

*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.*



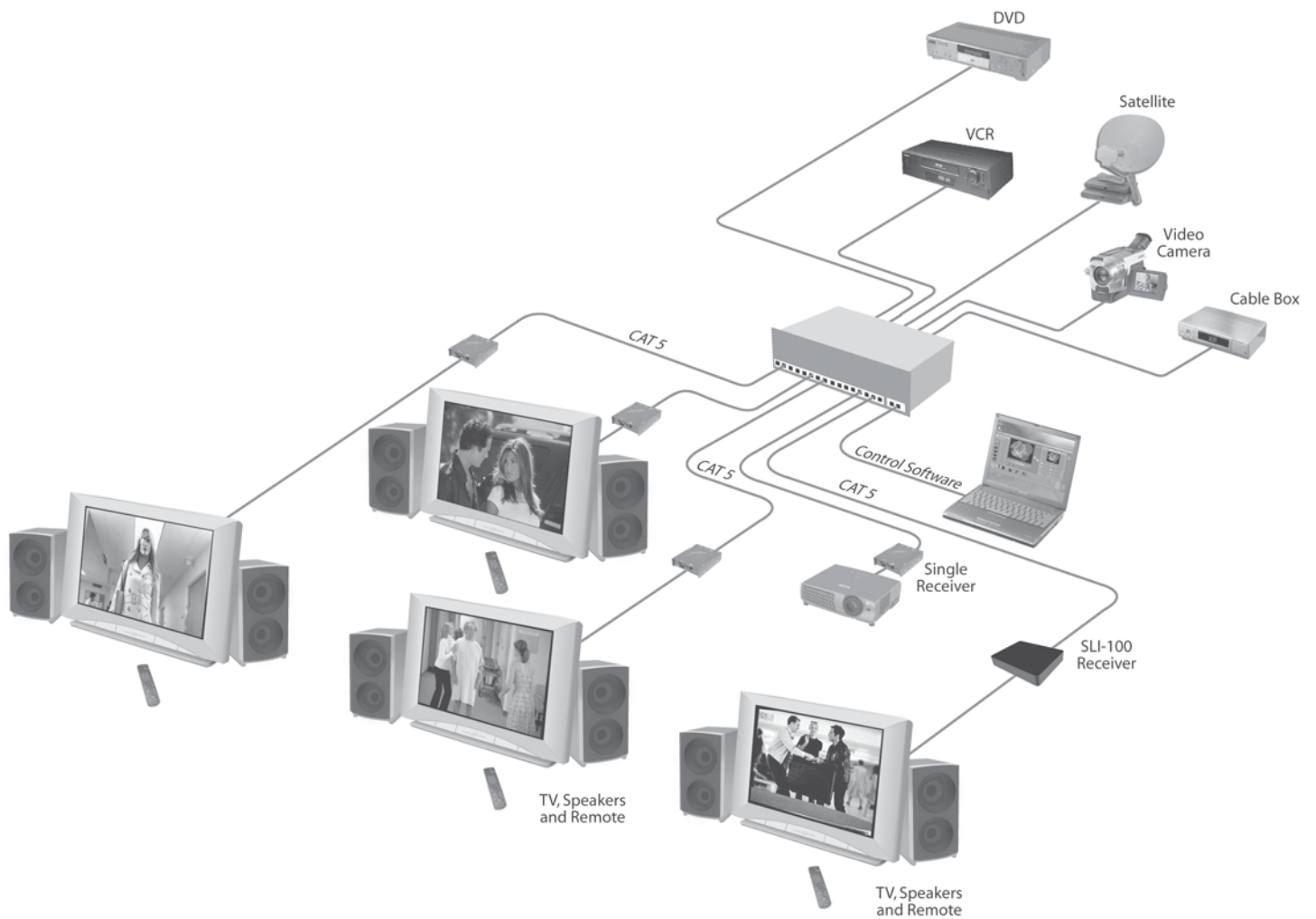
The SmartNet-V series of products provide a unique combination of High quality video and stereo audio matrix, Remote infrared control with pass-through and Signal distribution via Cat 5 cable

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*

## 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 IRIX-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.

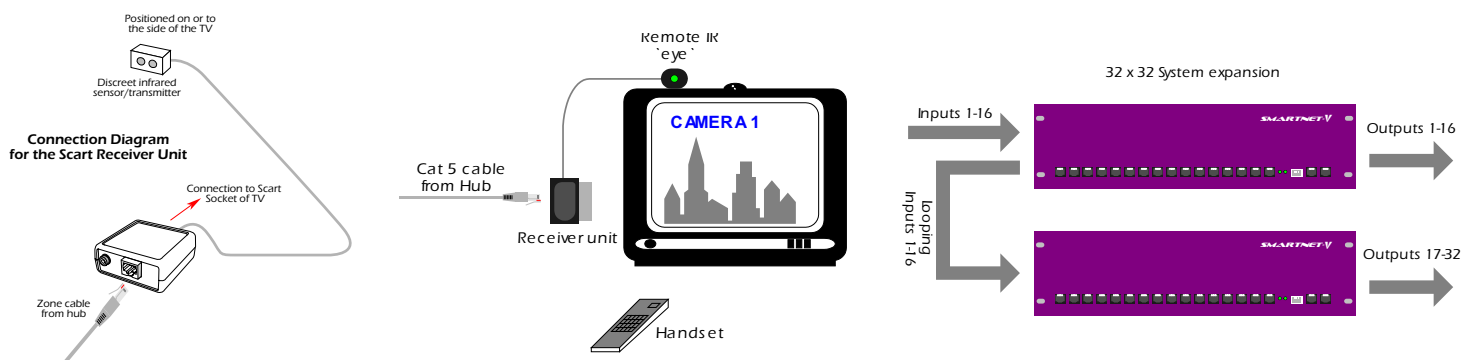
## Handset On-Screen Menu

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

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

## RECEIVERS SPECIFICATIONS

|                       |               |                             |                   |
|-----------------------|---------------|-----------------------------|-------------------|
| <b>Input Signals</b>  |               |                             |                   |
| Inputs                | Connector     | Signal Type                 | Impedance         |
| User                  | RJ45          | Balanced Video/IR/Audio     | 100R              |
| DC Power Requirements | 12 V DC@100mA | Power Source                | Remote via UTP    |
| <b>Output Signals</b> |               |                             |                   |
| Outputs               | Connector     | Signal Type                 | Impedance         |
| User                  | Scart         | Video<br>Audio 1<br>Audio 2 | 75R<br>50R<br>50R |
| Infrared              | 3.5mm jack    | TTL                         | 100R              |
| <b>Dimensions</b>     |               |                             |                   |
|                       | 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 |