

Application Note

HDMI™ Cable Types & HDMI Cable with Ethernet

HDMI cables come in five configurations...

Standard HDMI Cable – Supports video resolution up to 720p/1080i.

Standard HDMI Cable with Ethernet – Supports video resolution up to 720p/1080i. Also supports networking with the addition of a dedicated HDMI Ethernet Channel (HEC) through the HDMI connector. Connected devices must support HEC to use this feature.

Standard Automotive HDMI Cable – Supports video resolution up to 720p/1080i. Tested to a higher performance standard due to the harsh environment in which the cable is used.

High Speed HDMI Cable – Supports video resolutions of 1080p and higher including 4K, 3D, and Deep Color.

High Speed HDMI Cable with Ethernet – Supports video resolutions of 1080p and higher including 4K, 3D, and Deep Color. Also supports networking with the addition of a dedicated HDMI Ethernet Channel (HEC) through the HDMI connector. Connected devices must support HEC to use this feature.

How does the HDMI Ethernet Channel work?

The HDMI Ethernet Channel utilizes a previously unused pin and the hot plug detect pin to provide ethernet data at speeds up to 100Mbps. The benefit is realized when all devices that support this feature are using an HDMI Cable with Ethernet.

Figure 1 on the next page shows how this would have been accomplished before this feature became available. When using HDMI cables without the ethernet feature, supplying ethernet connectivity to the four devices required a separate ethernet cable from a router or switch to each device.

Figure 2 on the next page shows how this is accomplished with an HDMI Cable with Ethernet. A single ethernet cable from a router or switch to one device is shared between the rest of the components provided these devices support this feature.

All connected ports must support HEC to use this feature.

Application Note ID:

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Date:

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Product Line:

Audio/Video

Part Numbers Affected:

41900-**E

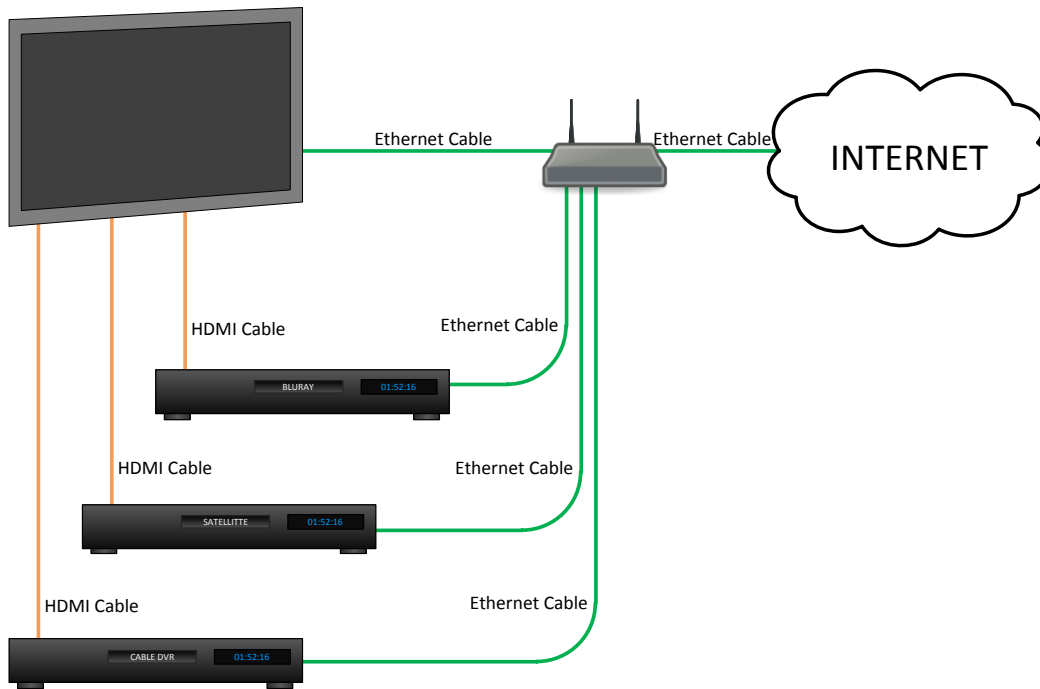


Figure 1

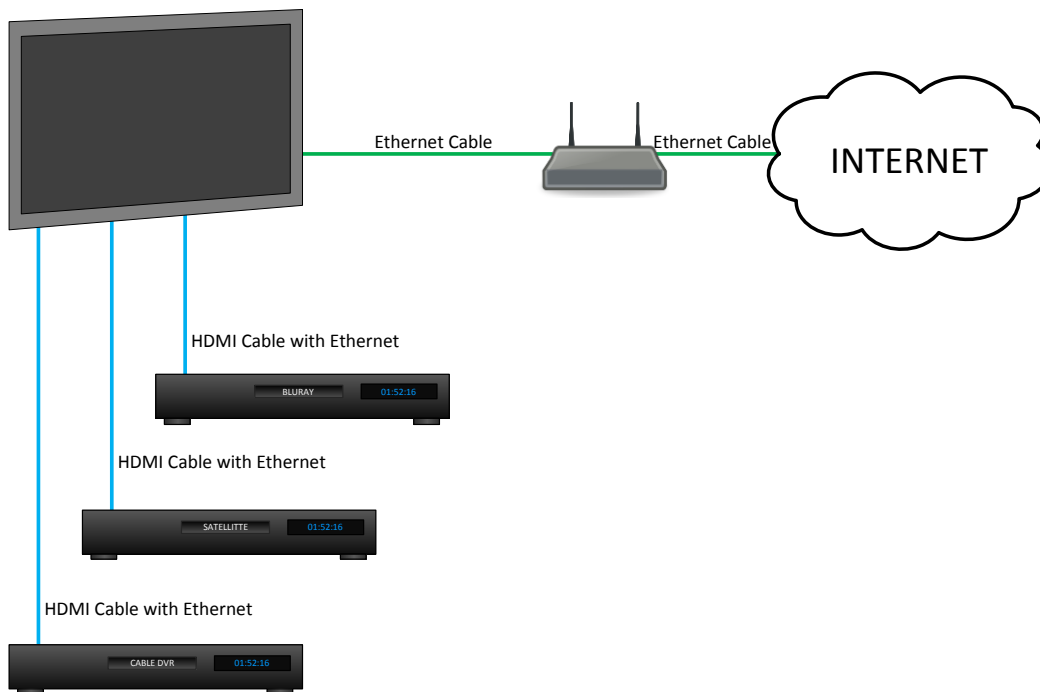


Figure 2