ROBIT

Professional Video Equipment

Brochures

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1 IMD200 Under Monitor Display System Overview

Under Monitor Displays (UMDs) are extremely powerful tools in the design of control room monitoring systems, giving immediately identification of the source and/or destination of the signals being displayed on the monitors. Advanced UMD systems can incorporate tally information in the display and can be directly interfaced to the switching equipment that feeds the signals to the monitors so that the display information is continually updated as switching events occur.

The displays can operate as “static” displays, where the information to be displayed is downloaded to the device from a PC over a serial data link or by push-buttons, or as “dynamic” displays, where the information is received continuously from the router control system.

UMDs (Under Monitor Displays) are alpha-numeric display modules with tally LED bars positioned under picture monitors (or in front of them). A remotely located Controller interfaces all the messages, color attributes and tallies with the Router and the Vision Mixer.

Dynamic UMDs are serially addressed by the Controller. Tally routing information may be changed either automatically or at will.

Various types of display are available, so as to match common monitor spacing.

The Under Monitor Displays are designed to operate either alone or as part of an integrated system. The modular approach allows a system to be easily reconfigured at a later date.

Static and Dynamic displays are available as single, double and triple to match common picture monitor spacing. OSD Audio monitor Display with Tally are available so to integrate the System with the new flat LCD monitor (for Video Splitting wall).

Single color dynamic displays are normally green (standard). Red display upon special order.

Tallies are individually addressable.

Film static displays are bi-color with two tally led bars.

1.1 Available Models

UMDs are alpha-numeric displays with either 10, 20, double 9 or triple 6 characters in length. UMDs can be either Film Static, Semi Static or Dynamic. All UMDs incorporate Tally LED BAR beside the message area.

- **FILM Static** (Double Color)

  BICOLOR (Green and Red) UMD. This UMD is obtained with a back-light LED illuminating a printed film. The film is printed by a common Laser Jet Printer. Tally can be displayed by color changing or Led Bars. Two levels of tallies available with close to ground contacts.

- **Semi-Static** (Single Color)

  Green or Red UMD. This model is a 16-segments LED display. Messages are programmed by the user via front push-buttons. Tally can be displayed by Led Bars or text changing and/or flashing. Two levels of tallies available with the Controller, one level of tally using close to ground contact.

- **Dynamic** (Single Color)

  Green or Red UMD. The Dynamic UMD is a 16-segments LED display. Messages are controlled via the serial link by the System Controller. Tally can be displayed by Led Bars or text changing and/or flashing. Two levels of tallies available with the Controller, one level of tally using close to ground contact.

- **Dynamic** (TRICOLOR)

  As above, but with full TRICOLOR displays. Tally can be displayed by color changing, Led Bars or text changing and/or flashing. Two levels of tallies available with the Controller, one level of tally using close to ground contact.

- **On Screen Display** UMDs. Dynamic UMDs with Tally and Audio Monitoring (excellent for Video splitting). VU-meter or Peak-meter with Stereo Analogue Audio. Phase correlation meter. Alarm on audio level or audio and video absence. Internal Video signal generator.

- **Controller** (MST ND)

  Features: PC interface to configure the UMDs, Dynamic Display alpha-numeric message control, Tally control, Router Integration, Parallel Interface and or Serial Tally decoding from a vision mixer (optional Interfaces **64PIO** and **SMIX**). Rack mount 1U.

- **Controller PC** (SER/PC)

  Features: PC interface to configure the UMDs, Dynamic Display alpha-numeric message control and Tally reaction. Tally can be used only with close to ground contact.

- **Virtual Matrix** (Tally GPI Encoder)

  Features: Parallel to Parallel Tally decoding, Direct Router interface, PC interface to configure the Xpoint map, Up to 1024 I/O.

- **16 OPTO IN**

  OPTO isolated 16 INPUTs, 1U rack mount Unit.

