## Frequently Asked Questions about Real4K Extenders

- 1. I ran a duplex cable, can I still use the Real4K extenders?
  - a. Sure just terminate one of the cables with SC connectors and plug in the extenders.

    The extra fiber can stay dark and be used for back-up or used now for something else.
- 2. I have a Denon or Marantz AVR and my Real4K Optical Adapters are not working consistently. What should I do?
  - a. Call us at tech support (925-494-3062); we have a firmware patch that we will send you.
- 3. Do I need to power the Real4K extender ends?
  - a. Yes. They use 5V USB, 500mA current, so a standard 5V USB adapter or USB port works to power the adapters/extenders.
- 4. I have a 4K matrix switch in my system, can I still use the Real4K extenders?
  - a. Yes. Just hook them up in place of any HDMI cable link to get uncompressed video.
- 5. What kind of fiber connectors do I use?
  - a. The Real4K adapters and extenders use SC connectors.
- 6. What do the LED status lights indicate?
  - a. Real4K Optical Extenders:

COLOR	LINK STATUS
Off	Extender end has no power
Red	Extender detects an open fiber connection and has disabled the lasers
Purple	Fiber connection is open and lasers have been disabled. Bootloader connected for firmware upgrade.
Yellow	Fiber link detected but HDMI initialization failed
White	Video active without HDCP encryption
Green	Video active with HDCP 1.x encryption
Blue	Video active with HDCP 2.x encryption

## b. Real4K Optical Adapters:

COLOR	LINK STATUS
Off	Module end has no power
Red – Steady/Flashing	Module detects open fiber connection and has disabled the lasers
Purple/Pink – Steady/Flashing	Module has detected and open fiber connection, lasers are disabled, and the unit is connected and ready for a bootloader update
Yellow	Fiber detected but link initialization failed
Green – Flashing	Video active without HDCP encryption
Green – Steady	Video active with HDCP 1.x encryption
Blue	Video active with HDCP 2.x encryption

- 7. The fiber is connected but the LED status is still blinking red, what's going on?
  - a. Most likely the fiber is broken or the termination is not good. Try using a Visual Fault Locator or optical power meter to test the fiber or try the link with a pre-terminated fiber.
- 8. Will my TOSLINK optical fiber work as the fiber link between the Real4K Tx and Rx?
  - a. Unfortunately, No. The TOSLINK is a completely different type of fiber and will not work with the Real4K optical extenders.
- 9. I want to use the IR control feature of my Real4K Optical Extenders. What types of IR systems are supported?
  - a. The IR control cables support 5V IR systems. Please see the IR cable information on the Inneos website:
    - http://www.inneos.com/wp-content/uploads/2019/07/R4K-IRB-Setup-Guide.pdf http://www.inneos.com/wp-content/uploads/2019/02/R4K-IRB-Information.pdf
- 10. How do I use the Real4K extenders if I don't have the tools to terminate fiber in the field?
  - a. Inneos offers a line of pre-terminated SC-SC, plenum rated fiber cables with a sleek black jacket designed specifically for AV installations:
    - http://www.inneos.com/products/pre-terminated-fiber/