

TeleEye Pro

Transmission Unit PTA8-B1 / PTA8-C1/

User Guide

SICOM

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**

Third party trademarks are the property of their respective holders.

Copyright (c) 1995-98 **Signal Communications Limited**.
All rights reserved.

Version 2.6

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.

FCC Statement on Class B

Table of Contents

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.

SECTION 1

INTRODUCTION

5

SECTION 2

INSTALLING *TeleEye Pro*

- What You Need
- System Connections
- Software Installation
- Registering the Transmission Unit
- Connecting *TeleWin* to *TeleEye Pro*
- Alarm Port Definition
- Pin Definitions for Null Modem Cable
- Transmitter Unit

6

7

8

8

9

9

9

9

10

SECTION 3

SPECIFICATIONS

11

- Model: PTA8-B1 and PTA8-C1

SECTION 1

INTRODUCTION

TeleEye Pro is an advanced *Video Monitoring System*. The transmission unit is especially designed for monitoring medium sized firm, factory and warehouse. Two models are available to suit for different applications. **PTA8-B1** is a monitoring system transmitting B/W video frames. **PTA8-C1** functions as standard model for the transmission of color video.

Features

- Transmits high quality videos of multiple CCTV cameras
- Achieves fast video update by using an interframe image compression
- Password protection on connections and settings
- Built-in real time clock
- Multiple alarm inputs with independent NC / NO trigger contacts
- Remote control through 2 relay switches

About the Reception Software

The **TeleWin Reception Software** is a Win95 application program (IBM or compatible PC). It implements the system controls as well as image decoding of the **TeleEye Pro** systems. The compressed data are decoded and displayed through the PC monitor.

SECTION 2

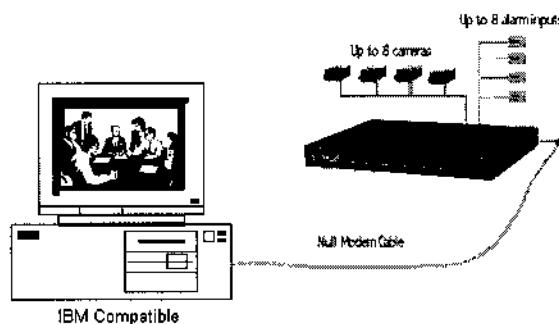
INSTALLING *TeleEye Pro*

What You Need

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

- *TeleEye Pro* Transmission Unit
The image transmitter supports up to 8 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 **TeleEye Pro** transmission unit.
- *Alarm Cable*
It is a shielded 37 ways cable.
- *Null Modem Cable*
It is used to connect the **TeleEye Pro** transmission unit to one of the COM port of the PC.

System Connections



Recommended Setup Procedures:

- Step 1:** Plug one end of the Null Modem cable into the socket marked MODEM on the *TeleEye Pro* transmitter, then plug the other end to the COM port 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 *TeleEye Pro*'s VIDEO INPUT connector (CH1 preferred).
If more than one camera, plug the BNC cable to the *TeleEye Pro* CH2 to CH8 sequentially.
- Step 3:** Plug one end of the alarm cable into the connector of the alarm sensor and plug the other end of the cable to the appropriate pins of the ALARM CONNECTOR of the *TeleEye Pro*.
- Step 4:** Plug the round end of the a.c. adaptor into the socket marked POWER on the *TeleEye Pro* transmitter. (Note: transmitter can support 9V d.c. to 12V d.c. supply voltage)
- Step 5:** Plug the a.c. adapter to a.c. power source and switch on the *TeleEye Pro*. The *TeleEye Pro*'s LED should light up.

Software Installation

Before setting up *TeleWin*, please change the video setting to *800 x 600 true colour* or *16-bit high colour* in Win95's **Display Properties**.

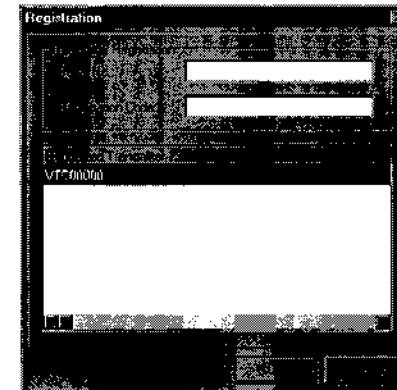
TeleWin software contains an installation program, **SETUP.EXE**. Please use this program to setup the necessary files into the hard disk of the reception unit.

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

Registering the Transmission Unit

Before connecting to the transmission unit, you have to perform *transmission unit registration*. This can be done under the **Transmitter** menu. Transmission unit registration is required only once; all the information will be recorded in the hard disk.

In the package, you are provided with a Registration Code and a Serial Number of the transmission unit. You need to fill them in the Registration Message Box as shown below. Besides, please keep them in a safe place for future reference.



Connecting *TeleWin* to *TeleEye Pro*

Step1: Make sure you video setting of Win95 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 -> TeleEye Pro -> TeleEye Pro WRS-AD-1*.

Step2: To connect to the *TeleEye Pro*, click *Connect* under the *Connection* menu or the *Connect* icon.

Step3: In the *Connect Using* box, select *Direct to COM1* or *Direct to COM2*. That is the COM port that the null modem cable is physically connecting to.

Step4: Fill in the password in order to connect. The default password is **000000**.

