

Overview

Novara AxLink Keypads can be used in both AxLink and Novara installations.

- Novara AxLink Keypads feature a 4-pin AxLink connector and Status LED.
- Novara AxLink Keypads feature one bi-directional RS-232 port.
- 8 and 16 button layouts are available. Each button has LED feedback.

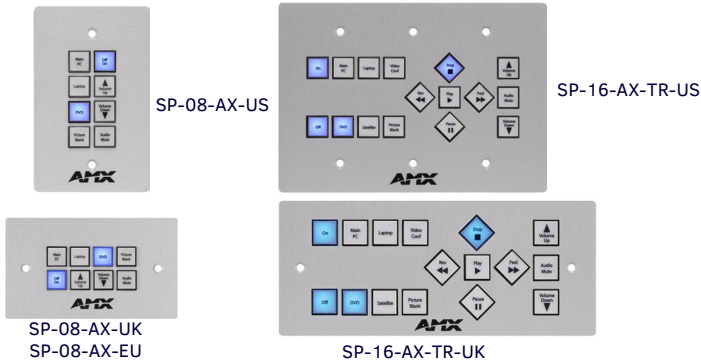


FIG. 1 NOVARA AXLINK KEYPADS

NOVARA AXLINK KEYPADS		
Name	Description	Colors/FG#s
SP-08-AX-US 8-Button Keypad	Fits 1-gang US conduit boxes. See Mounting Specifications for details.	<ul style="list-style-type: none"> • Brushed Aluminum: FG1311-08-SA • Black: FG1311-08-SB • White: FG1311-08-SW
SP-08-AX-UK 8-Button Keypad	Fits standard 2-gang UK back box sizes.	<ul style="list-style-type: none"> • Brushed Aluminum: FG1311-08-KA • Black: FG1311-08-KB • White: FG1311-08-KW
SP-08-AX-EU 8-Button Keypad	Fits standard 2-gang European back box sizes.	<ul style="list-style-type: none"> • Brushed Aluminum: FG1311-08-EA • Black: FG1311-08-EB • White: FG1311-08-EW
SP-16-AX-TR-US 16-Button Keypad	Fits 3-gang US conduit boxes. See Mounting Specifications for details.	<ul style="list-style-type: none"> • Brushed Aluminum: FG1311-16-SA • Black: FG1311-16-SB • White: FG1311-16-SW
SP-16-AX-TR-UK 16-Button Keypad	Fits standard 3-gang UK back box sizes.	<ul style="list-style-type: none"> • Brushed Aluminum: FG1311-16-KA • Black: FG1311-16-KB • White: FG1311-16-KW

Product Specifications

NOVARA AXLINK KEYPADS	
System Requirements:	Novara AxLink Keypads are only compatible with AMX NetLink Central Controllers.
Power Requirements:	<ul style="list-style-type: none"> • SP-08: Min: 80mA / Max: 130mA @ 12 VDC • SP-16: Min: 100mA / Max: 210mA @ 12 VDC
Button Layout:	<ul style="list-style-type: none"> • 8 and 16 button • Blue, backlit buttons with controllable feedback
Rear Panel Connectors:	<ul style="list-style-type: none"> • 4-pin AxLink connector/Status LED • Power connectors
Dimensions:	<ul style="list-style-type: none"> • SP-08-AX-US: 4.69" x 2.9" x 1.0" (11.9cm x 7.4cm x 2.6cm) • SP-08-AX-UK: 3.4" x 5.8" x 1.0" (8.6cm x 14.7cm x 2.6cm) • SP-08-AX-EU: 3.2" x 6.0" x 1.0" (8.0cm x 15.2cm x 2.6cm) • SP-16-AX-TR-US: 4.7" x 6.7" x 1.0" (11.9cm x 17cm x 2.6cm) • SP-16-AX-TR-UK: 3.4" x 8.1" x 1.2" (8.6cm x 20.7cm x 3.0cm)
Weight:	<ul style="list-style-type: none"> • SP-08-AX-US: 0.30 lbs (136.08 g) • SP-08-AX-UK/EU: 0.35 lbs (158.76 g) • SP-16-AX-TR-US: 0.55 lbs (249.48 g) • SP-16-AX-TR-UK: 0.65 lbs (294.84 g)
Included Accessories:	Button Kit - includes acetate sheet with 50 pre-cut button label inserts and clear plastic Key Caps
Other AMX Equipment:	External 12V Power Supply (57-1301-SA)
Certifications:	<ul style="list-style-type: none"> • IEC 60950 • FCC/CE • RoHS compliant

Mounting Specifications

Refer to the Product Specifications table above for dimensions. Dimensional drawings are available in the *Novara ControlPads and Keypads Instruction Manual*.

