

OVERVIEW

The Pathway eDIN Analog-to-DMX Interface provides the ability to convert analog 0-10VDC signals to DMX512 protocol. The analog inputs may also be used as dry contact closure inputs, either triggering a DMX channel to full, or to recall up to 24 presets. The DMX input may be merged with the analog input signal or with the preset recall. The DIN form factor makes installation in your own enclosures or cabinets fast and easy.

CONNECTIONS

The eDIN #1006 Analog-to-DMX Interface feature pluggable terminal blocks that may be removed from the board to facilitate installation. Make the following connections, WITH THE POWER TURNED OFF:

POWER

This interface is designed to run on a voltage range of 9-30 VDC, drawing no more than 500mA. Observe correct polarity when connecting to V+ and V- poles. A second set of terminals is provided on the same connector to daisy-chain power to other installed eDIN modules. A grounding terminal is provided for optional connection to Earth Ground.

DMX512

DMX connections consist of a shield wire and one or two data pairs. DMX OUT is the processed output of the interface. DMX IN is optional, and normally comes from a control console, architectural controller or the output of another eDIN module. This DMX input will be merged with the analog inputs, or is used as a source of levels when recording presets. DMX THRU daisy-chains the original DMX IN signal to other eDIN modules or other DMX equipment.

Connect DATA+ and DATA-, to D1+ and D1- (and to D2+ and D2-, if second pair is present) observing the same polarity convention throughout the system. Connect the cable shield or common to the SHLD COM terminal.

ANALOG / CONTACT CLOSURE INPUTS

The #1006 Interface supports 24 discrete inputs that can be configured as either analog or contact closure inputs. The COM (common) terminal must be used as a signal reference, regardless of input configuration. Analog inputs must be 0 to +10 volts DC with respect to COM. Contact inputs are simply maintained or momentary dry contact closures between COM and the individual input.

STATUS INDICATORS

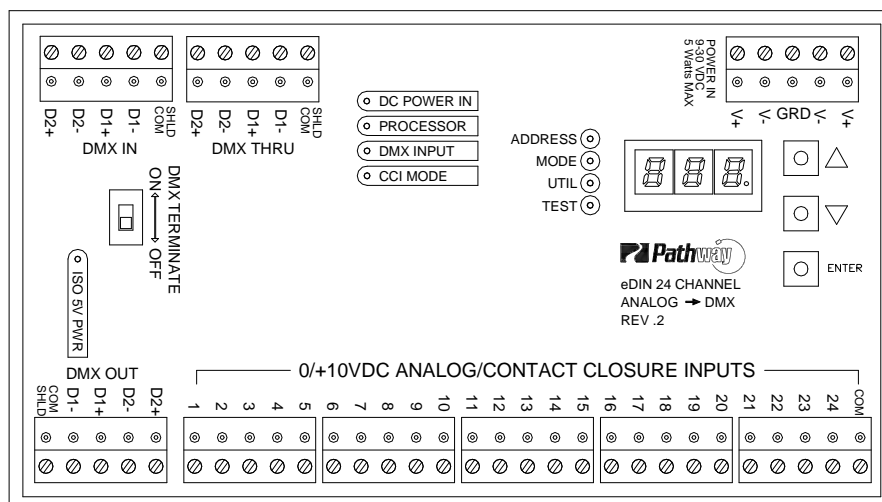
- POWER IN** **Blue.** Glowing steadily indicates power supply OK; off indicates no power.
- PROCESSOR** **Green.** Glowing steadily indicates processor is OK; off when POWER IN is lit indicates processor failure.
- DMX INPUT** **Amber.** Glowing steadily indicates data present; off indicates no signal present.
- CCI MODE** **Red.** Glowing steadily indicates contact closure input mode is in effect.
- MENU FUNCTION** **Amber.** Indicates the function associated with the numeric display, e.g. ADDRESS.

CONFIGURATION

Press the ▲ or ▼ buttons to select the desired function, as indicated by a lit LED next to ADDRESS, MODE, UTIL, or TEST. Once chosen, press and hold the ENTER button until three dots appear across the bottom of the display. The chosen function is now editable. When done editing, press ENTER. The dots will disappear and the new value will be saved. The unit is ready for operation.

