TeleEye iii+

Video Recording Transmitter

VR-16168

Installation Guide

TeleEye
www.TeleEye.com

Notice:

Signal Communications Limited reserves the right to make improvements to the product described in this manual at any time and without notice.

This manual is copyrighted. All rights are reserved. This manual may not be copied, reproduced or translated in whole or part without prior consent from Signal Communications Limited.

*Tele*Eye is a trademark of Signal Communications Limited and is registered in China, Hong Kong, US and other countries.

All other trademarks are the property of their respective owners.

Version 1.0

Limits of Liability and Disclaimer of Warranty

Signal Communications Limited have taken care in preparation of this manual, but makes no expressed or implied warranty of any kind and assume no responsibility for errors or omissions. No liability is assumed for incidental or consequential damages in connection with or arising out of the use of the information or accessories contained herein.

Features and specifications are subject to change without prior notice.

FCC Statement on Class B

WARNING

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determine by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- **Reorient or relocate the receiving antenna.**
- **Increase the separation between the equipment and receiver.**
- **Connect the equipment into an outlet on a circuit different from that to which the receiver is needed.**
- **Consult the dealer or an experienced radio/TV technician for help.**

Shielded cables must be used with this unit to ensure compliance with the Class B FCC limits.

Table of Contents

SECTION 1

INTRODUCTION

TelEye III+ Video Recording Transmitter (VRT) is a one-plug module on LAN and the Internet for remote video monitoring and recording.

VRT provides simultaneous remote monitoring, recording and playback. Users can keep track of live video and play back recorded video from any remote locations.

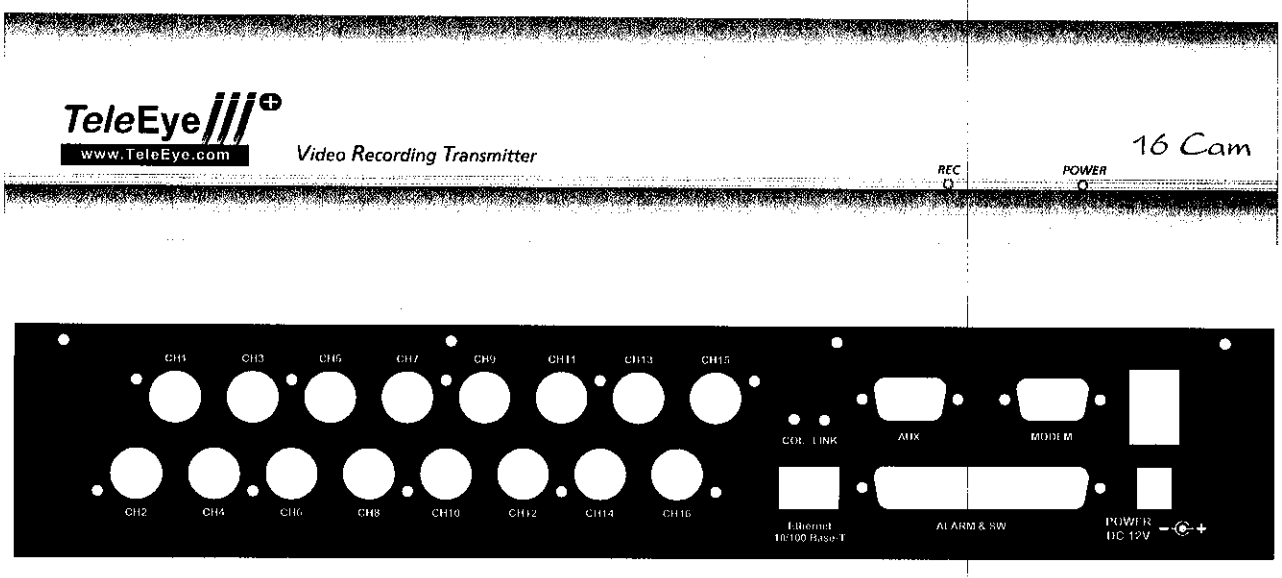
Features

- Real time video transmission
- 16 video & alarm inputs
- 4 relay switches
- Triplex Operation: Simultaneous video monitoring, recording & playback
- Password protection on connection and settings
- Built-in real time clock

SECTION 2

INTERFACE DESCRIPTION

Model: VR-16168



Functional Descriptions

VIDEO INPUT Connectors

- **VR-16168**: CH1 – CH16
- Standard BNC connectors for color and black&white video sources
- A composite video signal should be supplied to these connectors
- 'Line lock" camera(s) is(are) recommended to be used.

