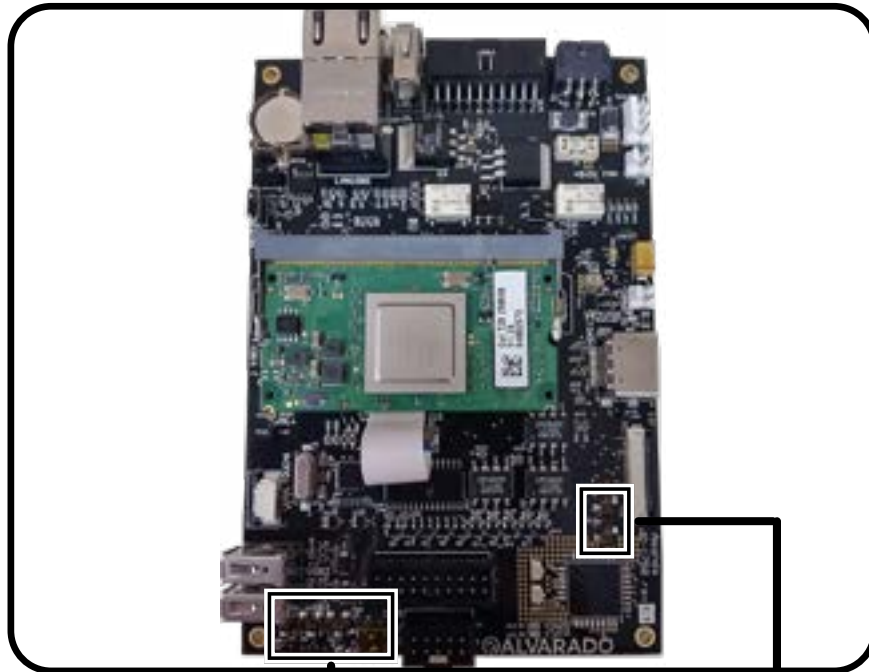
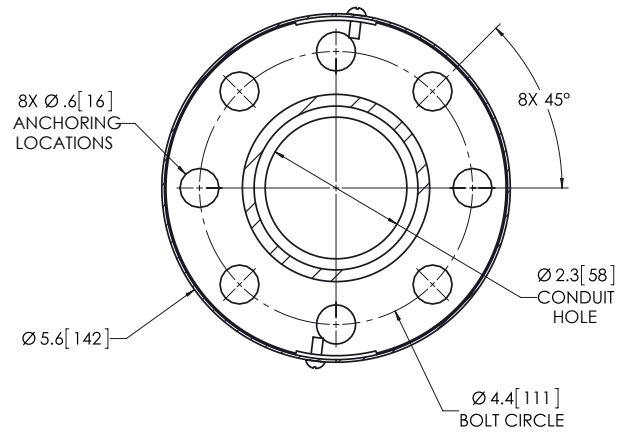
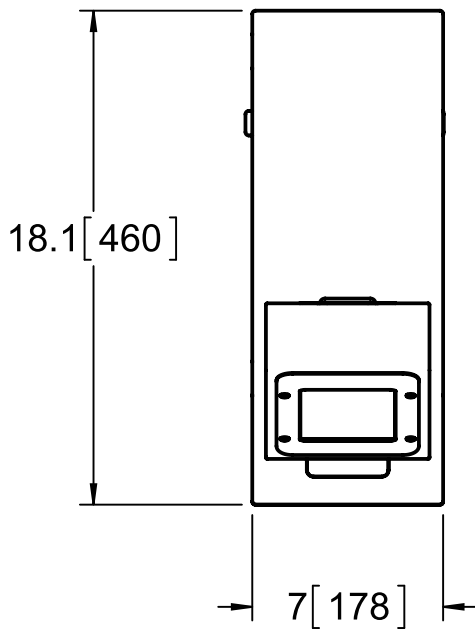
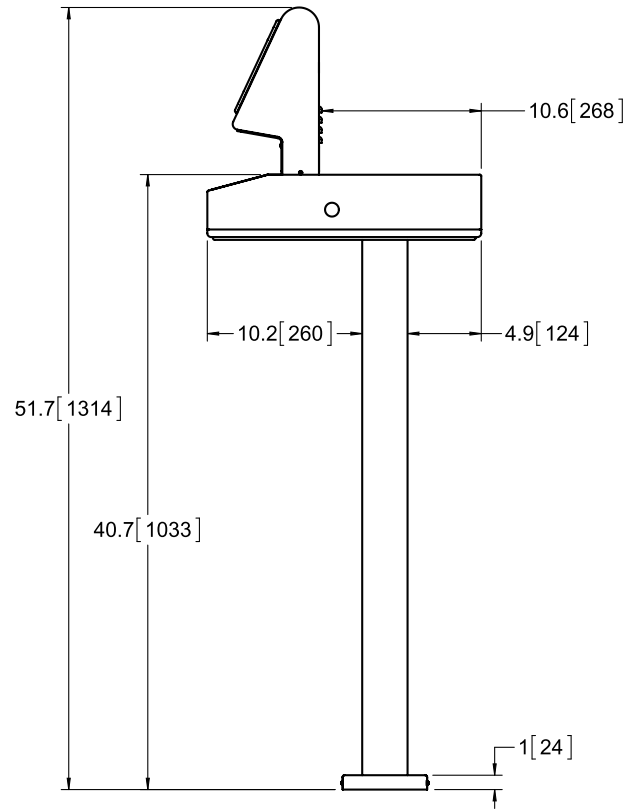
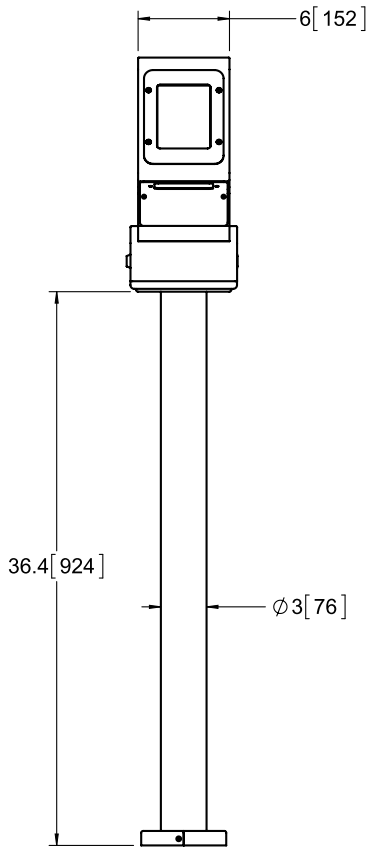


