

# IRID 110

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## AR500 TROUBLESHOOTING GUIDE

### Fixture does not retain focus.

- Torque bolts to 20ft/lbs.
- On the Remote Version, remove excess silicone from remote mount top and bottom, replace O-ring. You may need to roughen the mating surfaces.

### There is water in the fixture.

- Remove all components within head. Dry thoroughly. Verify all extrusion seams are flush. Spray sealant (Permatex Form-A-Seal Leak Repair) or use RTV 108 along seams. Allow to dry.
- Inspect gaskets and replace.
- Verify the watertight cable fittings are in place and RTV'd.
- If conduit is used a water tight seal must be used to block any opening.

### Fixture does not strike.

#### For Composer Units:

- Verify power to the fixture.
- If the fixture has the Remote Strike feature:
  - Check CPU LEDs. Amber LED should be on solid, green LED should be flashing.
    - If amber is not lit, check or replace power supply.
    - If amber is on and the green LED is not flashing, replace CPU.
    - If amber is on and green is flashing, continue to the next line.
- Disconnect power to the fixture and replace lamp.
- Inspect high voltage connections inside the stanchion. Replace or repair as necessary.
- Replace igniter and/or lamp lead wires.

#### For DMX units:

- Verify power to the fixture.
- Check power supply LED. LED should be on solid.
  - If LED is not lit, check or replace power supply.
  - If LED is on , continue to the next line.
- Disconnect power to the fixture and replace lamp.
- Inspect high voltage connections inside the stanchion. Replace or repair as necessary.
- Replace igniter and/or lamp lead wires.

## **Fixture does not change certain colors.**

- For Composer units, set thumb wheels on CPU to '00'. For DMX units, set thumb wheels to '990.' Self test will be enabled. Colors will cycle.
- Can you hear the motor?
  - Yes- Verify connection between actuator shaft and color head.
  - No- Check for a open or shorted motor/wiring. This is very important on remote ballast installations. You should get between 80 and 100 ohms for each motor pair. There are eight pairs of motor control wiring between the ballast and head. A short in the motor or wiring can damage the control card drivers and may even destroy the control card/power supply entirely.

## **Noisy operation of Linear Actuator motor.**

Replace motor.

## **Fixture does not respond to its thumb wheel address, but does respond MCP Self Test.**

- Does it effect multiple fixtures?
  - Yes- Check control data.
  - No- Check address and programming.
- Address to a known working address. Does it work now?
  - No- Replace CPU.
  - Yes- Verify programming address.

## **Fixture calibrates, but does not respond to any command.**

**For Composer units:**

- Verify data connections are good. Green LED blinking slowly indicates unit is not receiving data.
- Check for swapped or disconnected data + and data - outside and inside the unit.
- Check for shorts between data + or data - to shield.
- Has the correct cable type been used, (Belden 9827 or equivalent).
- Measuring between data + and - it should measure approximately 120 ohms.
- Is the data run 'daisy-chained', data cannot be 'home-run'.
- Verify that the data run does not exceed the maximum run length of 1000ft.
- Does this happen to one unit?
  - Yes- Replace CPU.
  - No- Verify data and fuses on MCP/DMXi

### **For DMX units:**

- Verify data connections are good. Red LED blinking slowly indicates unit is not receiving data.
- Check for swapped or disconnected data + and data - outside and inside the unit.
- Check for shorts between data + or data - to shield.
- Has the correct cable type been used, (Belden 9827 or equivalent).
- Measuring between data + and - it should measure approximately 120 ohms.
- Is the data run 'daisy-chained', data cannot be 'home-run'.
- Verify that the data run does not exceed the maximum run length of 1000ft.
- Does this happen to one unit?
  - Yes- Replace CPU.
  - No- Verify data and fuses on MCP/DMXi

### **Fixture misses presets intermittently.**

- Verify grounding of fixture.
- Verify data shield is not connected to ground in the fixture.
- Are the fixtures running a Sequence?
  - Yes. Address fixture to an address that is functioning properly. Continue to next line.
  - No. Continue to next line.
- Does the fixture continue to drop presets?
  - No. Check programming.
  - Yes. Continue to next line.
- Verify data wiring.

### **Fixture runs backwards.**

- Is the fixture controlled via DMX?
  - Yes. Check personality for flipped channels.
  - No. Continue to the next line.
- One data wire is disconnected.
- On remote ballast units, verify wiring between ballast and head.
- Check and replace input harness wiring.