

## Technical Bulletin

**Product:** B-540 Series HDBaseT Extenders

**Topic:** General Product Information

### 4K Ultra HD & 4K HDR Compatibility

This product is compatible with HDMI 2.0+ and HDCP 2.2. This would limit the max video resolution to:

- Standard Dynamic Range (SDR): 4K@60Hz 4:2:0 8-bit
- High Dynamic Range (HDR): 4K@30Hz 10/12-bit

For 4K@60Hz 4:4:4 and 4K HDR @ 60Hz support at 18Gbps, please utilize the [B-560-EXT-444-70](#) 4K HDR HDBaseT extender.

### Power Supply Voltage

Binary HDBaseT HDMI extenders use a 12 Volt DC power supply. All other Binary HDMI extenders use a 5 Volt DC power supply, and matrix switchers with integrated Cat 5 extenders use 12 Volt DC supplies. Using any other product than 12V, Binary product will result in damage to the product and possibly the power supply. Be sure to use the correct power supply with the correct product!

### Shielded Cable Recommendation

Although HDBaseT transmission technology is much less susceptible to EMI interference than other transmission technologies, if possible, it is recommended that you pull shielded Cat5e/Cat6 with this product for maximum reliability. Please note: for proper shielding, shielded connectors must be used with drains connected at both ends. In addition, "EZ end" connectors are not recommended for use with HDMI extenders.

### Clock Stretching

HDBaseT requires that connected equipment support what is known as Clock Stretching. While this feature was a requirement starting with HDMI 1.3, not all HDMI 1.3 products support it, and it was not a requirement for HDMI 1.2, which is still used in many set top boxes and AVRs. No video may appear if the devices connected to HDBaseT extenders do not support Clock Stretching. Solution: Binary offer simple workarounds for compatibility between newer HDBaseT products and older sources. Clock stretching solutions for full HD 1080p sources still include the [B-520-EXT-330-RS-IP](#) or [B-520-EXT-230-RS](#) HDBaseT extenders. Alternatively, if you use the [B-540-TX-330-IR](#) and connect it to the source via the [B-230-HDSPLTR-1x2](#) (1080p splitter), this will also solve any clock stretching issues.