SmartNet-V routes up to 128 Video, Stereo Audio and IR Sources to 16 Remote Monitors and Speakers located at up to 1000ft and connected with inexpensive CAT5.

The SmartNet-V series of products provide a unique combination of High quality video and stereo audio matrix, Remote infrared control with pass-through and Signal distribution via Cat 5 cable

Combining these functions creates an extremely powerful and cost effective product for use in monitoring, security and AV distribution. Housed in standard 19" rack mounting cases, various models are available allowing multiple configurations and applications. Each output comes with a small discrete receiver unit providing a high quality signal conversion from the Cat 5 cable to the television, computer or other display device.

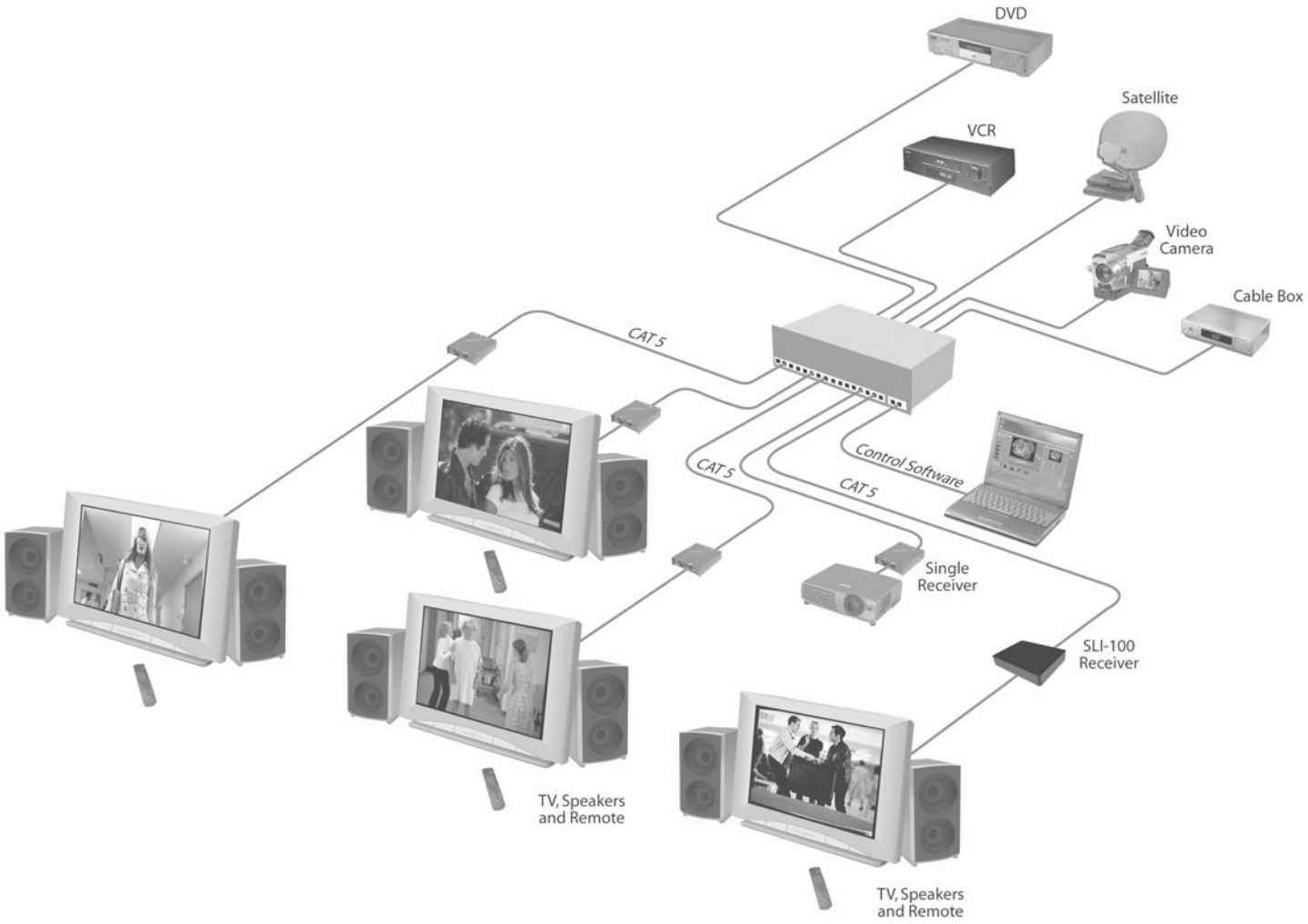
FEATURES

- ***TV distribution via Cat 5 structured cabling with full interactivity***
- ***High quality video and stereo audio routing***
- ***Signal distribution over Cat 5 structured cabling***
- ***Full interactivity via infrared control***
- ***Fully compatible with all standards of modulated IR and IRDA***
- ***Automatic cable compensation***
- ***On-screen display***
- ***Distributes signals over 300m***
- ***Expandable on-site***
- ***Remote powering of receiver***
- ***Variable input versions 16/32/48/64/128***

XVGA-AUDIO-MATRIX

SMARTNET-V

Application Diagram



Applications

- Monitoring
- Security
- Cable TV Remote Control
- A/V Distribution
- Control Rooms
- Hotels
- Remote On-Digital Set-Top Control
- Point of Sale
- Sky Box Control Extension
- Remote VCR Control
- Dealer Rooms
- Domestic Use

Overview

The IRX–SW series of products provide a unique combination of:

i) High quality video and stereo audio matrix
ii) Remote infrared control with pass-through
iii) Signal distribution via Cat 5 cable

Combining these functions creates an extremely powerful and cost effective product for use in monitoring, security and AV distribution. Housed in standard 19" rack mounting cases, various models are available allowing multiple configurations and applications. Each output comes with a small discrete receiver unit providing a high quality signal conversion from the Cat 5 cable to the television, computer or other display device.

IR Control

