

## Troubleshooting USB Adapter Problems

If you have a problem with the installation or use of your USB adapter, please consult this troubleshooting guide for help: (upper/lower case is important)

[www.lightorama.com/Documents/RS485\\_Adapter\\_Troubleshooting.pdf](http://www.lightorama.com/Documents/RS485_Adapter_Troubleshooting.pdf)

## Adapter Feature Matrix

The table headings are defined below.

Adapter Model	PC Port	Cable to controller	Accsry Power	Quick Trnarnd	Double RJ45	Isolation
SC485	Serial	100 ft	No	No	No	No
USB485	USB	4000 ft	No	No	No	No
USB485B	USB	4000 ft	170ma	Yes	Yes	No
USB485-ISO	USB	4000 ft	150ma	Yes	Yes	2500V

### PC Port

The type of port that must be available on your PC to support this type of adapter. The SC485 requires an old style serial communications port not usually available on modern PCs. Please note that the SC485 contains electronics, it is not simply a connector changer. This means that devices obtained from places like RadioShack that look like an SC485 will not work.

### Cable to controller

This is the maximum number of feet of Cat5 cable between the adapter and the first controller. The SC485 is powered by the controller(s), so the voltage drop on the cable sets this limit. The USB adapters derive their

power from the USB port so they are limited only by RS485's capability.

### Accessory Power

LOR accessories like the RF-V4 Wireless Module, DC-MP3 Show Director and mDM-MP3 miniDirector require power to operate. Accessories are usually powered by attached controller(s). In the case where there are no attached controllers, power must come from another source. The USB485B and the USB485-ISO have power boosters in them to up the USB +5v to a level that can power accessories.

### Quick Turnaround

LOR controllers have the ability to respond to polls from the show director (your PC, a DC-MP3 Show Director or mDM-MP3 miniDirector.) The S2 Interactive Showtime software supports polling the controllers so that the inputs can be sensed and used to control shows.

The USB485B and the USB485-ISO have additional components in them that allow the communications line to be quickly turned around (from pointing at the controllers to pointing at the show director and back again) so that inputs can be read without disrupting the show. These two adapters are preferred but not required for interactive shows.

### Double RJ45

The USB485B and the USB485-ISO adapters have two RJ45 connectors that are in parallel. These allow for more flexible placement of the adapter in a LOR network.