SIGNUM 16 - STEM

Installation Instructions

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1. Remove fixture and all components from box.
2. Connect power input wires with corresponding blue/brown/green wires using attached connector at end of wires.
   - Install cable clamp connector (required, but not included) Push connected wires through cable clamp connector. Clamp to secure.
3. Secure stem (by others) to bracket with two hex nuts (by others) as shown.
DMX is connected using a daisy-chain methodology where the source connects to the input of the first device, the output of the first device connects to the input of the next device, and so on.
Application note : Wiring for DMX/RDM lighting systems

DMX/RDM is a robust and reliable system for lighting control. However, if not implemented correctly, problems can arise such as random flashing of lights, erratic operation and delays in responding to commands. This document explains the best practices in DMX wiring.

Important things to consider are:

1. DMX is a three-wire system. Use all three!
2. DMX is based on the EIA-485/RS-485 standard.
3. Always use cable specifically designed for DMX / RS-485. These cables have an impedance of 120Ω and a low capacitance. For instance : Belden 9841 or 3105a.
4. DMX must be terminated with a 120Ω resistor to prevent reflections.
5. A daisy chain topology should be used.
6. After 32 unit loads a repeater/booster should be used.  
   (Important : For tunable white fixtures, After "15" unit loads a repeater/booster should be used.)
7. Keep cabling below 200 meters between the controller and the last driver.
8. It is generally considered good practice to provide separate DMX in and DMX out / DMX thru connections to your fixture to aid in installation. This can be in the form of pigtails, RJ-45 connectors or 5-pin XLR connectors.
9. Use twisted pair cables with an impedance of 120Ω and a low capacitance.
10. UTP Cat5 or Cat6 network cable can also be used but have a slightly lower impedance of 100Ω.
11. If shielded cable is used, only connect shield to ground on one side (typically, the controller should have its shield terminal connected to ground).
12. Not following the above recommendations may seem to work at first, but can cause problems. Sometimes after weeks of seemingly normal operation.