

# TeleObserver® TO2110B

Remote Video Transmission via GSM, PSTN (POTS), ISDN

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Whatever your personal or business interests concerning video transmission and surveillance are, we have the right answer for you with the TeleObserver product line.

In our TeleObserver TO2110B you find a totally mobile, powerful and compact system for the transmission of video images via the cellular phone network.

Live images can thus be transmitted world-wide from any place and any motion situation to a central station or a mobile reception station.

## System Structure

The TeleObserver TO2110B is designed for mobile operation, but it is also suitable for stationary use. Up to 4 cameras can be attached to the TeleObserver. The video transmission takes place through the integrated GSM modem or through an external PSTN or ISDN modem. The H.263+ standard-compliant compression software allows the transmission of up to 3 frames per second through the GSM net and up to 15 frames per second via ISDN. A connection to the receiver PC can be created through previously programmed alarm numbers. With a standardized serial interface it is possible to carry out control functions with the aid of the TeleObserver. For this serial interface DRResearch has an extensive offer of accessories.

To operate the TeleObserver, a standard PC with a modem is needed on the receiver side or, in case of higher mobility demands, a notebook with a GSM modem.



The receiver software must be installed at the computer. There are no further requirements.

## Fields of Application

The fields of application of the TeleObserver TO2110B include among others:

- Mobile control of construction sites, open cast mines and places of difficult access
- Remote assessment of machinery or condition of materials, e.g., in turbines, bridges or dams.
- Security
- Security operations in big events, e.g., concerts, meetings
- In public means of transport to keep vandalism and criminal offences under control
- Observation of traffic, analysis of accident focal points
- Live coverage

## Receiver Software

The software supports the following features:

- Video transmission after contacting the sender
- Automatic connection and transmission of post-alarm images in the event of an alarm detection by the sender
- Automatic redial
- Acoustic and visual signal in the event of an alarm
- Live camera switch and control
- Control of sender functions
- Automatic video recording at receiver side for later analysis
- Automatic record file

- Password-protected program settings of the system for alarm configuration
- Selection of different transmitter configurations
- Configuration of several sender
- Simple video replay



## Video Player Software

The TeleObserver TO2110B has an integrated replay software for video recordings. These recordings are archived during the transmission in a storage medium for later analysis. Due to the high compression rate just about 120 Mbytes memory space are needed for an observation time of 24 hours.

The software includes, besides well-known utilities, an integrated histogram for a fast search of points of interest in the whole video recording.

## Technical Specifications

Model	TeleObserver TO2110B
Video Input	4 NanoCon socket: CCIR / PAL, NTSC
Resolution	CIF (352 x 288 Pixel) QCIF (176 x 144 Pixel) SQCIF (128 x 96 Pixel)
Video Transmission	Digitalization of the analog camera input signals, compression rate beginning at 9600 bit/s, depending upon resolution and image quality, transmission of 1-3 images/s via GSM 15 images/s via ISDN
Compression Method	H.263 +
Interfaces	1 x RS-232
Sensor / Actuator	2 / 1
Power Supply	AC adapter plug, 12V, battery pack for up to 5 hours uninterrupted recording or transmission
Power requirements	500 mA/12 V active, 20 mA/12 V standby
Software	Receiver software with storage and control functions (24h about 120 MB) Video analysis and export software
Size	185 x 110 x 44 mm <sup>3</sup> (7.3 x 4.3 x 1.7 in <sup>3</sup> )
Weight	1,100 g (2.4 lb) (incl. battery pack)

## Receiver-Side System Requirements

Processor	Pentium 90 MHz
Memory	16 Mbytes
Graphic card	640 x 480, 256 colors
Operating System	Windows95 / Windows NT
Receiver	GSM, analog or ISDN modem

## Delivery Set

TeleObserver TO2110B with

- Internal GSM modem
- Battery pack
- Charging switch
- Antenna connection
- Battery control LED
- Function control LED
- DC IN

AC adapter

4 plugs for video inputs

Plug for Sensor/Actuator

Receiver software

Video analysis and export software

Instruction manual

## Accessories (Optional)

DetailExplorer (Software for the quality improvement of details in video images)

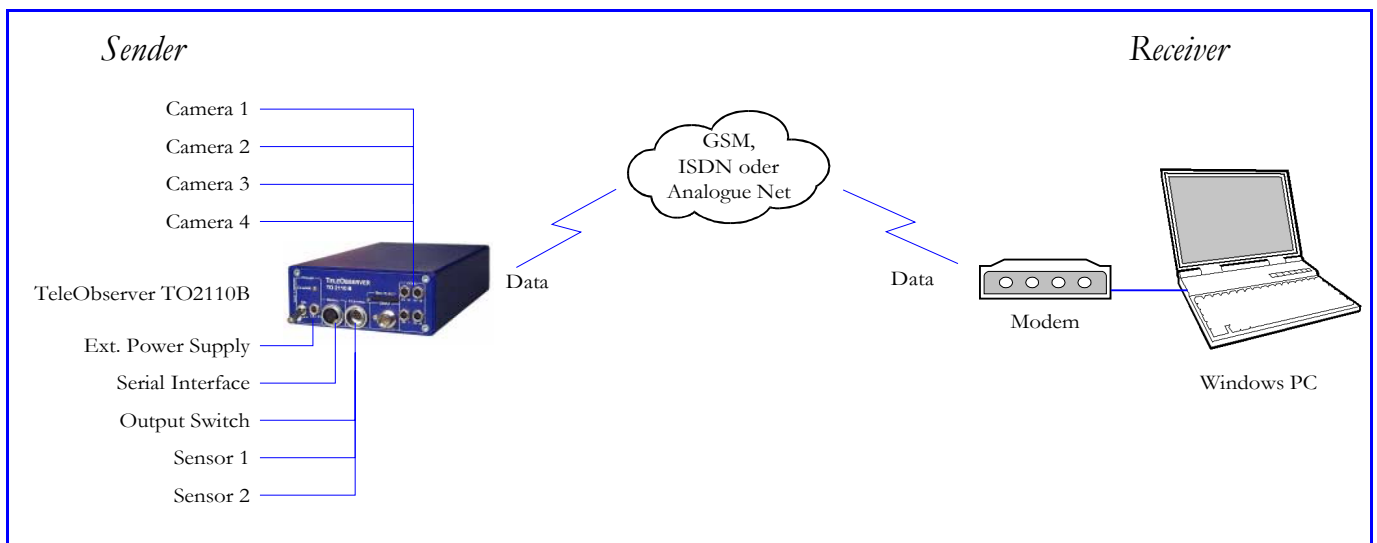
Relay Box (Device for the control of pan and tilt cameras, models with 8 or 16 relays)

VideoSwitch (Device for the connection of additional video cameras)

Modem cable

Null-modem cable

GSM antenna



Updated: September 7<sup>th</sup> 2000