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How to trouble shoot the EXeARC1

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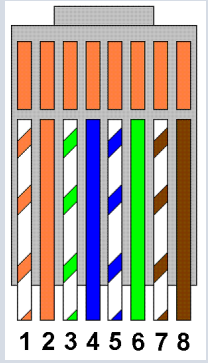
- Make sure that you are using high quality category cable. Cat6 or better is recommended even though there is a fair amount of Cat5e and even Cat5 that will work*
- Make sure that the category cable is terminated to 568b protocol (see below)



* This is a digital extender and will work on virtually any 8-conductor category cable, however Cat 5/5e is easier to damage when it is being installed and does not have the shielding available on the better category cable

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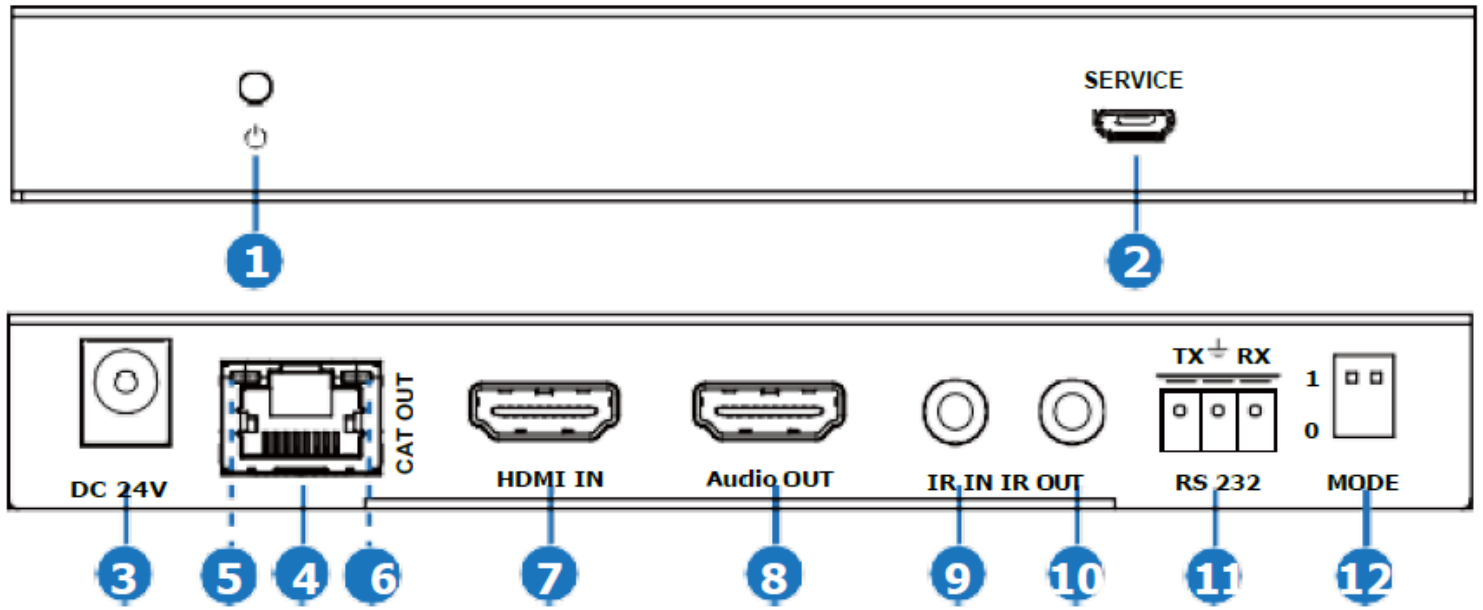
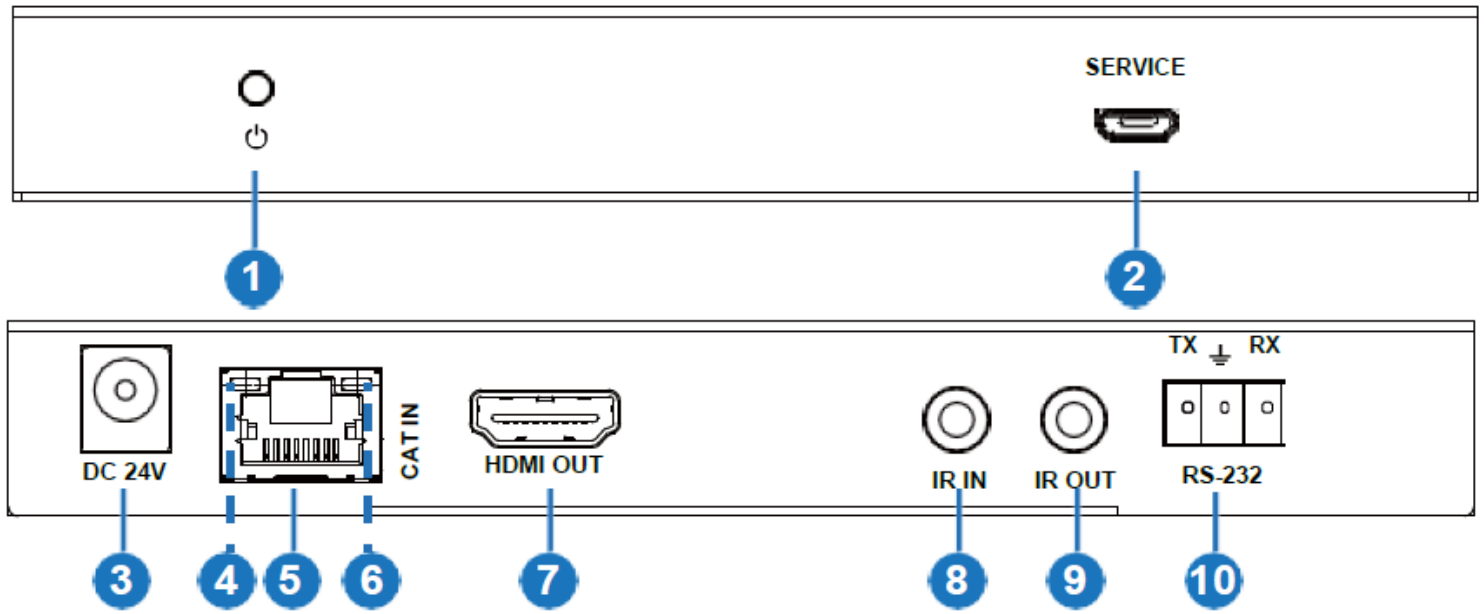
Connections TX