SET DMX ADDRESS

Once in ADDRESS mode, press ▲ or ▼ to change the start address to the desired value. Inputs will be numbered sequentially starting from this DMX slot. Valid start address ranges from 1 to 512. Press ENTER to save the address.



SET OPERATING MODE

Once in MODE, operating modes are selected the same way as the DMX start address.

Mode 1: HTP (Highest Takes Precedence) between Analog and DMX Inputs

The highest level present on the analog input or the DMX input for a given control channel is the level that will be present on the DMX output.

Mode 2: Analog Takes Precedence (Analog Priority)

If a given analog input's level is 4% or greater, the DMX output for that channel will be the analog input level and the corresponding DMX input value will be ignored. If the analog input's level is below 4%, the DMX input's level will determine the output level for that channel.

Mode 3: DMX Takes Precedence (DMX Priority)

When a DMX input data stream is present, the DMX input levels will determine the DMX output levels and all analog input levels will be ignored.

Mode 4: Contact Input Mode

When a given contact input is closed (input channel shorted to COM), the corresponding DMX output channel level will be 100% (hex FF, decimal 255). When the contact input is open, the corresponding DMX output channel level will be determined by the DMX input level, if present.

Mode 5: Preset Recall Mode

When a given contact input is closed momentarily (input channel shorted to COM), the corresponding stored preset will be activated at a fade rate of 5 seconds. All 512 possible DMX channel values can be stored for each preset. The highest level present on the stored preset or the DMX input for a given control channel is the level that will be present on the DMX output.

Mode 6: DMX Takes Precedence Over Presets

When a DMX input data stream is present, the DMX input levels will determine the DMX output levels and all stored preset levels will be ignored.

UTIL MODE

UTIL has two settings: the first shows the input number associated with the current active preset. The second accesses preset recording—see PRESET RECORD.

TEST MODE

press and hold ENTER until the dots appear, then use the ▲ or ▼ buttons to select an input (range 1 to 24). Press ENTER again to display the selected input's present level (range 0 to 100%) when operating in analog input mode. When in contact input mode, the display will show the state of the selected input (0 or 100).

TEST is Operating Mode dependent and will "ignore" DMX control while in edit mode.

PRESET RECORDING

Press the ▲ or ▼ button until UTIL is reached and the screen reads REC. Press ENTER until the dots appear. Use the ▲ or ▼ buttons to select the desired preset number. Connect incoming DMX to the DMX IN terminal and verify the look is correct. Press ENTER to capture and store the incoming DMX as a preset in the chosen location. Repeat for each additional preset to be stored.

DMX TERMINATE

DMX rules require that devices terminate the DMX line unless daisy-chained. If there is no connection to the DMX THRU terminals, the DMX Terminate switch should be ON. If there are other devices connected to the DMX THRU terminals, the DMX Terminate switch should be OFF on all devices except the last device in the daisy chain, which should have its terminate switch ON.

SELF-TEST

Press any button while turning power on to enter self-test. All LEDs will flash sequentially. The display will cycle 0 through 9, then show the serial number and firmware version. Cycle power to end self-test.

RDM SUPPORT

This eDIN Interface supports ESTA 1.27 RDM (Remote Device Management) via the DMX INPUT port on the module. RDM functionality allows the user to remotely "discover" the module and set its DMX address and operating modes. In addition, the #1006 will report input DC voltages as a sensor property.

SPECIFICATIONS

POWER SUPPLY:	9-30VDC, 500mA
INPUT SIGNAL:	USITT DMX512A, RDM
OUTPUT SIGNAL:	USITT DMX512A
ANALOG/CONTACT INPUTS:	DO NOT EXCEED 10VDC INPUT when set as analog inputs. DO NOT CONNECT VOLTAGE SOURCES when set as contact inputs.

EXCEEDING THESE RATINGS MAY RESULT IN PERSONAL INJURY AND/OR EQUIPMENT DAMAGE TO THIS AND OTHER CONNECTED DEVICES.

CONNECTIONS: Two piece compression screw terminals, accepts AWG 24 to 14