ALARM & SWITCH Port

- 4 remote control switches are available for all the models.
- **VR-16168**: 16 alarm sensors
- All alarm channels have the same priority.

Ethernet Socket (10/100 Base-T)

- This socket is used for connecting ***VRT*** to the corporate computer network (e.g. LAN)

Collision & Link LED Status

- COL LED, when on, indicates that collision is occurring on the network.
- LINK LED, when on, indicates that ***VRT*** is connecting to the network and ready to function.

AUX & MODEM Port

- These two ports are used for future development.

Power Jack

- A 2.1mm D.C. power jack for the connection to the power supply (12V D.C.) 

SECTION 3

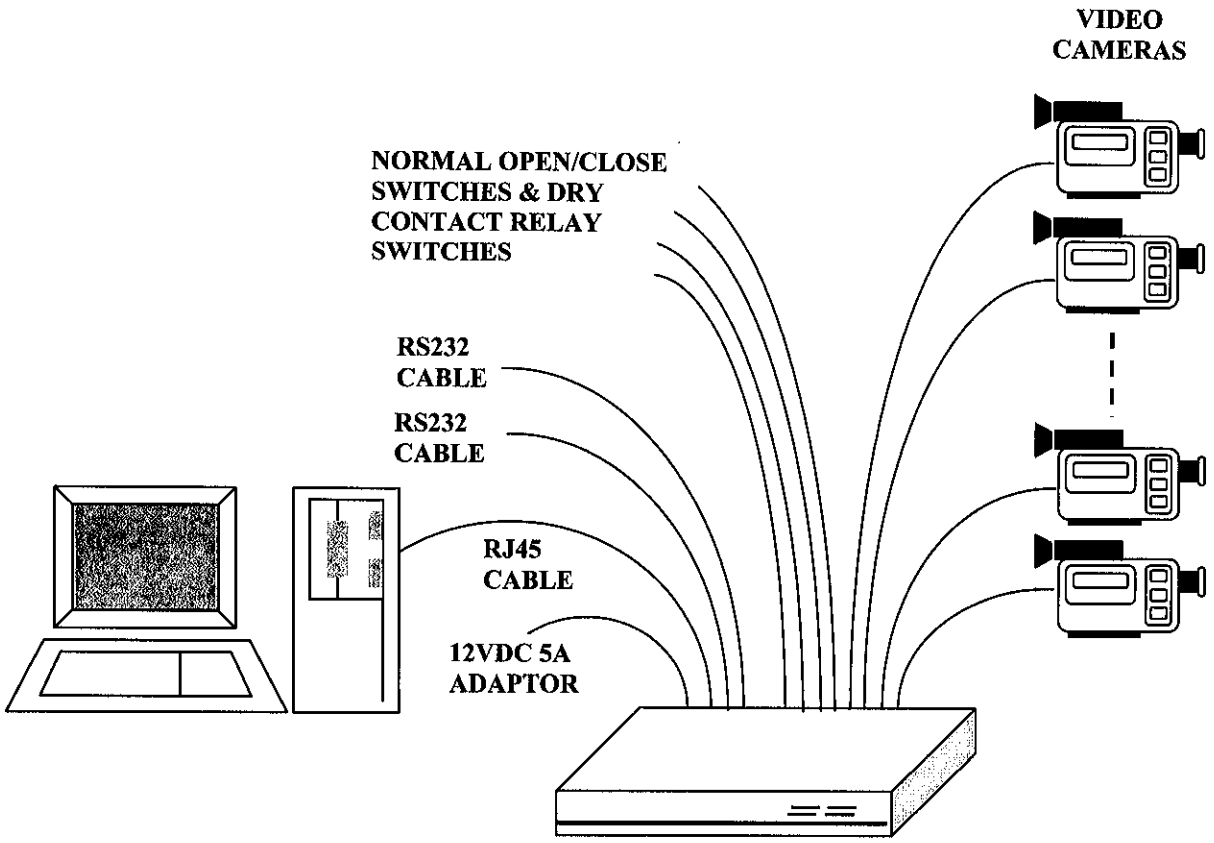
INSTALLING VRT

What You Need

To install and operate the ***VRT*** transmission unit, the following items are required:

- *TeleEye III+* ***VRT*** *Transmission Unit*
  The image transmitter supports up to 16 video sources in all PAL or NTSC format.
- *CCD Camera*
  Color / monochrome, PAL or NTSC.
- *Coaxial Cable (RG-59 recommended)*
  It is used to connect the video output of the CCD camera to the video input of ***VRT*** transmission unit.
- *RJ45 LAN Cable*
  It is used to connect the ***VRT*** transmission unit to Ethernet socket of the PC.
- Adaptor
  A d.c. 12V Adaptor.