- 1 is the power indicator that will illuminate if there is a power supply connected to the power input (#3)
- 2 is a service port for updating firmware
- 3 is the power connection from the supplied 24V power supply (only one is needed and can be used at the TX or the RX)
- 4 is the Category cable connection point to connect to the RX via Category cable terminated to 568b protocol
- 5 and 6 are LED indicators that will be discussed later
- 7 is the HDMI input from the AVR, it would also be the output of the eARC/ARC when used as an audio only extender
- 8 Can be used as an audio only connection see diagram later in this guide
- 9 and 10 are the IR connections
- 11 is the RS232 pass through
- 12 is the DIP switches used to configure the device

Connections RX



- 1 is the power indicator that will illuminate if there is a power supply connected to the power input (#3)
- 2 is a service port for updating firmware
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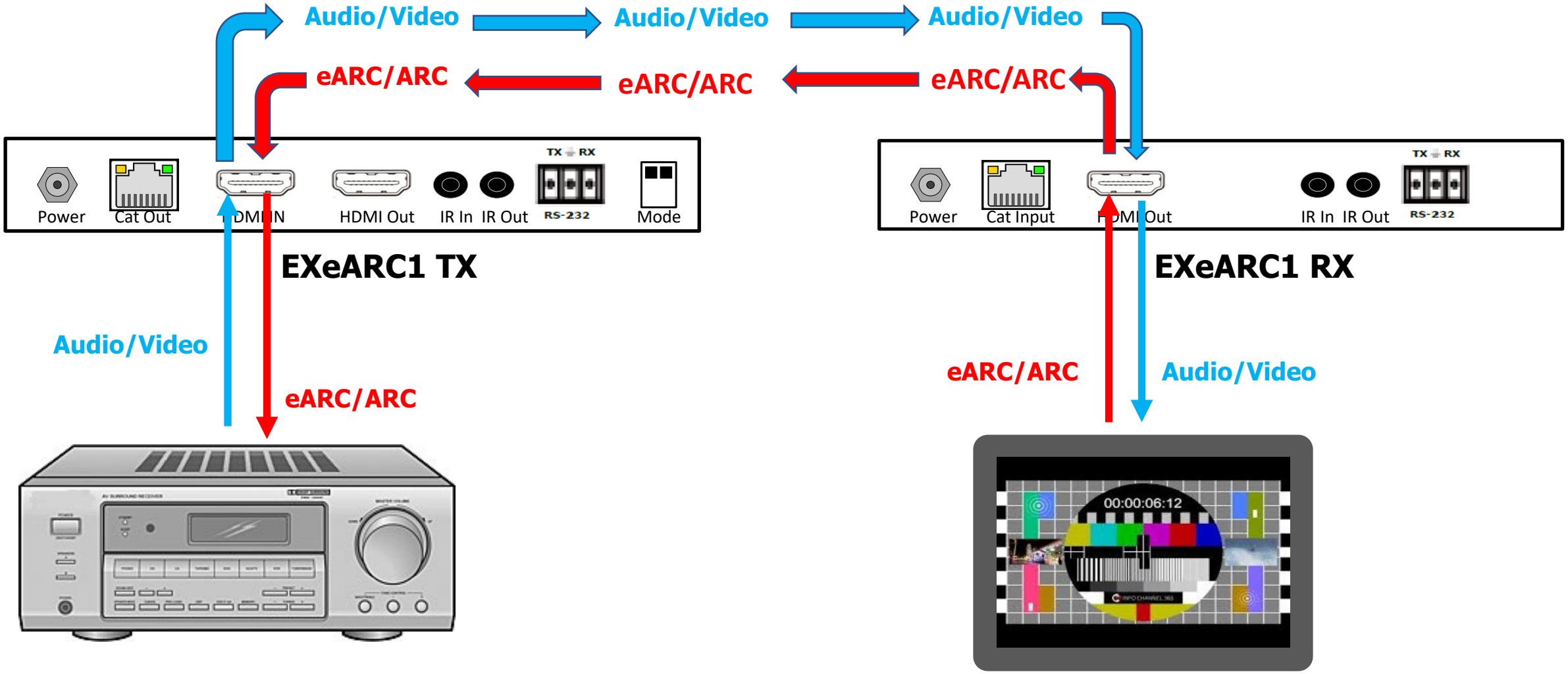
- 4 is the Category cable connection point to connect to the TX via Category cable terminated to 568b protocol
- 5 and 6 are LED indicators that will be discussed later
- 7 is the HDMI output to connect to the eARC/ARC HDMI input on the display
- 8 and 9 are the IR connections
- 10 is the RS232 pass through

