



High Quality Audio/Video
Distribution Over CAT5e Cable



In Home Distribution over CAT5e

In a world where Plasma TVs and TFT displays are now becoming ever popular around the home, the ability to get high quality sound and vision to those screens has become essential. Coupled with the current trend of decluttering your livingroom of electronic equipment such as DVDs, Satellite Receivers, Video players, etc., it is clear that today's consumer needs something more than a traditional coax based distribution system. **AViLYnX** is the solution.

The revolutionary **AViLYnX** from Global Communications (UK) Ltd, is designed to distribute high quality video and audio from multiple sources (using CAT5e cable) to multiple viewing & listening locations.

Using the dedicated **AViLYnX** IR remote control, from any connected viewing location the user is able to independently select any AV source. The user can then control the source with the **AViLYnX** remote control. The system can be set with control on a room priority basis or alternatively set to "walkabout" mode with no priority control.

Unique to the **AViLYnX** are three parental control functions which maybe setup at installation and made available at priority locations 1 & 2 :-

"Me View"

Allows the viewer to lock out a source device to all other viewing ports other than that being controlled by the viewer. No other viewing station is then able to view or control the locked source until control is returned at that location.

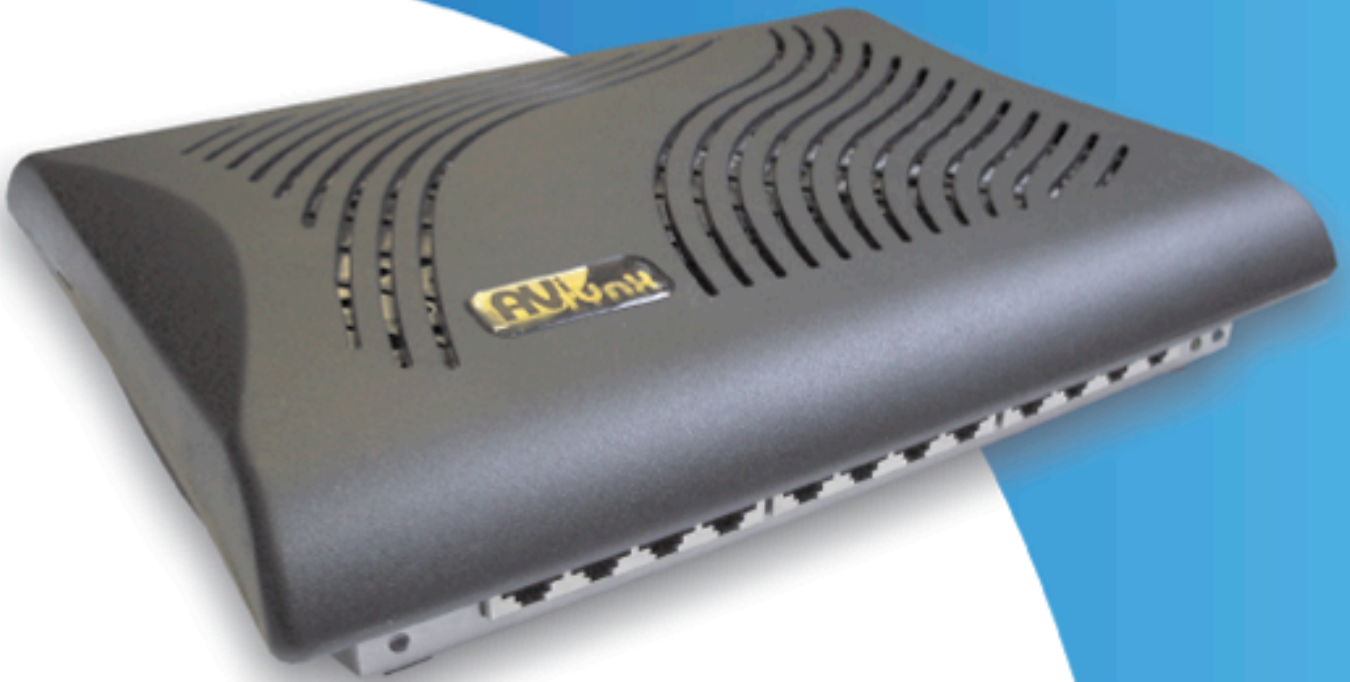
"Peak a View"

Allows the viewer to temporarily monitor what is being viewed at another viewing station connected to the system.