System Connections



TeleEye III+ Video Recording Transmitter (VRT)

Recommended Setup Procedures:

Step 1: Plug one end of the RJ45 LAN cable into the socket marked **Ethernet** on the ***VRT*** transmitter, then plug the other end to the Ethernet socket of the computer.

Step 2: Plug one end of the *BNC* cable into the **VIDEO OUTPUT** of the *CCD* camera, then plug the other end to the ***VRT*** 's **VIDEO INPUT** connector (**CH1** preferred)

If more than one camera, plug the *BNC* cable sequentially to the **CH2** to **CH16** of the ***VRT***.

Step 3: Plug one end of the Alarm & SW cable into the DB-9 male connector of the alarm sensor box and plug the other end of the cable to the DB-37 female connector of the ***VRT*** marked **Alarm & SW**.

Step 4: Plug the round end of the d.c. adaptor into the socket marked POWER on the ***VRT*** transmitter.

Step 5: Plug the adaptor to a.c. power source for switching on the ***VRT***.
The blue LED on the front panel of ***VRT*** should light up.

About the Reception Software

TeleWin Reception Software is a Windows 95/98/ME/NT/2000/XP application program (IBM compatible PC). It implements the system controls as well as image decoding of the ***VRT*** transmitter. The compressed data are decoded and displayed through the PC monitor.

Software Installation

Before setting up ***TeleWin***, please change the video setting to *800 x 600 true colour* or *16-bit high colour* in Windiw's **Display Properties**.

TeleWin software CD contains an installation program, SETUP.EXE. Please use this program to setup the necessary files into the hard disk of the reception unit.

Once you have completed the following installation procedure, you can run ***TeleWin*** directly from your hard disk.

Connecting *TeleWin* to *VRT*

Step 1: Make sure your video setting of Window's environment is *800 x 600 true colour* or *800 x 600 16-bit High Colour*. To start ***TeleWin* Reception Software**, click on the **Start** button on the taskbar, then choose **Programs** -> *Tele*Eye *III* -> *Tele*Eye *III*+ **WRS3-AD.**

Step 2: To connect to the ***VRT***, click **Connect** under the **Connection** menu or the ***Connect*** button.

Step 3: In the ***Connect Using*** box, select **TCP/IP** and enter the IP address as **192.168.0.1**. This allows the ***TeleWin*** to communicate with the ***VRT*** through the RJ45 LAN cable.

Step 4: Fill in the password for connection. The **default password** is **000000**.

Step 5: You may now click the ***connect*** button to make connection.

TeleWin Operation

You may connect/disconnect the connection by selecting **Connect/Disconnect** under the **Connections** menu or clicking the **Connect/Disconnect** button.

You may reset the alarms by clicking **Reset Alarm** under the **Event->Alarm** menu or with the **Reset Alarm** button.

You may enable/disable recording by clicking the **VRT REC** button.

You may playback the recorded video by clicking the **Remote Retrieval** under the **Remote** menu.

You may change the video mode from remote retrieving to monitoring by clicking the **Remote Monitoring** under the **Remote** menu.

Trouble Shooting:

If you encounter problem in connecting the ***VRT*** transmitter, you should check the following.

Please make sure your PC has a network card and is configured with network settings. Go to **Control Panel->Network** to enter the following network settings.

- IP = 192.168.0.2
- Subnet mask = 255.255.255.0

Pin Definitions of the crossover RJ45 CABLE

When linking ***VRT*** to PC, you need the crossover RJ45-to-RJ45 cable. Table F-2 lists the definitions for the crossover RJ45-to-RJ45 cable.

Terminal A			Terminal B		
White orange	1	TD+	3	RD+	White green
Orange	2	TD-	6	RD-	Green
White green	3	RD+	1	TD+	White orange
White blue	4	BI_1+ (Not used by 10BaseT)	7	BI_2+ (Not used by 10BaseT)	White brown
Blue	5	BI_1- (Not used by 10BaseT)	8	BI_2- (Not used by 10BaseT)	Brown
Green	6	RD-	2	TD-	Orange
White brown	7	BI_2+ (Not used by 10BaseT)	4	BI_1+ (Not used by 10BaseT)	White blue
Brown	8	BI_2- (Not used by 10BaseT)	5	BI_1- (Not used by 10BaseT)	Blue

Table F-2: Crossover RJ45-to-RJ45 cable definitions.