ST-DIO588

CueStation Digital IO Module

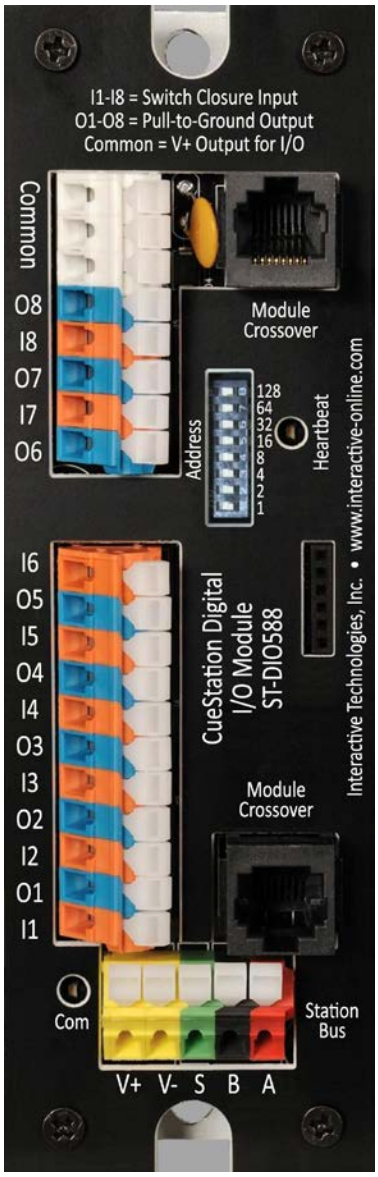
Overview

The CueStation Digitial I/O Module adds 8 contact closure inputs and 8 digital low-voltage outputs to the CueStation bus. These I/O signals can be used to interface with external devices such as contact closures, puchbuttons, keyswitches, LED indicators, relays and more.

The I/O Module uses the 5-Wire CueStation Bus for maximum reliability and network cable distances. Each module also includes two RJ-45 jacks for easily attaching multiple modules together using short CAT-5 type jumper cables. Each Input and Output on the Module has a simple spring-terminal for attaching discrete wiring.

The Module is furnished in a DIN-Rail compatible enclosure. The DIN-Rail clips can be removed to facilitate surface mounting the Module with two screw holes. The PCB may also be removed from the housing for other custom installations.

Typical applications include architectural lighting in commercial and residential buildings, building management, entertainment lighting, trade shows, themed entertainment, museums, abd others.



Features

- Adds 8 Contact Closure inputs and 8 Digital Outputs to a CueStation system
- Uses the CueStation 5-Wire Bus
- Spring Terminals for easy wiring
- RJ-45 Crossover Jacks for linking multiple modules
- DIN-Rail, Surface Mount or Loose PCB mounting

Connection Details

Common Terminals: The 3 Common terminals provide +24VDC output (when the DIO-588 is powered from a 24VDC input). The power supply circuit in the DIO-588 takes 24VAC or 24VDC and rectifies it to provide a 24VDC output on the Common terminals. If AC is used to power the DIO-588, then the Common output will be higher (as high as +33VDC, since this is the peak rectified voltage of a 24VAC sine wave).

Output Terminals: The 8 Output terminals provide a “pull-to-ground” circuit similar to how the CueServer outputs work. When the output is “on”, it connects the output terminal to ground. When the output is “off”, the terminal is left floating (which does not complete a circuit).

Some devices may be effected by the relatively high 24VDC provided by the Common output. They may need to be exchanged for appropriate device, or a resistor of appropriate value can be put in line with the device. For example, a resistor would need to be used with a 5V coil relay used on the 24VDC Common line, or a 24V coil relay would need to be used.

Input Terminals: The 8 Input terminals require a positive voltage to detect a switch closure. The minimum switch input voltage for a positive “closure” detection is 20 VDC. This means that if the Common is used to provide voltage to contact closures, the output of Common must be above 20VDC before the inputs will work.

Interactive Technologies, Inc.