- **PSU**

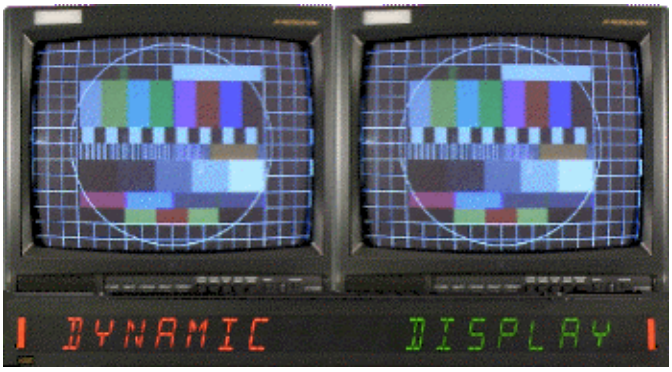
  Power Supply Unit for up to 24 UMDs / 64 UMDs, 1U rack mount Unit.

- **TD Clips**

  Tilt down clips, used to save 1U rack space. Front monitor rack mount.

1.2 Display Models

1\2U - 1U Models

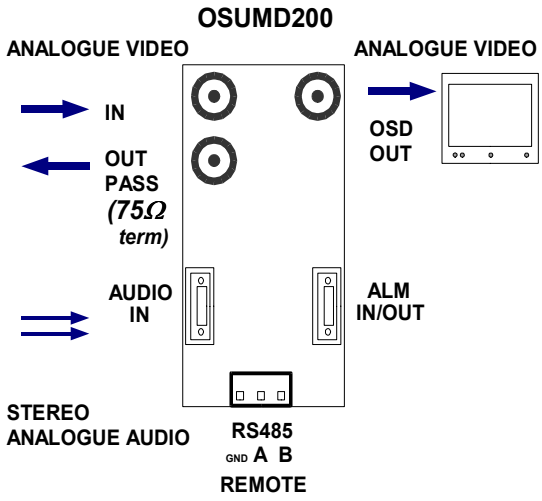


Front monitor Models

1U - FILM Models

MINI FILM Model

OSD Audio meters

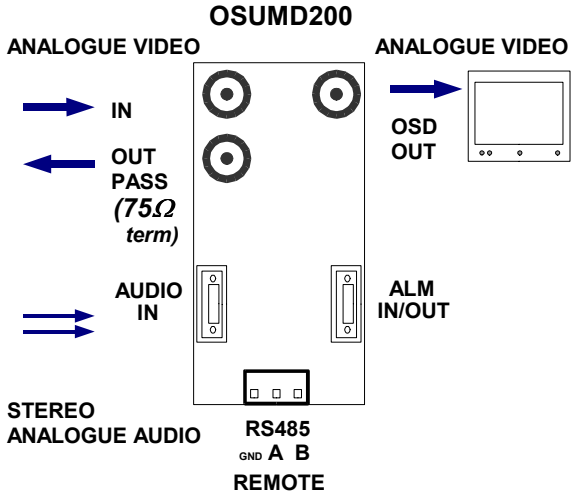


1.3 On Screen Display stereo Audio meter details

OSUMD 200

audio meter, peak meter, phase meter & Text display

OSD with Stereo Audio Monitoring, Alarm and Tally



Technical specifications

Overview:

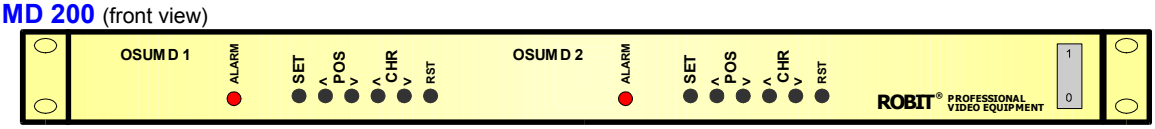
Rack-frame: 1 U Rack 19" (up to 2 OSUMD200 units)
Code : OSUMD-1P 1 stereo meter with UMD - PAL rack 1U
Code : OSUMD-2P 2 stereo meter with UMD - PAL rack 1U
Power Supply:
240VAC, 50/60Hz, 30VA
(NTSC and 110VAC available)
TEMPERATURE RANGE:
10÷40°C
DIMENSIONS: (mm)
Height 44
Width 483
Depth 110
VU-meter with peak-hold
Peak-meter with peak-hold
linear phase meter