Fig. 25A Correct DIP SW2 Configuration



Appendix A - Plan, Elevation and Footprint Drawings

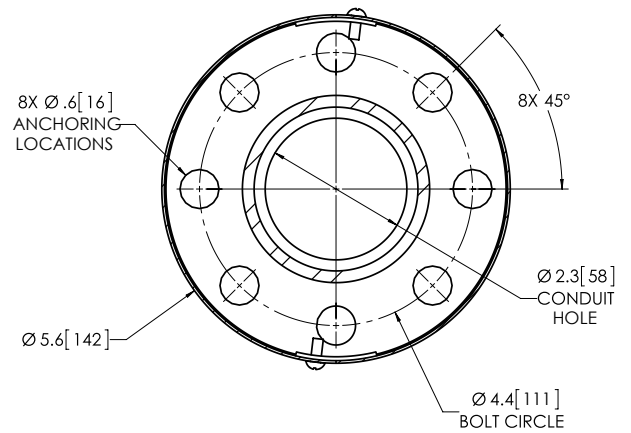
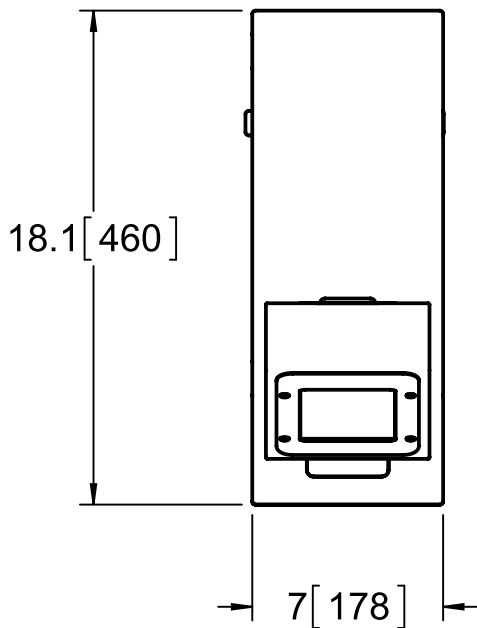
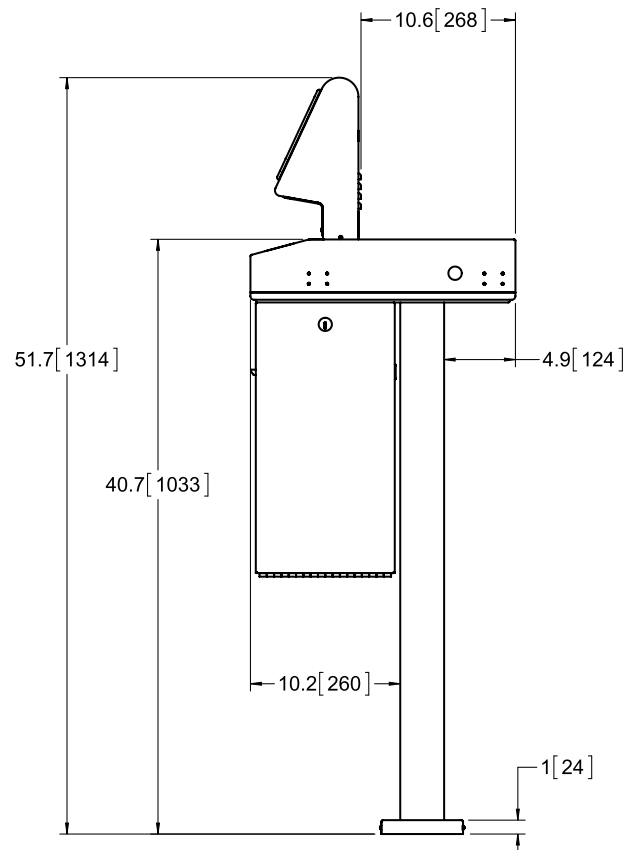
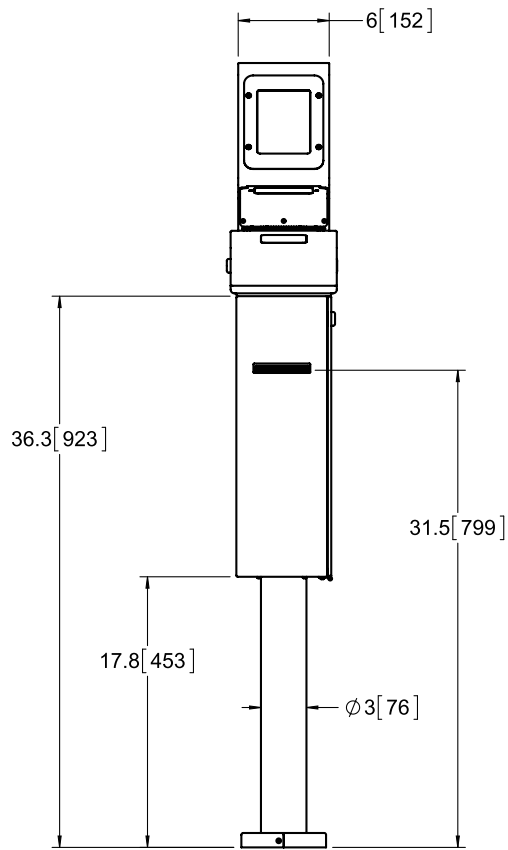
TAS12-AS1