Minimum Internal Clearance for US Conduit Boxes

To ensure a proper fit with sufficient clearance, US-style Novara Keypads require the following minimum internal dimensions within the conduit box:

- US 1-Gang (HWD): 2.9" x 2.1" x 1.6" (7.36 cm x 5.33 cm x 4.06 cm)
- US 3-Gang (HWD): 2.9" x 5.6" x 1.6" (14.22 cm x 5.33 cm x 4.06 cm)

These minimum interior dimensions will maintain a minimum .050" (1.27 cm) clearance around the Novara unit.

Wiring and Connections

AxLink Keypads - Rear Panel Connectors

FIG. 2 shows the rear panel connectors of the Novara AxLink Keypads, and indicates a typical installation:

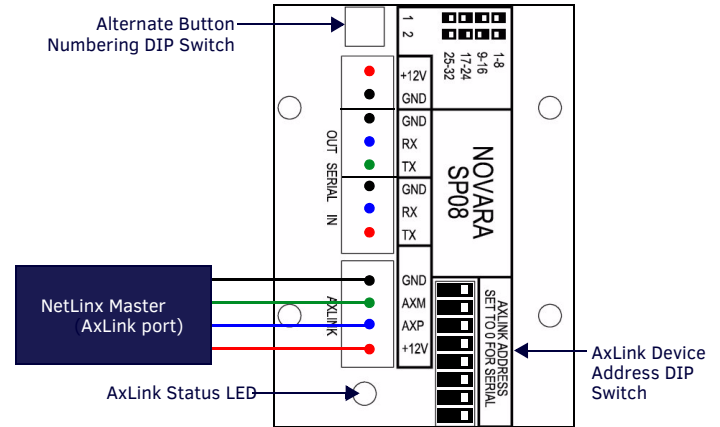


FIG. 2 NOVARA AXLINK KEYPADS - REAR PANEL CONNECTORS

NOTE: The rear panel connector layout is identical for all Novara AxLink Keypads.

Power Supply Connector

Novara AxLink Keypads can be powered by the AxLink bus. Optionally, an external 12V power supply can be used.

CAUTION: If using an external Power Supply, be aware that the Power Supply polarities on Novara Keypads are opposite to that of other AMX equipment.

- Connect the White strip lead to the +VE terminal on the Keypad
- Connect the Black strip lead to the -VE terminal

Daisy-Chaining Keypads (AxLink only)

To daisy chain the Keypads via AxLink, both Keypads should be connected to the AxLink, as shown in FIG. 3.

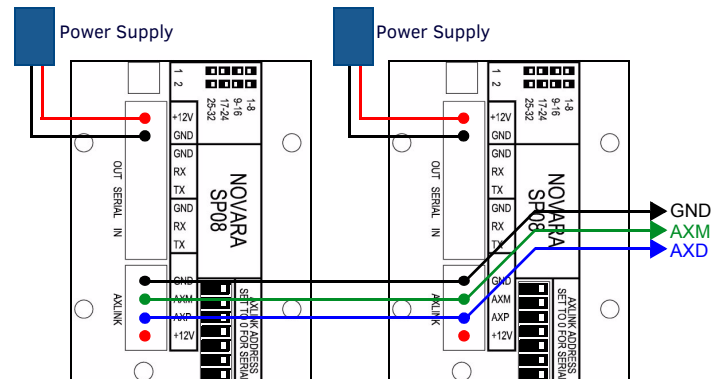


FIG. 3 DAISY-CHAINING KEYPADS

- Use screened cable to link to units.
- Daisy-chaining via Serial connection is not supported.