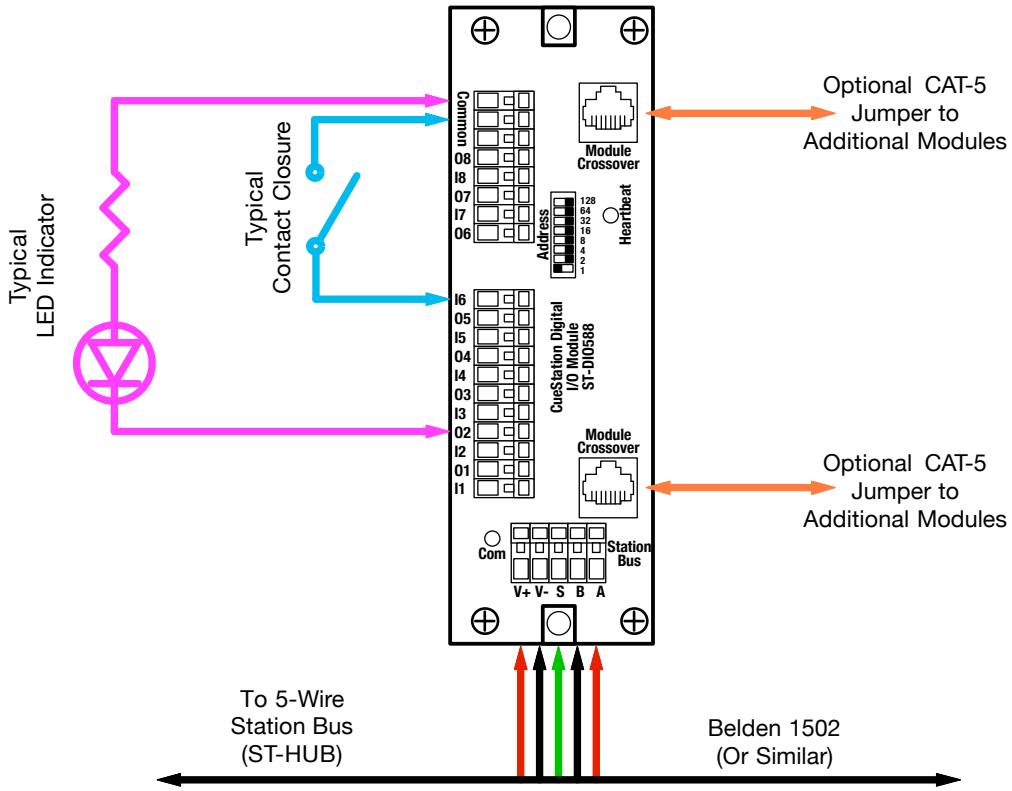
5295 Lake Pointe Center Drive, Suite 100
Cumming, GA 30041 USA
678-455-9019 (Phone)
678-455-9071 (Fax)

Catalog #:	**Project:**
Prepared by:	**Date:**

Specifications

Feature	Detail	Description
Network	Technology	CueStation 5-Wire
Power	Input Voltage	24VDC (provided by CueStation Bus)
	“Common” Terminals	24VDC Output
Contact Closure Inputs	Quantity	8
	Type	Voltage Detect
	Threshold	20VDC
Digital Outputs	Quantity	8
	Type	Pull-to-Ground
Mechanical	Housing Material	ABS Plastic
	Length	6.7” (171 mm)
	Width	2.1” (54 mm)
	Height	1.7” (44 mm) (with DIN-Rail Clips)
		1.0” (25 mm) (without DIN-Rail Clips)
Environmental	Operating Temperature	-20 to 70 °C
	Storage Temperature	-30 to 85 °C
	Humidity	5 to 95%, non-condensing

Typical Wiring Diagram



Ordering

ST-DIO588	CueStation Digital I/O Module

Dip Switch Settings

The Address Dip Switches select which station number the Digital I/O Module will respond to. Set switches to ON to choose the station address in Binary.

For example, Station #7 can be chosen by turning on switches 1, 2, & 4.

Valid Station Addresses range from 1 to 64.

Please note that no two stations on the same Hub can have the same Station Address.

⚠ Important Note

The CueStation Hub must be powered by 24V (AC or DC) for connected ST-DIO-588 modules to function properly. If the Hub is powered by 12V, the ST-DIO588 will not operate as expected.