

Overview

The HPX-U100-2BTN HydraPort 2-Button Keypad Module (FG554-02) with LEDs is a HydraPort module that enable users to switch to a specific input in Solecis digital switcher applications, or perform an action when configured for I/O operation with AMX master controllers, and DVX presentation switchers. The buttons can be illuminated when it is active, making it easy to determine which device's content is being shown on the display at any given time. Multiple modules can be stacked to accommodate a large number of devices. An optional Accessory kit (FG554-08) provides colored button inserts and similarly colored tags that fit onto the end of a cable where it plugs into the device, making it easy to identify which button selects an input.

The HPX-U100-2BTN HydraPort Two-Button Module (FIG. 1) is designed to be used in conjunction with the HPX-600/900/1200/1800 or HydraPort Touch (7"/10") Connection Ports and takes up 1 HydraPort unit.

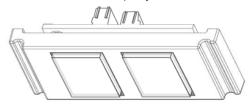


FIG. 1 HPX-U100-2BTN TWO-BUTTON MODULE

Product Specifications

HPX-U100-2BTN SPECIFICATIONS				
Dimensions (HWD)	 25mm x 52mm x 25mm (0.98" x 2.05" x 0.98") 			
Weight:	• 0.1 Kg (3.53oz)			
Enclosure:	Matte black finished face plate (Polycarbonate plastic).			
Front Panel:	Two push-buttons with LED backlight.			
Rear Connections:	 1 x 6 position Phoenix screw-terminal for I/O operation 1 x 5 position Phoenix screw-terminal for Selector operation 			
Input Voltage	 8-15 VDC on the J2 Standard I/O "+12V" input operates LEDs in I/O configurations with NX Master or DVX presentation switcher 8-15 VDC on the J1 Solecis Only "*" input for source selector configuration with Solecis digital switchers 			
Compatibility:	HydraPort Base Assemblies: • HPX-600 • HPX-MSP-7 • HPX-900 • HPX-MSP-10 • HPX-1200 • HPX-1800			
Included Accessories:	 Installation Guide Sheet of 70 preprinted button labels 			
Optional Accessories:	 Optional accessory kit (FG554-08) provides colored button inserts and similarly colored cable tags 			

Applications

The 2-Button Keypad Module operates as either an I/O device to control a programmed event with AMX Masters and DVX presentation switchers, or as a video source selector with AMX Solecis digital switchers. Refer to the following sections for each application.

1. Master/DVX Connection Guide

Connecting to an AMX NX Master, or a DVX presentation switcher is completed using the J2 6-pin screw-down terminal on the back of the 2-Button Keypad Module (FIG. 2).

Use cable tie to secure wire bundle

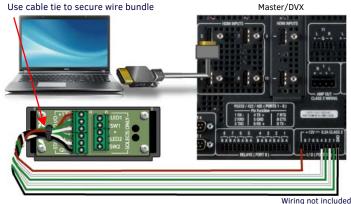


FIG. 2 WIRING I/O OUTPUTS TO NX MASTER OR DVX PRESENTATION SWITCHER

The 2-Button Keypad Module connects to an AMX DVX Master or NetLinx Controller using the GPIO interface as outlined in FIG. 2. The GPIO port delivers Power and Ground, and receives switch inputs (set/release). This solution requires NetLinx programming to correlate a GPIO input event to switch to a predetermined DVX port.

2. Solecis Digital Switcher Connection Guide

Connecting to an AMX Solecis digital switcher is completed using the J1 5-pin screwdown terminal on the back of the 2-Button Keypad Module (FIG. 3).

Use cable tie to

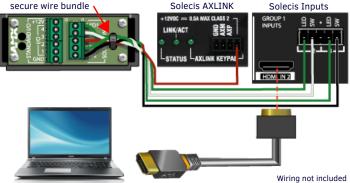


FIG. 3 WIRING TO A SOLECIS DIGITAL SWITCHER EXAMPLE

The 2-Button Keypad Module connects to the AMX Solecis front AXLINK port for power as outlined in FIG. 3. Output ports SW1 and SW2 are wired to the corresponding Solecis rear "SW" input that has a MyTurn Ready Cable connected to it. This solution can be implemented without NetLinx programming since the SW port is directly connected.

Optional Accessory Kit

The Optional Accessory kit (FG554-08) includes eight colored bands and eight matching colored inserts that are inserted into the push buttons of the 2-Button Keypad Module. This solution enables users to connect to their Hydraport cable type and just push the matching colored button to connect and display content (FIG. 4).

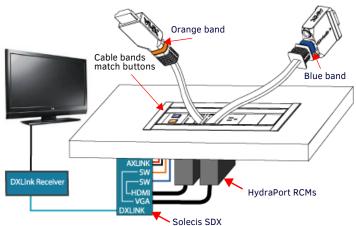


FIG. 4 2-BUTTON KEYPAD MODULE OPERATIONAL DIAGRAM SHOWN WITH SOLECIS SWITCHER The button inserts must be installed prior to the into the 2-Button Keypad Module installation

Installing Optional Colored Bands

Stretch the (optional) colored bands over the source end of the cables until they 1. rest in the over mold channel (FIG. 2).