Button Layout

FIG. 4 indicates the button layout for 8 and 16 button Keypads:

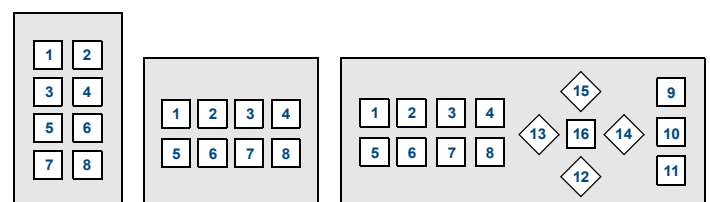


FIG. 4 KEYPADS BUTTON LAYOUT

- 8-Button Keypads can be configured for button numbers 1-8, 9-16, 17-24, or 25-32.
- 16-Button Keypads can be configured for button numbers 1-16 or 17-32.

Setting DIP Switches to Assign Alternate Button Numbering

Use the 2-position DIP Switch on the rear panel of the Keypads to specify alternate button numbers for each Keypad, for cases in which you want to avoid having multiple Keypads in the same system using the same button numbers.

NOTE: Multiple Keypads are allowed to share identical button numbers.

Alternate Button Numbering: 8-Button Keypads

The DIP Switch settings for 8-button Keypads are described in FIG. 5:

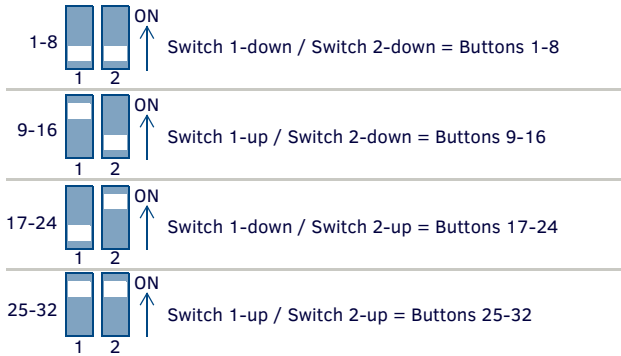


FIG. 5 DIP SWITCH SETTINGS - ALTERNATE BUTTON NUMBERING: 8-BUTTON KEYPADS

Alternate Button Numbering: 16-Button Keypads

The DIP Switch settings for 16-button Keypads are described in FIG. 6:

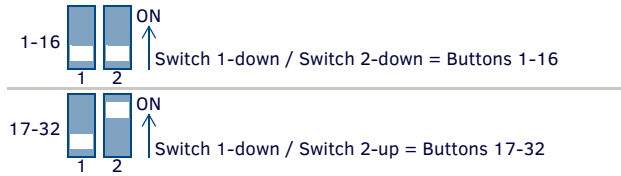


FIG. 6 DIP SWITCH SETTINGS - ALTERNATE BUTTON NUMBERING: 16-BUTTON KEYPADS

Button Labeling

Novara ControlPads and Keypads come with a set of clear plastic Key Caps, which are designed to fit tightly over the pushbuttons, and allow you to place a label on each button according to the requirements of your particular installation.

Novara ControlPads and Keypads also come with a pre-printed acetate sheet with a range of 50 (pre-cut) button label inserts. The button labels provided will accommodate most installations, but it is also possible to print your own button labels on acetate for custom button labeling.

Installing Acetate Button Labels and Key Caps - READ THIS FIRST!

- Punch out the desired Button Label from the included acetate sheet.
If you have printed your own custom button labels on acetate, cut each button label to fit inside the Key Caps.
 - Custom button labels must be cut to a **1.20cm (0.472") square** to fit securely inside the Key Caps.
 - The thickness of the acetate used must not exceed **.004" (0.10 mm)**.
- Place the Key Cap face-down, and insert the Button Label into the bottom of the Key Cap (FIG. 7).