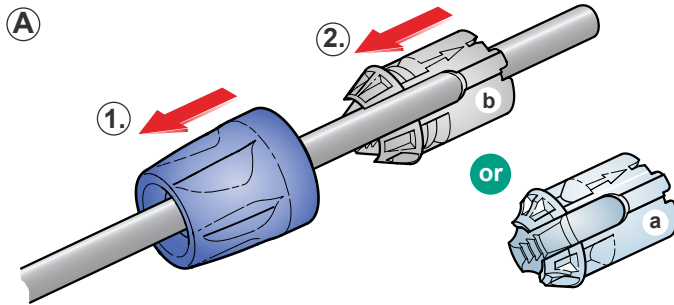
Appendix A - Plan, Elevation and Footprint Drawings (cont.)

TAS12P-AS1



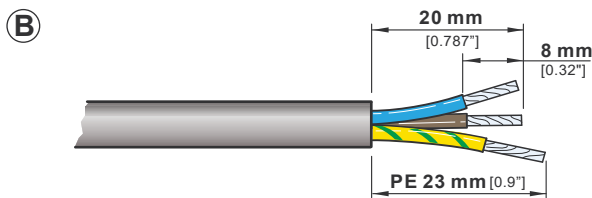


Appendix B - Assembling the Neutrik Connector



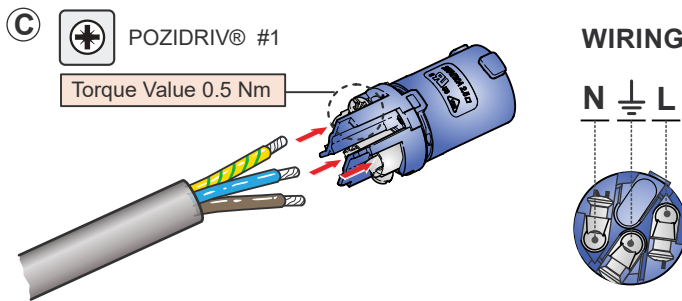
- A** Place the bushing (1) and the chuck (2) over the cable.