The SmartNet-V products allow the extension of infrared control signals via a single category 5 twisted pair cable. Using a unique method of transparent data transfer, the system allows a device (e.g. set-top box) to be situated up to 1000ft (300m) from the controller (e.g. television).

Fully compliant with standard modulated IR and the latest IRDA, the extender will provide a transparent path for all protocols and data transfers.

Matrix

The units contain a high quality routing matrix for composite video and stereo audio. Gold RCA jacks sockets on the rear of the unit connect the input signals to the matrix. Color coded jacks are used for ease of identification.
Both audio and video inputs are high impedance to allow for looping inputs. This enables multiple units to be cascaded together increasing the number of users to the system. Each model in the series has looping inputs giving a convenient method of upgrading the system on site. An integral on screen display (OSD) for each output keeps the user informed of channel identification and system configuration.

Signal Distribution

All signals are distributed balanced and driven differentially, this method provides for the best immunity to external noise and interference. Sending signals balanced also minimizes emissions, as any interference transmissions from the cable are cancelled out.

Pairs 1,2 and 3 of the Cat 5 cable are used for video and stereo audio respectively. Pair 4 is used for the return Infrared signals from the user, which is combined with the power from the chassis and sent as a common mode signal.

Receiver unit

Each user requires a receiver unit complete with IR 'eye' and handset. There are currently 3 receiver models:

i) Scart receiver and separate 'eye'
ii) Integral receiver
iii) Bulkhead mounted receiver

The Scart receiver consists of a small box with integral Scart plug, which connects directly to the television. The flying 'eye' is then placed on top of or to the side of the television so that it can pick up the IR commands from the handset when directed at the TV. Other receivers have the same specification but allow for differing installation requirements.

All that is required to view the channels is to connect a Cat 5 cable to the receiver unit, the other end of which connects to an output on the chassis. No adjustments are necessary to receive the video and stereo audio as the unit provides an automatic compensation for any losses for up to 300m of cable. Power is provided through the cable eliminating the need for bulky plug-top supplies.