Video & Audio signals

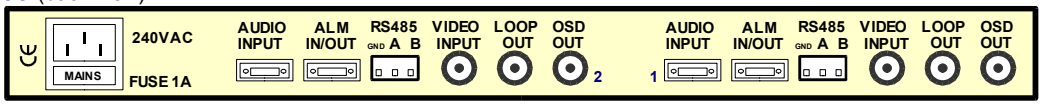
Video:
ANALOGUE PAL (75ohm input)
Loop-Through (composite video 1Vpp, output 1Vpp on 75 ohm)
Audio:
ANALOGUE STEREO (balanced and unbalanced)
meters: dBu, German PPM (more available on demand)
Calibration:
0dB VU; -6 dB PPM; 0.775Vrms; 2.18Vpp @ 1KHz sine wave
PHASE correlation meter
IN/OUT:
GPIO for remote OSD and ALARMs
UMD:
under monitor display option 10 characters with Tally
TEXT:
Display Text (e.g. Camera title) 1 line x 10 alphanumeric characters
REMOTE:
RS485/232 remote control software (optional)
"No Video", "Low level Audio" and "High level Audio" alarms
with 2 "o.c." outs
GPI "close to ground" for Tally IN and general purpose ALARM
Transparency selectable
internal sync generator

Note: the equipment can also display just a simple Text (e.g. Camera title) by excluding audio metering.
1 line x 10 alphanumeric characters.

OSUMD 200 (front view)



OSUMD 200 (back view)



1.4 V-MTX200 virtual matrix (GPI encoder)

V-MTX 200 is a Tally Matrix system that interfaces with many Routers (e.g. Utah, Leitch, Quartz etc) directly. Tally X-points are identified from the router by a RS232 connection to operate tallies following the internal configuration system. There are two different working maps, the first one follows the router, the second one is assigned by the MTX-PC software. It is also possible to force the entire map to a pre-assigned status configured by a PC.

It is possible to work interfacing the router or in stand-alone. The system operates without a PC, which is necessary only to configure the system itself.

V-MTX 200 is a modular system that can manage until 512 different X-points wired in RS485. Configuration and status are stored in an internal memory. In the event of Power failure, the system will not lose any X-point, or setting.

V-MTX-SMIX is a Tally matrix with serial MIXER interface. X-points configured via PC and file Salvo.

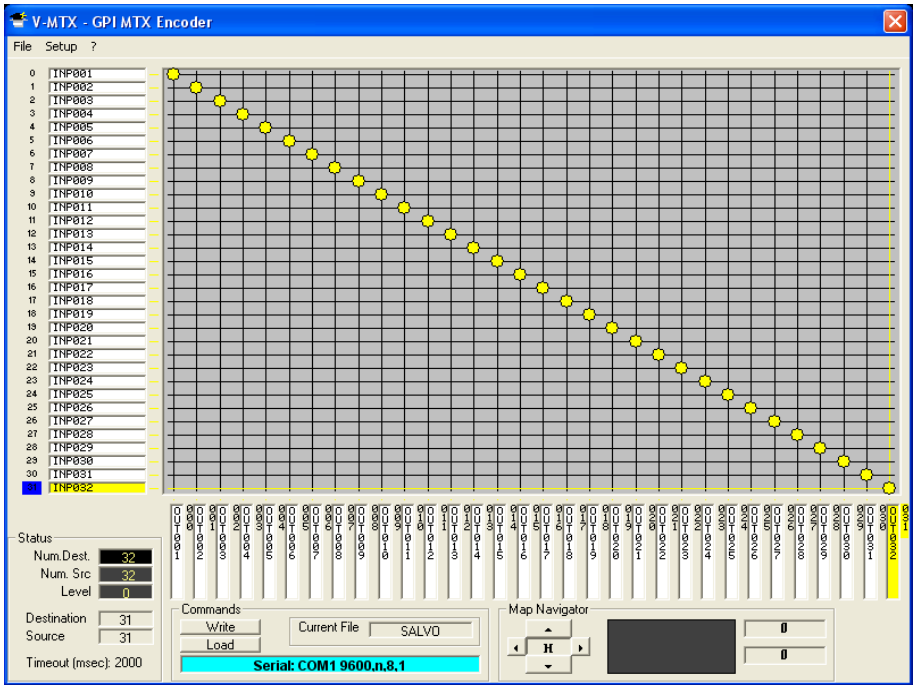
Technical Data

LINK OPTION	POWER SOURCE	TEMPERATURE RANGE	PHYSICAL DIMENSIONS
-RS232 to PC	Mains Ranges Voltages 220VAC	Operating 0÷50°C	Height 44mm (1.75")
-RS232 to MATRIX	Frequency 50÷60Hz		Width 482mm (19")
	Power Consumption 15VA		Depth 111mm (4.41")