White chuck (a): 6.0 - 11.0 mm [0.236 - 0.433"]
 Black chuck (b): 9.5 - 15.0 mm [0.374 - 0.59"]
 VDE: 9.5 - 14.0 mm [0.374 - 0.551"]

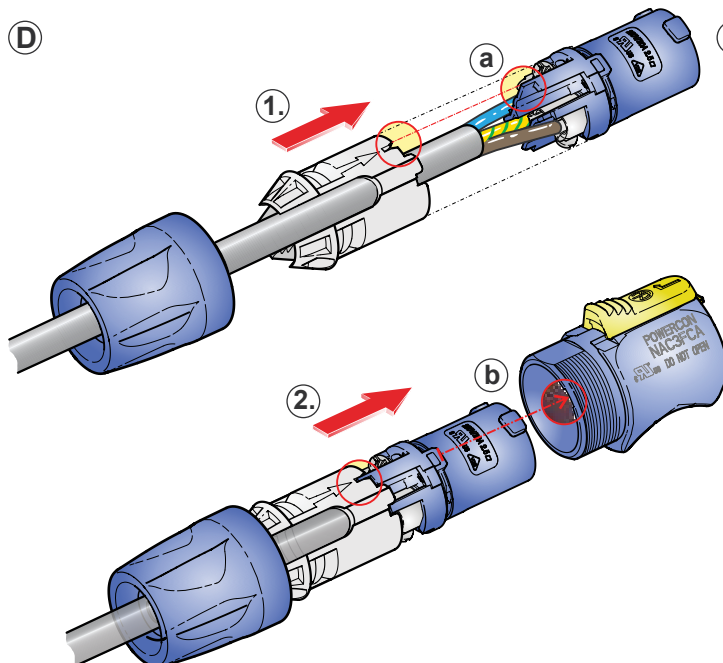


- B** Prepare the cable as shown.

Cable O.D.: 6.0 - 15.0 mm [0.236 - 0.59"]
 Wire size: 2.5 mm² (AWG 11)



- C** Insert the wire into the terminals and fasten the clamping device with a POZIDRIV® #1, max. Torque 0.5 Nm (0.37 lb-ft).



- D** Slide the insert and the chuck (1) into the housing (2).

Important:

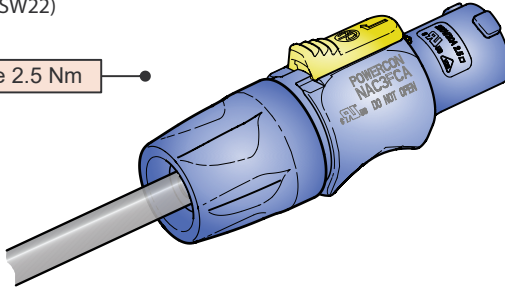
- (a) Align the chuck by positioning the nose into the recess.
 (b) Pay attention to the guiding keyway!



Appendix B - Assembling the Neutrik Connector (Cont.)

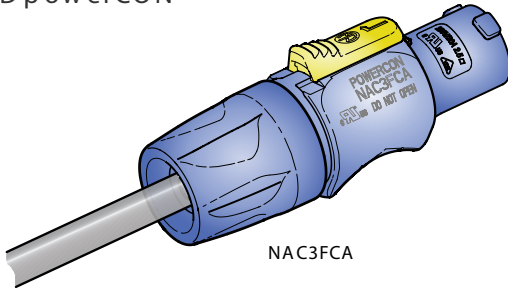
- Ⓔ  Wrench size
7/8" (SW22)

Torque Value 2.5 Nm



- Ⓔ Fasten bushing by means of a fork wrench 7/8" (SW 22), min. Torque 2.5 Nm (1.8 lb-ft).

FINISHED powerCON



NOTE: You can find more information about the Neutrik powercON NAC3FCA power connector on the manufacturer's website:

<http://www.neutrik.com/en/powercon-20a/powercon-20-a/nac3fca>

**Revision History**

Revision	Date	Author	Description
1-0	9/19/2014	A. Flores	Original document
1-1	12/2/2016	D. Bohannon	Updated for Amanda module and formatting. Added section on portable units
1-2	3/26/2020	D. Bohannon	Updated TAS12 images to reflect current design.



Alvarado Manufacturing Company, Inc.
12660 Colony Street, Chino, CA 91710
Telephone: (909) 591-8431
Fax: (909) 628-1403
support@alvaradomfg.com
www.alvaradomfg.com