

## WORKING WITH - DMX 512

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### WHAT TO DO BEFORE SETUP

Check to be sure that you are using the correct cables for your DMX control link. The wiring of a DMX cable is consistent with that of a low impedance microphone cable, however there are many similar audio and mic cables wired for different applications that will not work properly in a DMX system. Use a good quality DMX cable to avoid problems with your inter-links.

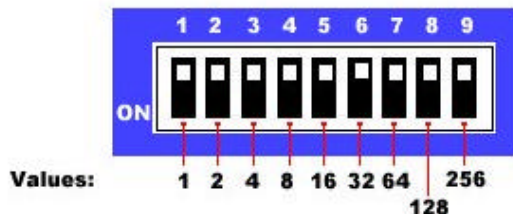
Check your controller's owner manual for information regarding the proper starting address for all fixtures to be connected on your DMX link. For example: if your controller reserves 14 channels for each fixture, then the start address of each new fixture must increase by 14.

	Fixture 1	Fixture 2	Fixture 3	Fixture 4
Start Address	1	15	29	43

### HOW TO SET AN ADDRESS

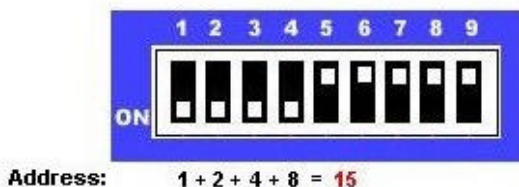
Intelligent fixtures have an external set of 9 small (DIP) switches. If your fixture contains more than one set, use the set marked "address."

Each switch has a value associated with it. The first switch has a value of 1. The value of each remaining switch is twice that of the previous switch. The address for that fixture will be the sum of the values for all switches in the "on" position.



To set an address: start with the switch with the highest value possible, then work your way down turning on switches with smaller values until the sum equals the desired starting address.

**For example:** to set a starting address of **15** begin with switch **4**, and continue downward turning on switches **3**, **2**, and **1** since the values of those switches add to **15**.



To control a single fixture individually it must have its own unique address. Any two or more fixtures may be grouped together and controlled synchronously by assigning them to the same start address.

For synchronous operation you must group only those fixtures with a compatible control channel sequence.

For example, if one fixture requires 4 DMX channels, and the first channel controls color, then each subsequent fixture connected at that address must also use the first channel for color. The function for each remaining channel in use must also coincide.

	Chan 1	Chan 2	Chan 3	Chan 4
Fixture 1	Color	Gobo	X-motion	Y-motion
Fixture 2	Color	Gobo	X-motion	Y-motion

Check the fixture's owner manual to determine how many DMX channels are required, and how those channels are assigned to each function.

### PERSONALITY

Some intelligent fixtures will have an additional set of small (DIP) switches. These usually provide additional flexibility like inverted pan or tilt, and mode settings like master/slave or stand-alone audio trigger. Refer to the fixture's owner manual for available features and proper settings.

### CONTROLLER TIPS

Be certain that all of your DMX cable links have been properly connected and that the end of the line has been terminated to prevent signal errors. If the last fixture in your link is not self-terminating you can create a terminal plug using a male DMX connector with a 100 ohm ¼ watt resistor soldered across pin numbers 2 and 3.

Set the addresses for each fixture and then power up the system. Allow the fixtures to return to their "home" position. And the controller to complete its initial "boot."

Select your fixture type from the controller's library, or define a new fixture type corresponding to your fixture's own channel control sequence.

Place your controller in edit mode, select the active fixtures to control and begin!

**Activate each control fader by first moving it to its maximum, then back again**, before setting the desired level. Save your settings as a "scene." Create multiple scenes then assemble a "chase" program using different scenes as steps in the chase along with your choice of cross-fade times and chase speed.