INPUT AND OUTPUTS:
32 pull-to-ground Inputs
32 contact-close-to-ground Outputs

Expansion Available:
up to 96 inputs and 96 outputs

PC CONTROL SOFTWARE



1.5 TIME CODE Displays

OVERVIEW:
Time Code displays which are able to read and display, frame-accurately serial time(s) received from Time Code generator or system automation.

Available with a digit height from **20mm** up to **41cm**. RED, GREEN or AMBER. Brightness can be adjusted.

Main features

1/2U - 1U rack frame - wall mount

Dynamic Display numeric Time Code control

RS485 / RS422 serial interface
Automation software available
Optional LTC input 4VPP (balanced/unbalanced) speed: 21 to 39 frames/s (only from time base)

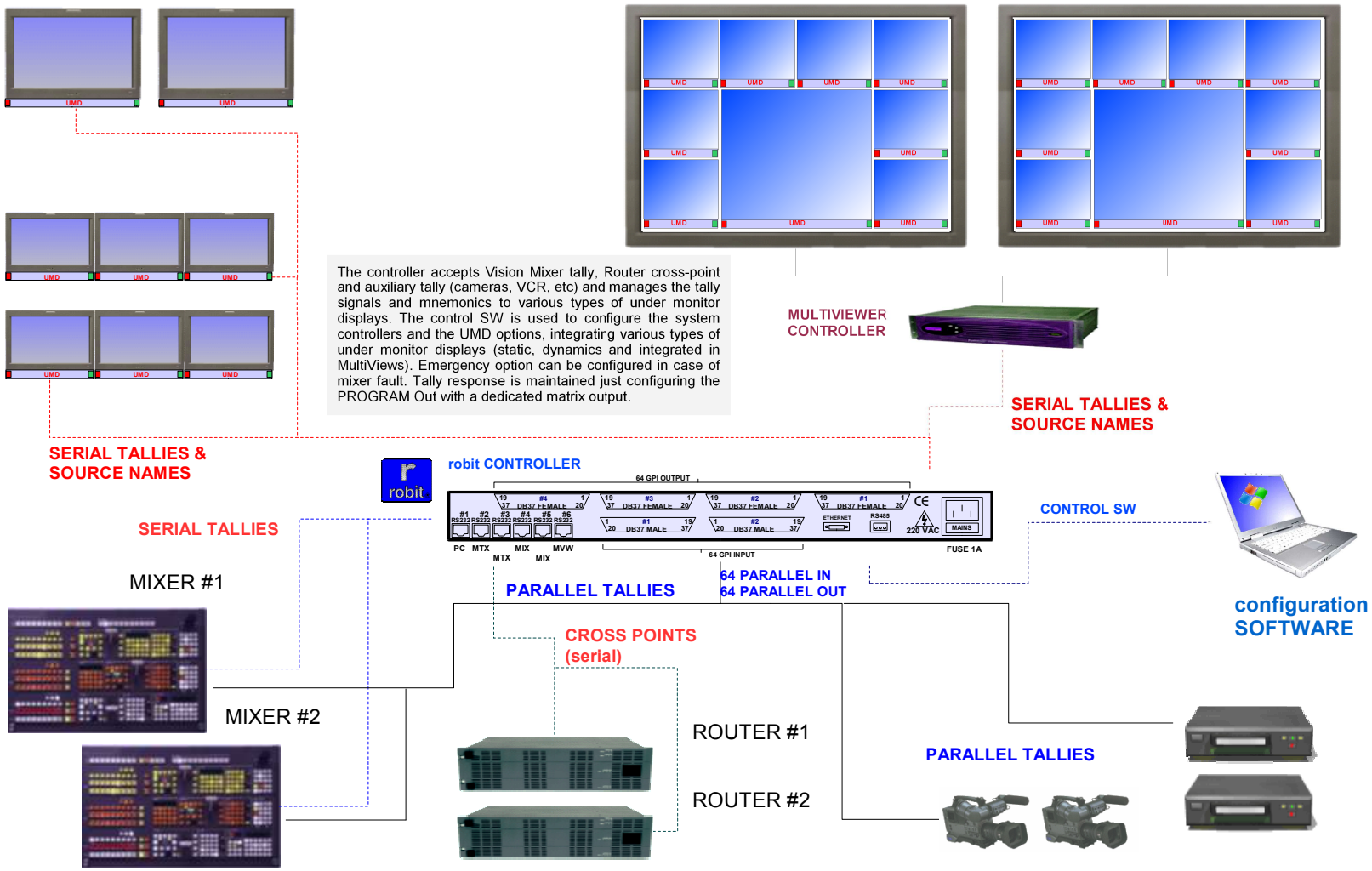
Technical Data

TIME Code interface
Serial interface
RS232 or RS422/485
optional LTC Input 4VPP
(balanced/unbalanced
only from time base)

POWER SOURCE:
Mains Ranges Voltages
12VAc or 240VAC, 50/60Hz
Frequency 50÷60Hz
Consumption from 10VA

TEMPERATURE RANGE:
10÷40°C

2 UMD system layout example



www.robit.com

3 SI200 Changeover system overview

SI200 is a 4 user-configurable channels system designed to switch and monitor primary and backup sources into a guaranteed output. This changeover system is specially designed to guarantee the presence of one of the input sources to the output channel. The output can be manually or automatically selected. In case of automatic mode, the quality of the primary signal is detected by the system itself.

SI200 can process the following signals:

- composite, scrambled or digital 270 Mb/s Video
- analog or digital AES EBU Audio
- RS232 serial or similar on DB9 connector
- DS3 43Mb/s

Because of its flexibility, the system can perfectly fit your need in analog, mixed-format and all digital television. In 2U, SI200 provides 4 user-configurable Video and 8 user-configurable Audio channels. It can also switch 2 DB9 serial signals to a DB9 out connector. Each Audio and Video channel consists in a primary and backup input source, that can be switched to the output channel. The system can also be used to distribute an