Technical Note

Product Name: AD-RING

Current Version:

Ver.Type	Ver No.	Date
Firmware	–	–
Software	–	–
Web	–	–
Hardware	–	–

Technical Note Date: March 4, 2020

1. AD-RING is a very popular product that can be ordered in different configurations. See document *KRAMER AD-RING CONFIGURATIONS* in the attachment.

2. In most of the applications, adapters included in AD-RING work without any problem.

3. Unlike other product installations that use permanent sources and displays, a typical AD-RING use case is in BYOD environments in which a wide variety of sources and displays are used and you may encounter compatibility issues.

4. Any physical connection attenuates the signal and may affect the provided distances and resolutions. Therefore, when connecting an additional cable between the AD-RING and the display device, use only high-quality Kramer cables such as C-HM/HM/PRO.

5. 4K versions of DisplayPort / Mini DisplayPort adaptors have known limitations and incompatibilities with certain computers, devices, and installations. If maximum compatibility is a concern, we recommend using the standard 1080p AD-RINGS:

    - AD-RING-1

    - AD-RING-2

    - AD-RING-3

    - AD-RING-8

6. If an installation requires connecting additional products in the chain, an additional active product may be required to boost / reclock the HDMI signal (for example, PT-3H2, VM-2HXL, VS-62H, and more).

7. If an active cable or device is connected to the AD-RING, this product may require an external power source.

8. Not all USB-C devices use the same technology. Therefore, not all USB-C devices are compatible with a single adaptor.

9. If one of the adapters in the AD-RING set becomes unusable (through mechanical damage, total failure with different sources, etc.) there is no need to replace or discard the entire set. Each component of the AD-RING can be ordered and replaced separately. See the table below.

10. To replace adapters in the AD-RING set, use the TL−RING set that includes a 1.5mm Hex wrench and Torx T-10 size pin driver that can be used for locking an AD-RING set on an HDMI cable.

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Part number	Model name	Description	Resolution
99-9191024	ADC-USBC/HF/RING	USB type-C(M) to HDMI (F) adapter cable	4K60 (4:2:0)
99-9191025	AD-HMC/HF/RING	HDMI type-C (M) to HDMI type-A(F) adapter	4K60 (4:2:0)
99-9191026	AD-MDP/HF/RING	MiniDisplayPort (M) to HDMI (F) Adapter	1080p
99-9191027	AD-DPM/HF/RING	DisplayPort (M) to HDMI (F) Adapter	1080p
99-9191031	ADC-LTN/HF/RING	Apple Lightning to HDMI (F) adapter cable	1080p
99-9191034	AD-HMD/HF/RING	HDMI type-D (M) to HDMI type-A(F) adapter	4K60 (4:2:0)
99-9191035	AD-MDP/HF/UHD/RING	MiniDisplayPort (M) to HDMI (F) Adapter	4K60 (4:4:4)
99-9191036	AD-DPM/HF/UHD/RING	DisplayPort (M) to HDMI (F) Adapter	4K60 (4:4:4)
99-9191037	ADC-MDP/HF/UHD/RING	MiniDisplayPort (M) to HDMI (F) Adapter Cable	4K60 (4:4:4)
99-9191022	TL-RING	Adapter Ring tool set	N/A