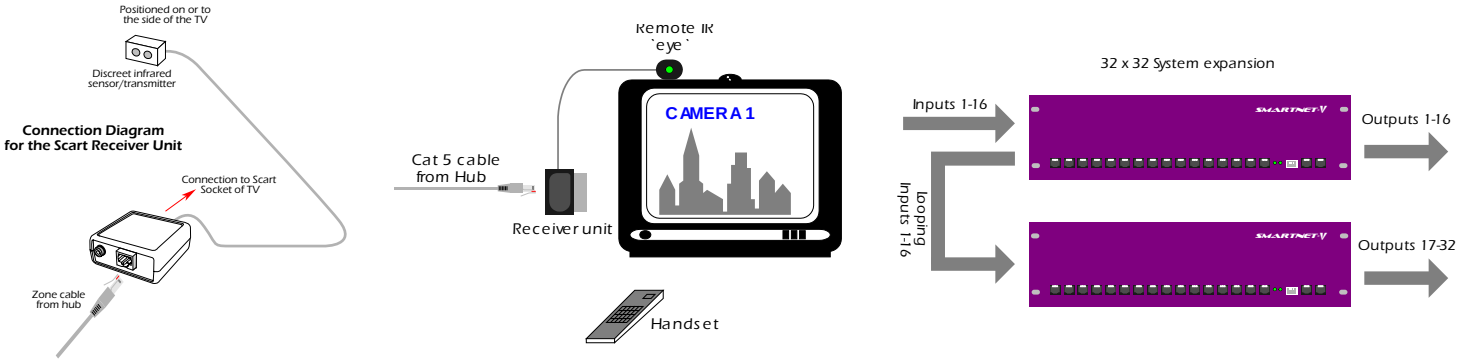
Handset On-Screen Menu

For ease of installation and monitoring the chassis provides an on-screen menu for each user. This feature is used to allocate names to each AV source and allow programming of all system options.

The SmartNet-V handset enables the user to switch between the various external sources. The system uses a unique IR protocol so conflicts with other devices should not occur. The handset has a multifunction feature allowing it to be programmed with other protocols. This allows the same handset to be used for multi-devices e.g. TV, VCR and STB etc.

Expansion

Multiple units can be cascaded together to form larger matrices. Looping inputs allow both the video and audio signals to be bussed to other units expanding the number of available users. The infrared control can also be cascaded by connecting the input and outputs between racks, thereby allowing all users to remotely control the source devices.



CHASSIS SPECIFICATIONS

		Video	
		Bandwidth	15MHz
		Input Signal Level	1Volt pk-pk into 75R
		Output Impedance	100 Ohms
		Input Impedance	100k Ohms
		Connector	RCA jack socket
		Format	PAL/NTSC/SECAM
		Audio	
		Bandwidth	20KHz
		Signal level	0dB
		Output Impedance	100 Ohms
		Input Impedance	10K Ohms
		Input Connector	RCA jack socket
		Looping Connector	Subminiature dB25 socket
Cat 5 Signals		Power	
Pair 1	Video balanced 1 V pk-pk	Voltage	90-230V
Pair 2	Audio L balanced 0dB	Connector	IEC
Pair 3	Audio R balanced 0dB	Fuse Rating	1A A/S
Pair 4	12V DC power + IR balanced signals	Frequency	50/60 Hz
Dimensions		IR Control	
Height	3U (133mm)	Type	Open collector to 12V
Width	19"	Multi-output connector	Subminiature dB37 socket
Depth	450 mm	Multi-input connector	Subminiature dB37 plug
Weight	10Kg		

RECEIVERS SPECIFICATIONS

Input Signals			
Inputs	Connector	Signal Type	Impedance
User	RJ45	Balanced Video/IR/Audio	100R
DC Power Requirements	12 V DC@100mA	Power Source	Remote via UTP

Output Signals			
Outputs	Connector	Signal Type	Impedance
User	Scart	Video Audio 1 Audio 2	75R 50R 50R
Infrared	3.5mm jack	TTL	100R

Dimensions			
	Height	Width	Depth
Receiver	65mm	65mm	28mm
IR 'eye'	40mm	40mm	20mm

ORDER INFO

Model	Description
SNV16X16	Smartnet-V 16 in by 16 out composite video, stereo audio, IR and power
SNV32X16	Smartnet-V 32 in by 16 out composite video, stereo audio, IR and power
SNV64X16	Smartnet-V 64 in by 16 out composite video, stereo audio, IR and power
SNV-RX100	Composite video and stereo audio receiver unit with inline power and internal IR receiver

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