analog Video channel in four outputs by using the SVDA200 board. Each channel can be gain adjusted and equalized. At the same way, two analog balanced Audio channels can be distributed on four outputs; each one of them can be gain adjusted. It is possible to configure the system to operate with Local or Remote control. The Remote control can be operated by a remote control panel or by a serial opto-isolated RS485 link. SI200 can work in Manual or Automatic mode. During Automatic mode, the system detects the quality of a configurable group of individual channels of the primary sources. The fault detection, that can be customized signal by signal to specific needs, works on analog voltage levels and tests the quality of composite Video signal. SI200 system can receive a maximum of 4 intelligent boards that can be associated to a different back-board specific to the chosen signal and application. Each single board can be configured to a composite, scrambled, or digital Video signal. At the same time Audio channels can be configured for analog or digital AES EBU signals. It is also possible to query or modify the state of the system by using a serial opto-isolated link, just by using a PC or a specific HW.

Our system @ work:

Combined with a site monitoring & control system, it allows to monitor and control the operation of radio-television stations in remote locations, distributed over a geographical area on a regional or national scale. The sites are connected to the control center through different communication channels, including VHF or UHF radio, dial-up modems, GSM modem, 64k or 2 Mbit/sec digital channel. Our changeover is part of the nation-wide tele-control system used to monitor and remote the television signal network (Mediaset group Italy).

3.1 SI200 changeover details

Installation

Rack-frame; 2 U Rack 19” can support 4 SI200 intelligent-boards and 4 back-boards of chosen and optionally different type. Can also support 4 SVDA200 boards and 4 RSVDA back-boards. It possible to insert a mixing of main-board and back-board just depending on specific application.

