

# What is a Video & Audio Extender?

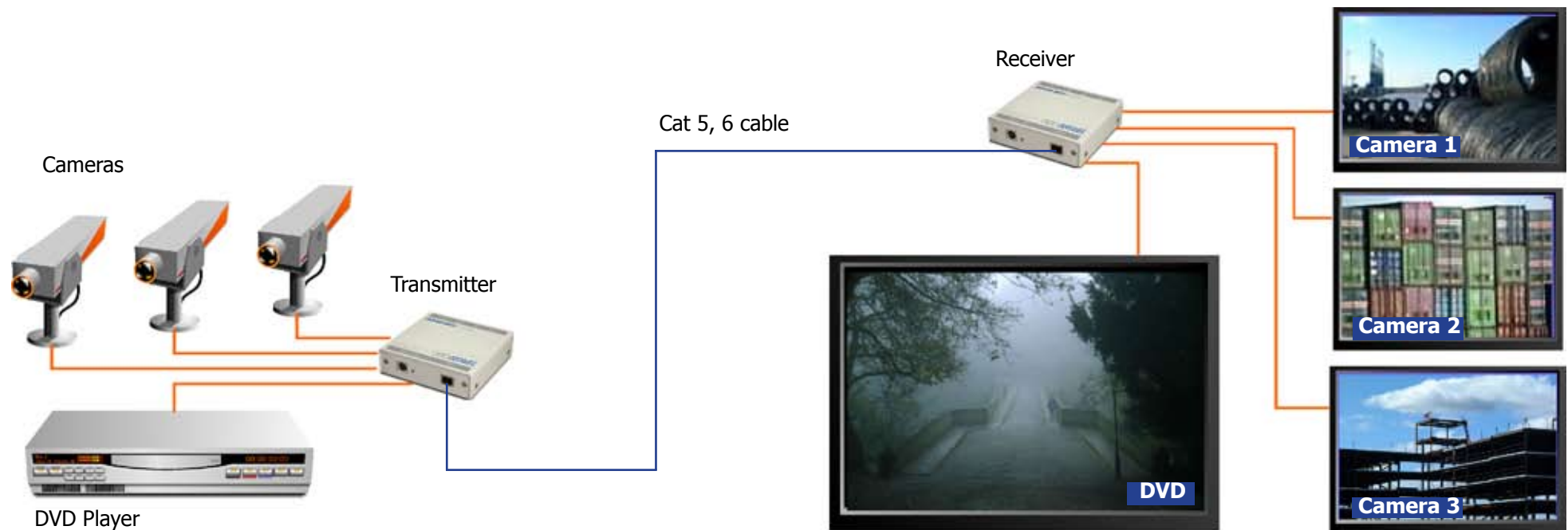
A video and audio extender allows video signals (various formats) and audio signals to be extended from a source to a destination over Cat 5 or 6 twisted pair cable. The quality of the cable will determine the maximum distance these signals can be transmitted but it is usually possible to work over cable lengths of up to 200m with little or no visible / audible degradation.

It is always necessary to have both a transmitter and a receiver unit so when ordering these extenders check that you have both components.

Each manufacturer has their own protocol for video and audio extension so transmitters and receivers from different sources should not be mixed. They won't work!

In the best extenders, signals are 'balanced' so that noise picked up along the cable length can be easily removed by the receiver. This feature is especially useful where the video and audio extender is being used near sources of electrical interference: a factory of some sort for example.

The example below shows the Amulet Hotkey am230 transmitter being used to drive 4 composite video signals across a single Cat 5, 6 twisted pair cable. The am230 receiver converts the balanced signals back into composite video for connection to the displays. Note that in this example the titles shown on the monitors are not generated by the am230 system.



Another feature offered is for multiple copies of the video and audio signals to be generated by the transmitter. This allows receivers to be set up at various locations around a building. An example of how this might be used is at an airport where arrival and departure information needs to be copied to various halls for public viewing. A similar system might be used in a supermarket to inform customers of any special promotions being offered.

In the second example below we see the Amulet Hotkey md4 driver unit being used to extend the video output of a standard PC across twisted pair cable. The md4 creates 4 copies of the video signal each of which passes over its own cable to an MXR receiver unit. The receiver converts the balanced line signals back into a suitable format for display.

Note that for the sake of clarity, the audio connections have been omitted from these diagrams.