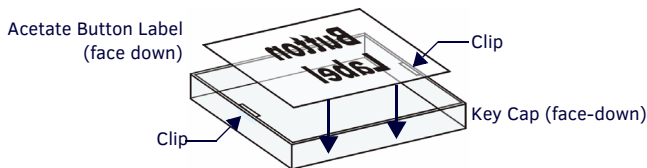


FIG. 7 PLACING A BUTTON LABEL INSIDE A KEY CAP

- Orient the Button Label inside the Key Cap so that the two clips are located on the left and right sides of the readable text on the Button Label, as indicated in FIG. 7.
 - Be sure to place the Button Label face-down inside the Key Cap (see FIG. 7), otherwise the label will be seen in reverse once the Key Cap is installed.
- Install the Key Cap on the pushbutton (FIG. 8):

NOTE: Verify that the vertical orientation of the Button Label is correct relative to the keypad.

- Gently press the bottom of the Key Cap (no clip) onto the pushbutton. Do not allow the clips on either side to engage.

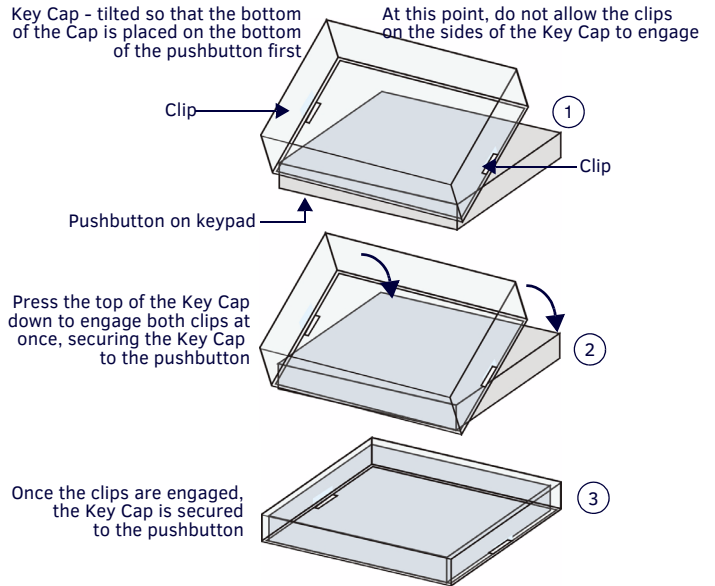


FIG. 8 PLACING A BUTTON LABEL INSIDE A KEY CAP

- With the bottom of the Key Cap secured, gently press the top of the Key Cap. This action will engage both clips simultaneously, and the Key Cap will snap into place on the push button.

NOTE: Be careful to follow these procedures closely - the bottom of the Key Cap must be installed on the pushbutton before the Key Cap clips engage, or there is a risk of the button being misaligned.

Removing the Key Caps requires additional steps - refer to the Novara ControlPads and Keypads Instruction Manual for details on Replacing Button Labels/Key Caps.

Setting the AxLink Address DIP Switch

The AxLink Device Address DIP switch determines whether this Keypad will function as an AxLink device or as a Serial device.

If the DIP Switch is set to anything other than zero, this Keypad will be assigned an AxLink device address based on the switch settings.

Setting the AxLink Device Address

- If connected, disconnect the power supply.
- Locate the 8-position Device DIP switch on the rear panel.(FIG. 9).
- Set the DIP switch according to the switch values shown below.

Switch	1	2	3	4	5	6	7	8
Value	1	2	4	8	16	32	64	128

The device number is set by the total value of DIP switch positions that are ON (up). As an example, the first DIP switch in FIG. 9 defines device number 129 (1+128=129).

If you later change the device number, remove and reconnect the AxLink power connector to enter the new device number into memory. Use AMX's Dip Switch2 application (available for download from www.amx.com) to assist in calculating Dip switch position values.



FIG. 9 EXAMPLE DEVICE DIP SWITCHES

Programming AxLink Keypads

The SP-08-AX and SP-16-AX AxLink Keypads are typically programmed using the standard Netlinx keypad device format (like any other keypad).

- These keypads issue a Push, and feedback is controlled by turning the channel on and off.
- When using it as a standard NetLinX device there is no special or device specific programming to deal with.
- The SP-08-AX and SP-16-AX AxLink Keypads are programmed using the standard Netlinx keypad device format.

Additional Documentation

Refer to the Novara ControlPads and Keypads Instruction Manual (available at www.amx.com) for additional installation details, configuration and instructions.

