

### Overview

Smart modules add additional functionality and connectivity to select CueServer 3 models by plugging them into an available module slot.

Use **SM-DMX** modules to add bi-directional Isolated DMX-512 ports. Seven different module varieties are available in different combinations of 5-Pin XLR, 3-Pin XLR, RJ45, Terminal Block, etc. Each module is software definable as either a DMX Input or DMX Output.

Additionally, **SM-DMX** modules also support alternate protocols including Station Bus and RS-485 serial. In Station Bus mode, these modules allow for direct connection of 5-Wire CueStation button stations (such as Mystique or Ultra stations). In RS-485 mode, the module can be used to communicate via RS-485 serial protocols.

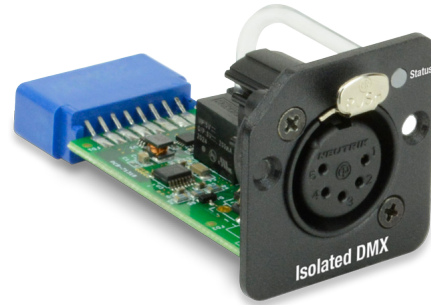
The **SM-DMX** modules are fully isolated and protected to help prevent failures caused by ground loops, voltage mismatches, power surges or electrostatic events. Also, an LED indicator on the module provides at-a-glance operational status.

### Features

- Full galvanic isolation of the port for best immunity to ground loops and voltage mismatches
- High ESD protection
- Software configurable as a DMX input or output
- Additional Station Bus and RS-485 protocols supported
- Built-in status indicator LED

### Ordering

<b>SM-DMX-X5F</b>	<b>5-Pin XLR Female DMX Smart Module</b> <i>Includes genuine Neutrik® XLR jack</i>
<b>SM-DMX-X5M</b>	<b>5-Pin XLR Male DMX Smart Module</b> <i>Includes genuine Neutrik® XLR jack</i>
<b>SM-DMX-X3F</b>	<b>3-Pin XLR Female DMX Smart Module</b> <i>Includes genuine Neutrik® XLR jack</i>
<b>SM-DMX-X3M</b>	<b>3-Pin XLR Male DMX Smart Module</b> <i>Includes genuine Neutrik® XLR jack</i>
<b>SM-DMX-RJ45</b>	<b>RJ45 Ethercon DMX Smart Module</b> <i>Includes genuine Neutrik® Ethercon® RJ45 jack</i>
<b>SM-DMX-TB</b>	<b>Terminal Block DMX Smart Module</b> <i>Includes 0.200" pitch pluggable terminal block with slotted set screws suitable for 12-30 AWG wire sizes</i>
<b>SM-DMX-IDC</b>	<b>IDC Plug DMX Smart Module</b> <i>Includes pluggable Insulation Displacement Connector (IDC) suitable for 18-20 AWG wire sizes</i>



SM-DMX-X5F  
5-Pin XLR Female DMX Smart Module

### Available Types



SM-DMX-RJ45



SM-DMX-TB



SM-DMX-IDC



SM-DMX-X5F



SM-DMX-X5M



SM-DMX-X3F



SM-DMX-X3M

Continued on back...

**Interactive Technologies, Inc.**

5295 Lake Pointe Center Drive  
Cumming, GA 30041 USA  
1-678-455-9019  
interactive-online.com

**Catalog #:**

**Project:**

**Prepared by:**

**Date:**

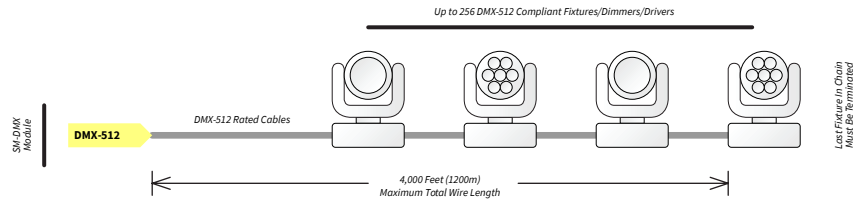
# Installation & Configuration

The SM-DMX modules can support DMX, Station Bus and RS-485 protocols, which can be configured in the CueServer Studio software.