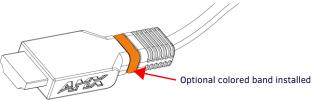


FIG. 5 COLOR BANDING MYTURN READY CABLES (Optional accessory kit FG554-08)

Installing Button Inserts

To Install the (optional) colored button inserts or the included preprinted button inserts, remove the PCB from the back of the 2-Button Keypad Module:

1. Remove the screws at each corner of the PC under the 2-Button Keypad Module.



FIG. 6 2-BUTTON KEYPAD MODULE PCB REMOVAL

Lift off the PCB to expose the buttons latched into place in the housing (FIG. 7).

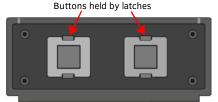


FIG. 7 EXPOSING BUTTONS

2.

3. Using a finger, lift one of the latched sides of the button backer to tilt it up and get it past the latch (FIG. 8). The silicone pad may separate from the backer, just push it back inside.

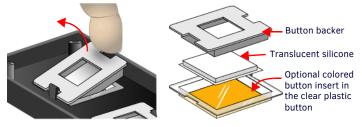


FIG. 8 INSTALLING BUTTON INSERTS

4. The clear plastic button is now exposed. Place the (optional) colored button insert or preprinted button insert inside and reassemble. Make sure the preprinted button insert has the lettering facing down to show properly when reassembled.

Installation

Wire the 2-Button Keypad module for the desired interface using either the J1 or J2 connector as defined in the following sections:

Caution: The HPX-U100-2BTN can only be connected to one device: An AMX master controller or DVX presentation switcher (Standard I/O via J2), or a Solecis digital switcher (Solecis Only via J1). Connection to both simultaneously can damage the 2-Button Keypad Module and/or device inputs.

Master/DVX Wiring

1. Wire the J2 connector per the table below before installing the 2-Button Keypad Module in the chassis.

J2 I/O CONNECTIONS			PIN OPERATION
		+12V	Receives the +12 VDC input (8-15V) for LED operation from the GPIO port.
	Õ	Pin 1	Provides a push and release ground closure operation for one of the buttons to a GPIO input.
	O	Pin 2	Control for LED related to button on Pin 1. Must be turned on using NetLinx programming through the GPIO port.
		Pin 3	Provides a push and release ground closure operation for the opposite button to a GPIO input.
	O	Pin 4	Control for LED related to button on Pin 3. Must be turned on using NetLinx programming through the GPIO port.
	\bigcirc	GND	Receives the ground reference for I/O operation. from the Master/DVX GPIO port.

2. Once wires are connected, use a cable tie through the holes in the PCB to secure the cable and provide strain relief (FIG. 2).

Solecis SDX Wiring

1. Wire the J1 connector per the table below before installing the 2-Button Keypad Module in the chassis.

J1 SOLECIS CONNECTIONS			ECTIONS	PIN OPERATION
			LED1	The Solecis LED output provides a Ground Closure on this pin for LED operation on the first button.
2	O.		SW1	Provides a push and release ground closure for button 1 to switch video inputs to the matching source input.
	Ø		*	+12VDC (8-15V) Voltage provided by Solecis from the AXLINK output to power LEDs.
	\bigcirc		LED2	The Solecis LED output provides a Ground Closure on this pin for LED operation on the second button.
	,O,		SW2	Provides a push and release ground closure for button 2 to switch video inputs to the matching source input.

2. Once wires are connected, use a cable tie through the holes in the PCB to secure the cable and provide strain relief (FIG. 3).

Insert the 2-Button Keypad Module into the HydraPort Base

The following abbreviated instructions describe installing the HPX-U100-2BTN module into HydraPort HPX-600/900/1200/1800 or HydraPort Touch (7"/10") Connection Ports. For full detailed instructions on installation, refer to the product manuals available to view or download from www.amx.com.

Caution: Only use a manual screwdriver for the mounting instructions in this document. Over-tightening the screws can hinder performance or damage the product.

Note: The HydraPort Base Assembly must be un-mounted from the surface before the HPX-U100-2BTN module can be installed:

1. Orient the module relative to the HydraPort base assembly so that the Module's faceplate is facing up, towards the mounting surface (FIG. 9).

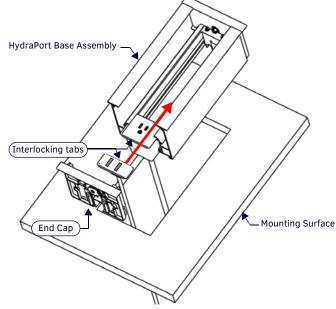


FIG. 9 INSTALLING THE HPX-U100-2BTN MODULE

 Align the Mounting Notches on the module with the Mounting Rails on the HydraPort base.

Note: Module faceplates are notched in a "tongue and groove" type fashion to ensure that all modules are oriented correctly in the HydraPort. Note the orientation of the notched faceplate on each module before sliding the module(s) into the HydraPort assembly.

- 3. Slide the module into position.
- 4. Install any remaining modules into the HydraPort base.

Additional Documentation

Refer to the catalog page on $www.amx.com\ (Dealer\ Site)$ for additional product documentation.



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