"No View"

Allows the viewer to inhibit all output to a selected viewing station connected to the system.

Server Matrix



Available in 3 versions :-

- 4 source, 4 viewing stations
- 4 source, 8 viewing stations
- 8 source, 12 viewing stations

The server is the heart of the system with all source kits and room kits being routed to & from the unit. The server can be supplied as either a 4 source/4 room unit, 4 source/8 room or alternatively as an 8 source/12 room unit.

The server routes a selected source output to the viewing station along with the controlling IR commands. Since source selection is totally independent for each viewing location it enables multiple sources of "like" equipment to be viewed & controlled independently.

The server is supplied with a pre-programmed "universal type" database of IR codes which allows the server to convert the incoming AVILYNX IR commands from each viewing station into correct IR commands for each source. The server can be programmed with the code for each source from any viewing station; there is also a learning function, whereby the server can be programmed to control equipment, which was not included within the database.

The server can be set to enable the control of the sources on a descending priority basis, with all viewing stations differing to viewing station 1. The unique parental control functions are controlled by the server with the feature being available to port 1 & 2 (selectable). As an alternative to priority control, the server can be set with no priority for those homes where a priority control is not required to allow the user to control the same source whilst moving between view station locations.

Viewing Station Kit

The viewing station kit comprises of the composite video/audio decoder, with an IR detector module and the AViLYnX IR remote control. AV Signal is routed via the server matrix and fed to the decoder via a standard RJ45 connection. The decoder then converts the signal back to its original video and stereo composition and is fed to the viewing port via a SCART/RCA connector.

The IR detector is discreetly mounted on or near to the viewing or listening station and receives in the IR commands from the AViLYnX remote control & feeds them to the server via the CAT5e cable.

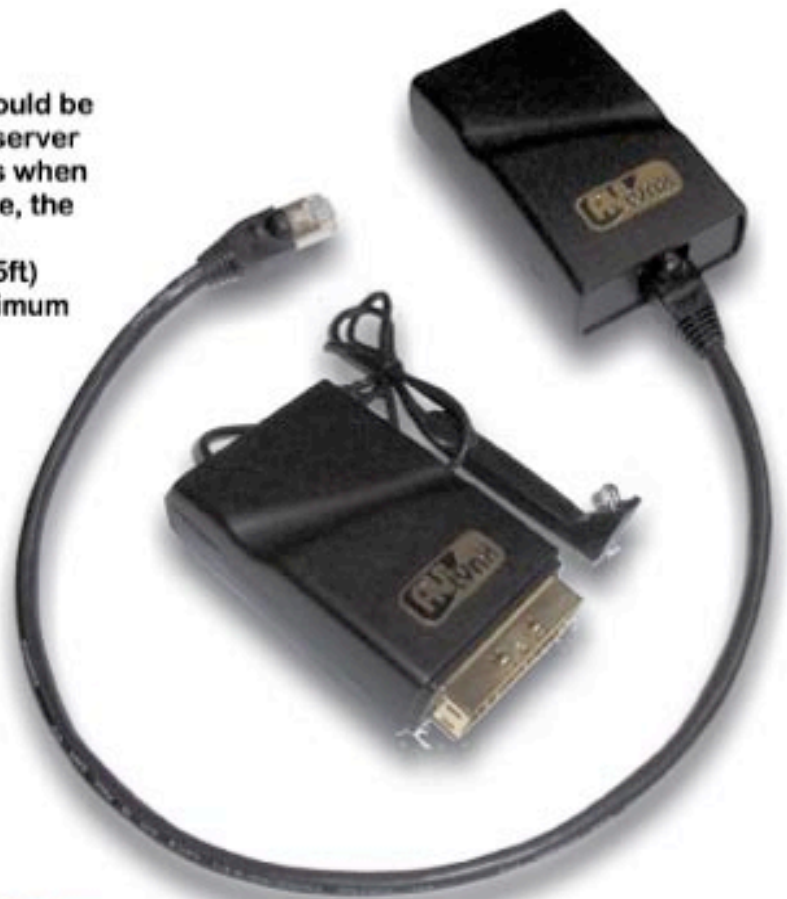
The AViLYnX remote control handset incorporates special function buttons to access each of the sources. It also utilises the same control buttons e.g. play or fast forward for each source. Other features such as "me view only, peek a view or no view" can be selected via the remote control, with conformation given via the video & audio feed. The AViLYnX handset also has a limited universal database built in to enable the handset to also be able to control the viewing station (TVs Plasmas etc).