Power Supply

Voltage 220VAC, Frequency 50/60Hz, maximum Power consumption 30VA. (110VAC available)

Technical specifications

Analogue Video:
standard signal PAL CCIR input 75ohm (NTSC available)
Loop-Through
composite video 1Vpp, output 1Vpp on 75 ohm
scrambled

DIGITAL Video:
digital serial 270Mb/s
DS3 43Mb/s

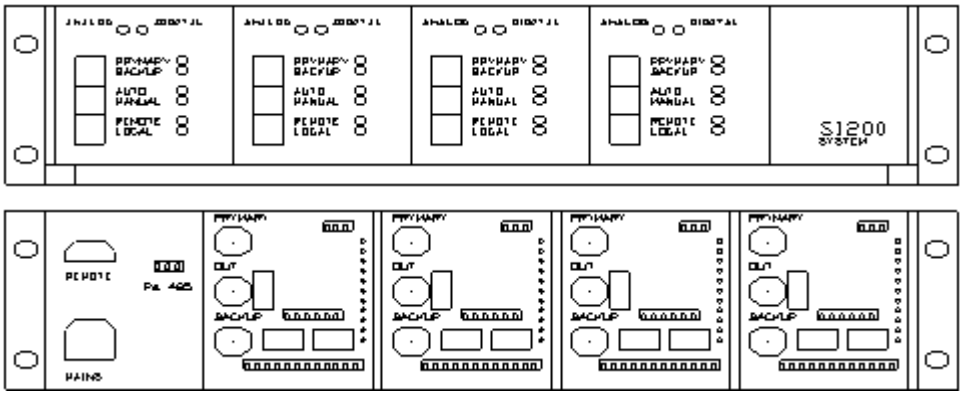
TEMPERATURE RANGE:
Operating 10÷40°C

Analogue Audio:
balanced
unbalanced

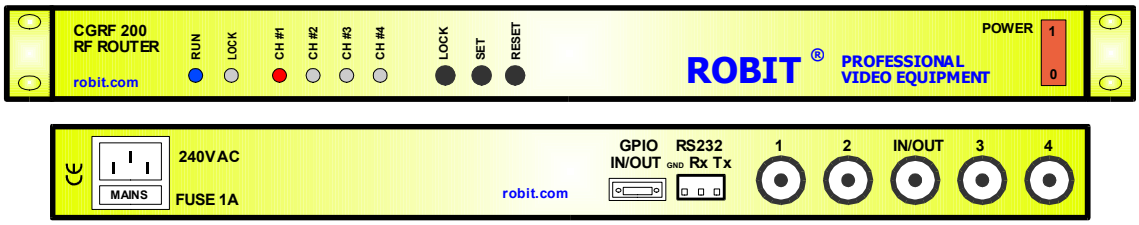
DIGITAL Audio:
AES/EBU

PHYSICAL DIMENSIONS RACK-FRAME:

Dimensions	mm
Height	88
Width	483
Depth	465



4 CGRF 200 RF Multiplexer for Testing Equipment



CGRF 200: Bi-directional broadband RF switch 4x1 1x4 for Testing Equipment

CGRF 200 is a very flexible connection path between the device under test and the test equipment. It allows different instruments to be connected to the point on your measurements at the same time. CGRF 200 provides 4 configurable channels to 1 out (or 1 input to 4 outputs) in 1 U rack mount. SW remote via RS232 or RS485 serial link, auto timing switch or Manual source selection, to facilitate periodic testing of system function. Most brand Router interface available. Switching technology offers broadband switching capabilities for high-frequency and pulsed signals. Front panel controls are provided for source selection and operating mode. LED indicators are provided for operating mode and channel selection. Each control command is also available via remote RS232 or RS485 connector. GPIO for remote control and status.

Technical Data

PC LINK OPTION
-RS232
-RS485
automatic or manual operation

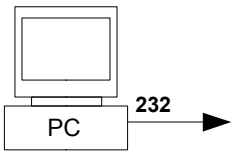
POWER SOURCE
Mains Ranges Voltages 220VAC
Frequency 50÷60Hz
Power Consumption 15VA

