# HDMI Extender Troubleshooting

Make sure all devices are power cycled before proceeding further.

**Power Cycle Order:**
- Power-off all equipment (At the wall socket).
- Ensure all Cables, Splitters, Switches, Extenders are connected throughout the system.
- Power on all Splitters, Switches, Extenders within the HDMI Distribution System.
- Power on all displays and set to HDMI input from HDMI System (Source device need to be able to contact display to retrieve EDID information).
- Power on Sources / Players. Ensure that a path is open from source to display for HDCP handshake negotiation by selecting the proper input on HDMI Switches or HDMI switch/splitter.
- Make sure to never hot-swap any HDMI cables, as this can damage your equipment.

**No Lights on Unit:**

If the device is not getting any power, this is typically a power supply issue.
Most baluns are supplied with a very cost effective Switch Mode Power Supply. These can fail from time to time. Replace the power supply. Make sure the power supply is the correct one for your device as supplying the wrong voltage is almost certain to cause damage to the unit.  To test this, you can check the voltage with a basic multi-meter.

**No Signal At All / Intermittent cut-out:**
A number of factors can lead to this, so there are a few things to check.

- Check you have the sender and receiver around the right way.
- Check is whether the Balun works with lower resolution sources. (This is particularly the case if you are trying to use the balun for 4K).
- If it is not working with the resolution it should be, check the Cat6 cable and it's terminations are up to standard.  You can do this by running a patch cable between the sender and receiver.
- Check that the Network Cabling is terminated properly. The termination should be the "568B" style, with solid conductors (not stranded).
- Many extenders will not work with some of the "cheaper" style Cat6 cables or connectors.
- Next it is worthwhile checking the HDMI cables. Make sure there are no sharp turns and angles and that all connectors are properly secured. Remove any angle adapters or similar small HDMI devices which many be complicating the issue.
- Try swapping the HDMI cables for any others you have to see if this is causing the issue.
- It's also usually worth checking that HDMI CEC (HDMI Control) is turned off, as this can always complicate HDMI issues.
- If none of these options has worked, try a different balun.

**Cut-out when other devices are turned on:**

If your balun loses sync when other HDMI devices are switched off and on this is usually an HDCP or HDMI handshaking issue. This can be one of the trickiest problems to solve.

Sometimes a device like an Audio Visual Receiver can be interfering with the HDCP signal. Remove everything from the HDMI System, so that you have source – sender – receiver – display only and do your testing with this configuration.

**Works for some sources and not others**:

Again there is no super simple answer. This is usually caused by an HDCP or "handshaking" issue.

- May require trying different EDID Settings.
- Simplify things and try with fixed resolutions on your source devices.
- Test with only one TV connected at a time and try to see if the TV could cause the issue.
- May require a permanent HDMI sync or resolution converter.