

Video Baluns

Distribute component or composite video signals anywhere in the home using category 5 cable and the Knoll's UTP Transmission System. Send DVD, cable TV, satellite and digital pictures from a few feet to up to 500 feet (150 meters) of cable with no discernible video distortion or cable loss and better performance than the more expensive, specialized "designer" cables. The Knoll's transmission system works better than conventional "balun" systems because the Knoll's transmission system relies on active electronics rather than transformers that can saturate and are not as linear as active systems.

The component video transmission system comprises: a Send Unit for transmitting the video signals and a Receive Unit for receiving the video signals. If whole house distribution is required, send units can be installer adjusted to allow multiple send units to be ganged together using "Y" cords. For larger systems, the US3-Hub sends component video signals to six receivers using one cat 5 wire each up to 500 feet (150m). It needs to be connected to up to six Knoll receiver modules (UR-P3 in-wall or UR-V3 enclosure) to operate correctly. Home run a cat 5 wire from the US3-Hub to each of the up to six component receive module locations using all eight conductors.

Knoll's UTP (Unshielded Twisted Pair wire) transmission systems use advanced active electronics to operate with different topologies:

1. A stand alone send unit and receive unit system with a single power supply.
2. Multiple send units and receive units with a larger single power supply.
3. One or more six output hubs with as many receive units as required.

Send and receive units run on 12 VDC and are powered with a power supply on the send unit only. The send and receive units are available in an in-wall Decora™ version or mounted in a black enclosure. In-wall and enclosure versions can be mixed or matched as desired.

The US3-Hub system requires a single PS1506 power supply connected to the US3-Hub. The up to six receiver modules get their power over the cat 5 wire from the US3-Hub.

The Knoll balun system uses very little power and is normally left on or it can be switched on and off with a switched outlet. A led lamp shows if power is connected properly on both the send and receive unit.

If more than six component receivers are required in a system, multiple US3-Hubs can be connected together.

The Knoll balun system does not have any user adjustments and is completely automatic.



Specifications:

Video works on 480p, 480i, 720p, 720i, 1080i up to 800' (240m) and 1080p up to 400' (120m)

Models and Dimensions

UR-P3 (in-wall Decora™ version): 4.1"h x 1.4" w x 2.0"d.
UR-V3 (black enclosure): 1.1"h x 2.6"w x 2.8"d (28 x 66 x 71 mm).
US-P3 (in-wall Decora™ version): 4.1"h x 1.4"w x 2.0"d.
US-V3 (black enclosure): 1.1"h x 2.6"w x 2.8"d (28 x 66 x 71 mm).

US3-Hub (black stackable enclosure).

Video Bandwidth

Send Unit: 450 mHz @ -3 dB.
Receive Unit: 450 mHz @ -3 dB.
Hub: 450 mHz @ -3 dB.

Video Input

Receive unit: 0.5 V to 2V.

Video Output

Send unit: 0.5 V to 2 V.

Input and Outputs:

Send Unit: three video RCA input jacks, one RJ-45 out-jack, one-DC power input.
Receive Unit: three video RCA output jacks, one RJ-45 input jack.
US3-Hub: three video RCA input jacks, six RJ-45 output jacks, one DC power input, one input and one output link RJ45 jack.

Power

Send Unit: 12 VDC (one PS1202 power supply will power one send and one receive and is connected to the send unit only.)
Receive Unit: 12 VDC (from send or hub).
US3-Hub: 15 VDC (one PS1506, included, will power the hub and up to six component receives).