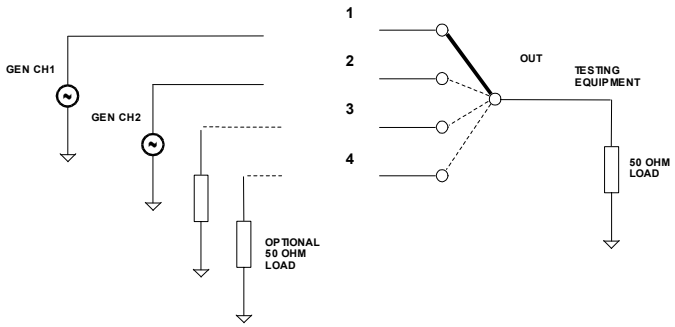
TEMPERATURE RANGE
Operating 0÷50°C

PHYSICAL DIMENSIONS
Height 44mm (1.75")
Width 482mm (19")
Depth 111mm (4.41")

BANDWIDTH: Up to 3GHz
RF SIGNALS
4 Video RF inputs/outputs (N-type or BNC connector)
1 Video RF output/input (N-type or BNC connector)

CONTACT INPUTS
4 GPI “close to ground” to simply remote the selected channel
CONTACT OUTPUTS
4 GPO “open collector” linked to the channel selected





5 Embedded Web Server

TSER 200/8 is an equipment that can link remote alarm signals (close to ground) between 2 zones.

The units have 8 Inputs and 8 Outputs each, so it is possible to link information about Alarm and GPI between two zones just using a 3 wire cable or, in case of long distances, an optical serial link. The connection by IP can be also provided, so the equipment acts as a **web server**.

There is no need to use a PC to configure the system. Just plug the serial cable and use your remote signals without having to wire a huge amount of cables. The last GPO is configurable to show if the link is broken.

Technical Data

LINK OPTION
-RS232 to other Unit
-IP address

INPUTS
8 close to ground
OUTPUTS
8 clean contacts

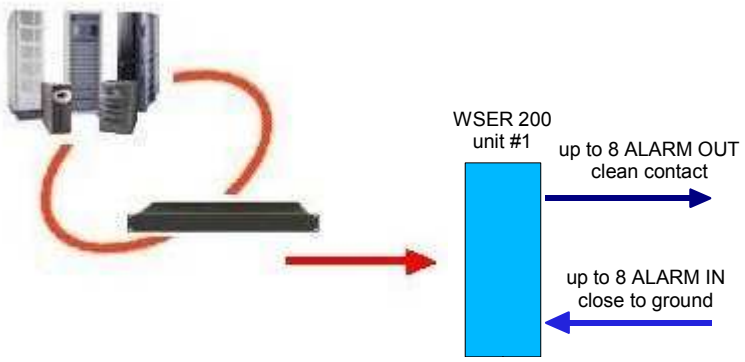
POWER SOURCE
Mains Ranges Voltages 220VAC
Frequency 50÷60Hz
Power Consumption 15VA

Available
up to 32 inputs and 32 outputs

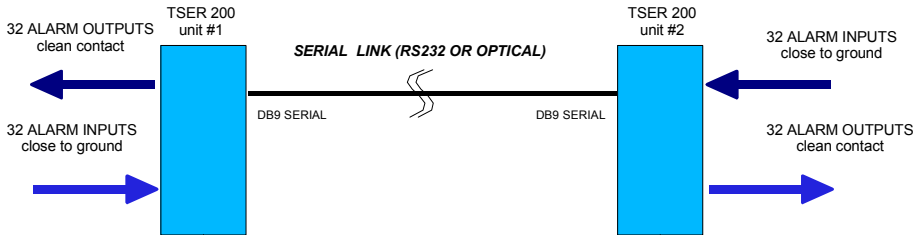
TEMPERATURE RANGE
Operating 0÷50°C

PHYSICAL DIMENSIONS
Height 44mm (1.75")
Width 482mm (19")
Depth 111mm (4.41")