Viewing Station kits are available as separate units and can be purchased dependent on customer requirements.



Line Extender

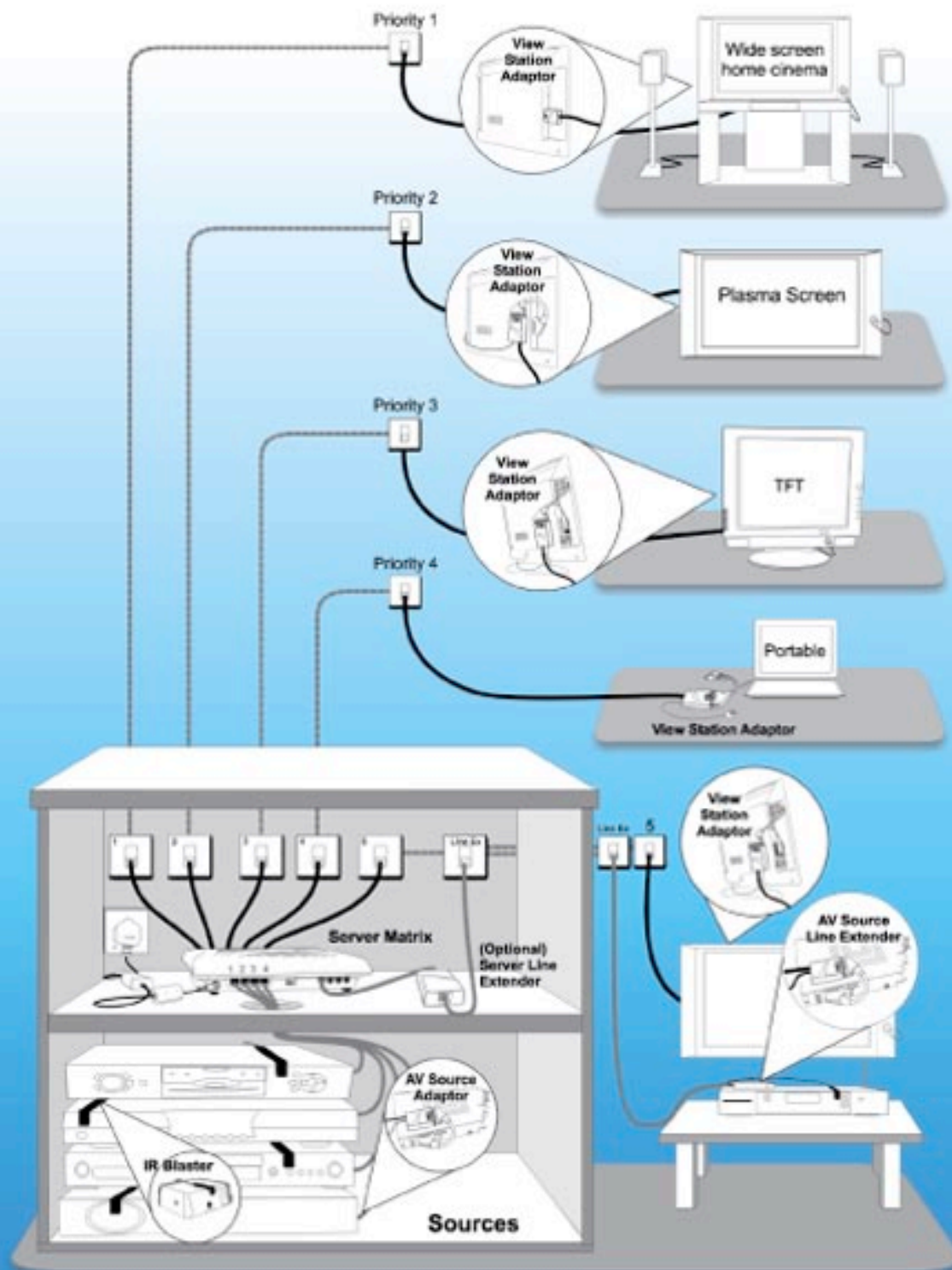
It is envisaged that source equipment would be co located within the same room as the server (max cable length 1m). On the occasions when this is either not possible or not desirable, the use of line extenders allows the source equipment to be located up to 250m (825ft) from the server matrix, so allowing maximum flexibility.