How eARC and ARC Travels



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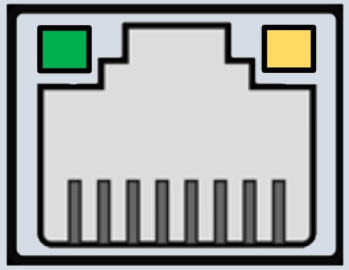
- Once the EXeARC1 is connected like the previous diagram there should be eARC/ARC audio back to the TX device
- There should also be AV on the display from the TX if the EXeARC1 one is being used to send AV to the display
- If there is an issue the LED indicators at the Category connection will give you information on the Category cable and the HDMI cables

Green LED
(Category Cable Status)

Off = No power/connection to RX or to TX
Flashing = Connection is poor/wire is poor
Solid = Good connection/Communication



Amber LED
HDMI Circuit Status

Off = No power/connection to RX or to TX
Flashing Rapidly = Connection is poor/wire is poor
Flashing Slowly = Connection is good, HDMI does not have HDCP
Solid = Good connection/Communication with HDCP

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A note on HDMI Cables

- Not all HDMI cables are created equal, there are varying grades of wires and frankly knowledge levels of the manufacturer of the HDMI cables
- eARC is a new feature and some cables may not have the ability to pass it. The function should work on most high-speed cables, but it is not a guarantee that the manufacturer tested the cables for this function
- It has been our experience that if an HDMI cable is suspect, many times they will behave differently if turned around in the circuit. If you are having issues and you flip the cable around and these issues are resolved or the issues change, the HDMI cable is not operating correctly
- This can be a little frustrating and requires some trouble shooting skills to identify good cables and that operate correctly

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Display Settings

- This is a moving target. Many display manufacturers change how the HDMI inputs operate year to year
- If the display is capable of eARC or ARC there will be one input marked that way
- The other inputs are not capable, but will pass the sound of the device plugged into them through the eARC/ARC Input back to the AVR/Amplifier
- There can be some confusion, it is often the case that different makes of displays operate differently
- It may be the case that eARC may not function correctly and you may need to use ARC instead. Make sure that the display and other devices are updated to their latest firmware
- In cases of older devices, they may not be fully capable of eARC or may have quirks. The Internet and forums may help ferret out some of these quirks
- The CEC functions of the display can be used with the EXeARC1, but there are cases where the displays do not control the sources or other components correctly. In the case of eARC, it is possible to turn off CEC and in many cases with ARC now as well if this is needed to make your system function correctly

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Conclusion

- Hopefully, this guide has helped make the system operational
- HDMI circuits can be frustrating, take your time a verify everything, do not assume something works because it did in another circuit, the same goes for “bad” devices, it could just be the circuit they are in at this time. Incompatibilities do occur.
- The eARC format is FAR superior to ARC and Optical S/PDIF (Toslink) and worth the effort

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