## DMX Protocol

When using SM-DMX modules for DMX-512 protocol, the CueServer Studio software can be used to configure each port as either a DMX Input or DMX Output. While in DMX Output mode, use industry standard wiring practices for DMX-512 to connect one or more fixtures, dimmers, or LED drivers to the module. While in DMX Input mode, DMX cabling can connect an external console or controller's output to the module as an Input.

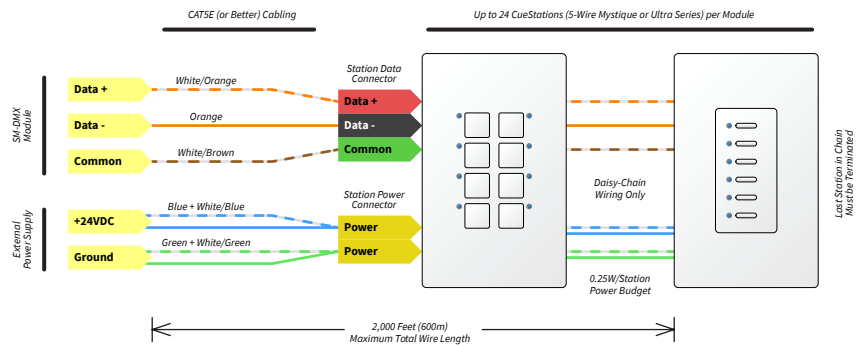
The SM-DMX module is available with several connector configurations. These are provided entirely for the convenience of a particular installation type. For example, many DMX projects (primarily live events, concerts, and pro-lighting installations) use 5-pin or 3-pin XLR connectors on the DMX cables being used. In a significant number of LED projects, the wiring between DMX drivers may be RJ45 connectors. In architectural and "architainment" projects, raw un-terminated wiring may be used. Each of various XLR, RJ45, and Terminal Block configurations are available to make it easiest to match the connector types with the type of installation.



## Station Bus Protocol

The SM-DMX module can be configured for Station Bus protocol using CueServer Studio software. In this mode, the module can be used to directly connect up to 24 individual 5-Wire CueStations (such as Mystique or Ultra stations) to a CueServer without the need for a separate station controller hub.

When attaching 5-Wire CueStations to CueServer, it is recommended to use CAT5E (or better) cable. When using CAT5E wire, a single conductor is used for each of the data lines and doubled-up conductors are used for each of the power lines, as shown in the diagram. 5-Wire CueStations can only be wired in a "daisy-chain" manner, with the last station's termination switch turned on. In this configuration, a total of 24 stations and a total of 2,000 feet (600m) of wire length can be fed off of a single SM-DMX module.



It is recommended to use the SM-DMX-TB (Terminal Block) module to make field wiring easier, however any of the SM-DMX module types can be used.

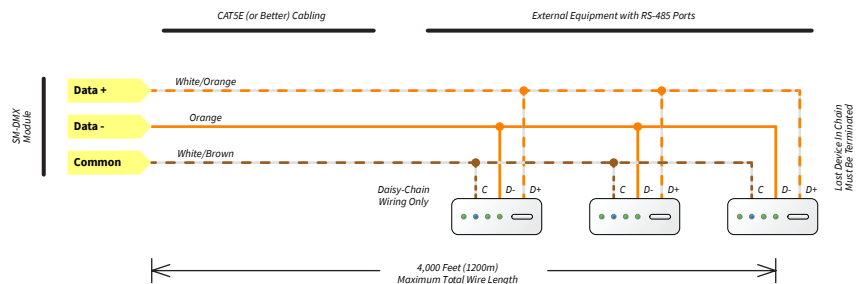
## RS-485 Serial Protocol

The SM-DMX module can be configured for RS-485 serial protocol using CueServer Studio software. In this mode, the module can be used to communicate with external devices that have RS-485 serial ports.

When attaching one or more external RS-485 devices to CueServer, connect all of the "Data +", "Data -", and "Common" terminals of each device together. Sometimes Data + is marked "D+" or "A", and Data - is marked "D-" or "B".

CueServer Studio can be used to configure the port's baud rate, data format, and protocol.

It is recommended to use the SM-DMX-TB (Terminal Block) module to make field wiring easier, however any of the SM-DMX module types can be used.



Distributor:



Phone: 407-857-8770  
 Fax: 407-857-8771  
 Email: sales@techni-lux.com  
 www.techni-lux.com