Source Kit

Each source device is connected to the system via a dedicated source kit which converts the composite video and stereo audio output from the connected source via a SCART/RCA connector ready for distribution onto the system via a RJ45 connection. The source kit also enables the source to be controlled by the server, via the connected IR blaster which is positioned in front of the IR receptor on the source device. Power for the unit is supplied directly from the server via the CAT5e cable. Source kits are available as separate units and can be purchased dependent on customer requirements and are supplied with a SCART/RCA converter and a 1metre CAT5e interconnect cable.

Typical Installation Diagram



AViLYnX Data Sheet Operating Parameters

Environment

- Maximum Cable Length Source: 1m shielded CAT5e, 250m with Line Extender kit
- Maximum Cable Length Viewer: 250m CAT5e
- Operating Temperature: +5 to +30C
- Humidity: 85% max at 30C
- CE (EN55013/EN55020), FCC Part 15 (Class B Digital Device) approval
- Size: Server 265x205x56mm, Source/View Station Adapters 82x56x27mm
- Weight: Server 2.7kg, Source/View Station Adapters 75/85g

Interfaces

- Audio/Video: SCART/Peritel or RCA/Phono plugs
- Video Format: PAL, SECAM, NTSC, 50/60Hz composite
- Audio Format: stereo left & right
- Interconnection: RJ45 socket CAT5(e preferred) or CAT6 cables
- Power Supply: external AC mains adapter; 10V DC output jack, inner +ve

Video

- Source Input Level: 1V peak white sync tip, nom (75Ohm)
- System Gain (Luminance Bar): -3% 2m; -2dB 250m
- Frequency Response: equalised (<0.5dB/5ns) up to 45m; -8dB/75ns @5MHz 250m
- Signal-to-Noise, weighted: >70dB luminance
- Differential Phase & Gain: 1deg, 0.5% typ. at 48% APL
- 2T Pulse-to-Bar & K Factor: 70%; 4.5% KF typ. 250m
- Luminance Non-Linearity: 0.3% typ. at 48% APL
- Chrominance/Luminance Delay: 14ns typ., 2m
- SCART Pin 8 Control: 0, 6, 12V states

Audio

- Source Input Level: 0.5V rms nom. (100kOhm)
- System Gain (1kHz): -0.3dB 250m
- Frequency Response: -0.5dB, 2m; -1.4dB, 250m: 20Hz 20kHz
- Signal-to-Noise: >78dB at 1V rms test tone: 20Hz 20kHz
- Distortion: 0.06% typ. at 1V rms test tone: 30Hz 20kHz
- Right-to-Left Crosstalk: -55dB, 20Hz; -52dB, 1kHz; -33dB, 20kHz typ. at 1V rms test tone
- Output-to-Output Crosstalk: <-70dB, 1kHz typ. at 1V rms test tone.



For more information contact
your AVILYNX Distributor