Step5: You may now click the *connect* button to make connection.

You may disconnect the connection by selecting *Disconnect* on the *Connections* menu or clicking the *Disconnect* button.

You may reset the alarms by clicking *Reset Alarm* under the *Alarm* menu and fill in the password. The default password is **000000**.

Alarm Port Definition

Pin 1	- ALARM IN 1	Pin 19	- GND	Pin 6	- ALARM IN 6	Pin 24	- GND
Pin 2	- ALARM IN 2	Pin 20	- GND	Pin 7	- ALARM IN 7	Pin 25	- GND
Pin 3	- ALARM IN 3	Pin 21	- GND	Pin 8	- ALARM IN 8	Pin 26	- GND
Pin 4	- ALARM IN 4	Pin 22	- GND	Pin 35	- GND		
Pin 5	- ALARM IN 5	Pin 23	- GND	Pin 36	- REMOTE CONTROL SWITCH 1 B		
Pin 17	- REMOTE CONTROL SWITCH 1 A	Pin 23	- GND	Pin 37	- REMOTE CONTROL SWITCH 2 B		
Pin 18	- REMOTE CONTROL SWITCH 2 A						

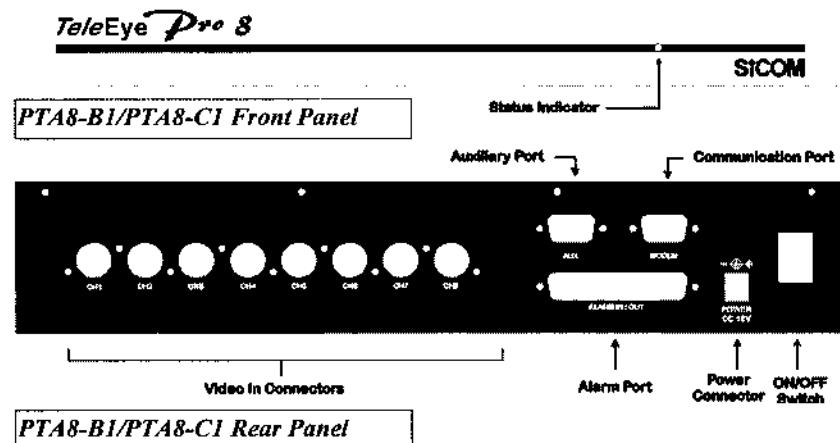
Pin Definitions of NULL MODEM CABLE

The pin definitions of a DB-9 (female) to DB-25 (female) or DB-9 (female) to DB-9 (female) null modem cable is shown below:

<i>TeleEye Pro</i>		PC	PC
Transmission Unit		DB25	DB9
2	RXD	2	3
3	TXD	3	2
1	CD	20	4
4	DTR	8	1
5	GND	7	5
7	RTS	5	8
8	CTS	4	7

Transmission Unit

The panels of the *TeleEye Pro* transmission unit are shown below :



Functional Description

VIDEO IN Connectors (CH1 – CH8)

- Standard BNC connectors for the video sources
- A composite video signal should be supplied to these connectors

ALARM IN Connector

- This connector is used for connecting 2 remote control switches and 8 alarm inputs.
- All alarm channels have the same priority

Communication Port

A DB-9 male connector for connecting to COM port of PC

Power Connector

A 2.1mm DC power jack for the connection to the power supply (9V-12V DC)

Power Switch

A on/off switch of power.

SECTION 3

SPECIFICATIONS

MODEL	PTA8-B1 / PTA8-C1
VIDEO	
STANDARD	(P): PAL/CCIR, 625 LINES, 50 FIELDS PER SECOND (N): NTSC/EIA, 525 LINES, 60 FIELDS PER SECOND
INTERFACE	8 CHANNELS, 1.0V _{pp} COMPOSITE, BNC WITH 75Ω TERMINATION
FRAME CAPTURE	
RESOLUTION (H x V)	256 x 192 PIXELS
GRAY LEVELS	256
COLORS	16 MILLION
COMPRESSION	SCALEABLE ADAPTIVE IMAGE COMPRESSION
ALARM	
INPUT	8 INDEPENDENT CHANNELS, NC / NO
REMOTE CONTROL	
SWITCH	2 CHANNEL, DRY CONTACT CONTACT RATING : 2A, 120V A.C. RESISTIVE LOAD : 2A, 28V D.C.
INTERFACE	
TYPE	RS-232C, DB-9 MALE CONNECTOR
RATE	38,400 BITS PER SECOND
FORMAT	ASYNCHRONOUS, 8 DATA BITS, NO PARITY, 1 STOP BIT (N,8,1)
FLOW CONTROL	HARDWARE (RTS, CTS)
PROTOCOL	EFFICIENT ERROR CONTROL PROTOCOL
POWER REQUIREMENT	
INPUT VOLTAGE	9 - 12V DC
POWER CONSUMPTION	12W (MAX.)
ENVIRONMENT CONDITIONS	
AMBIENT	+5°C TO +40°C
TEMPERATURE	(40°C TO 104°F)
RELATIVE HUMIDITY	20% TO 85%, NO CONDENSATION
MECHANICAL DESIGN	
DIMENSION (W x D x H)	330mm x 280mm x 65mm
COLOR	BLACK
WEIGHT	2.7 kg