web server



remote serial link



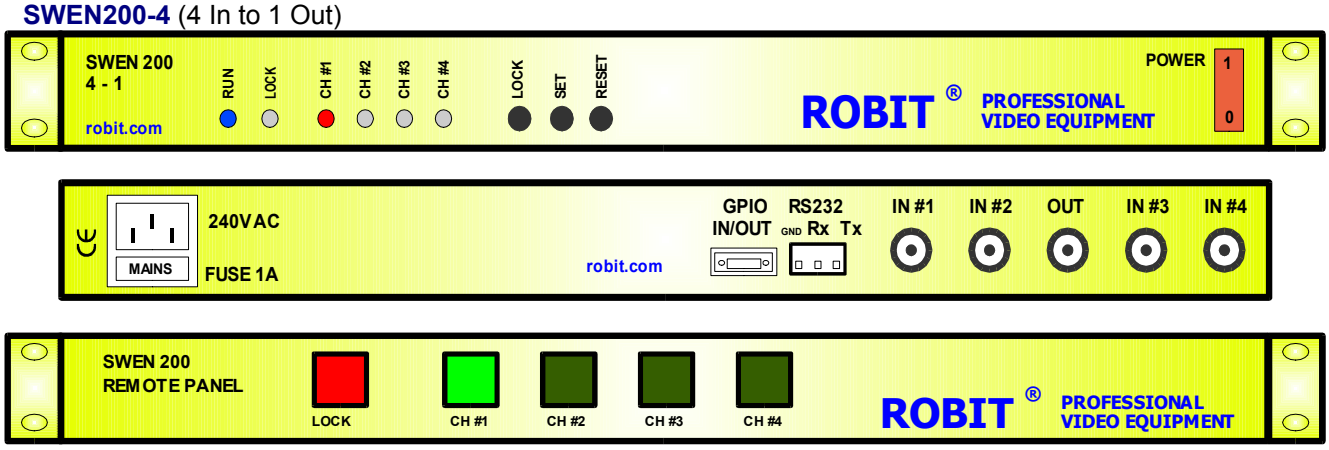
Phone remote server - TSER 200/M

A remote link with an external modem can be used to send information about GPIOs just through a standard telephone line.

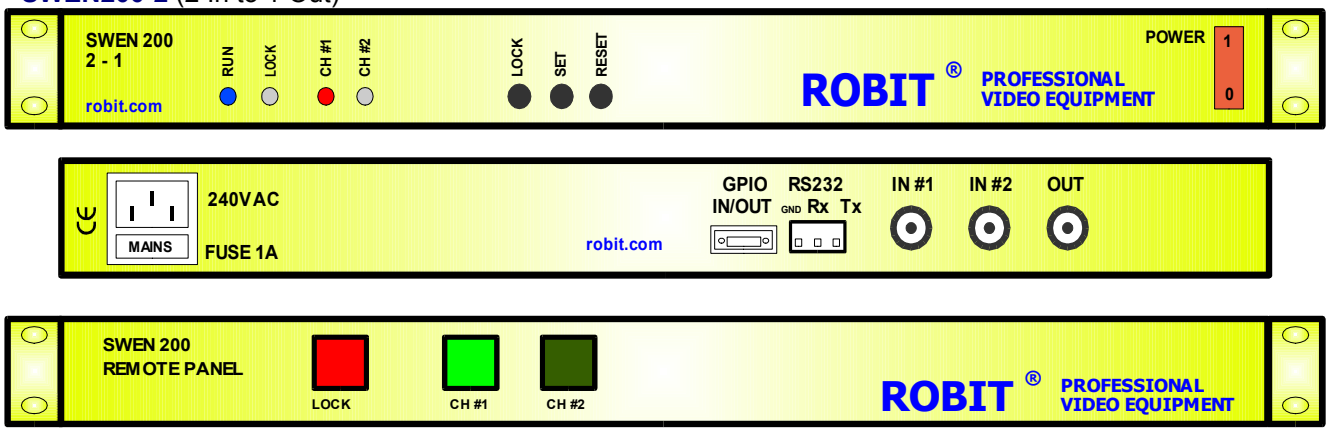
6 SWEN-200 Emergency changeover (SDI and Analogue)

SWEN200 is an emergency changeover designed to switch Digital or Analogue Video selecting the source among 4 different inputs. The remote panel has an ***ENABLE*** security function to prevent undesired switch operation. Switching is by HF mechanical relays to offer broadband switching capabilities for high-frequency and pulsed signals. Front panel controls are provided for source selection and operating mode. LED indicators are provided for operating mode and channel selection.

SWEN200-4 (4 In to 1 Out)



SWEN200-2 (2 In to 1 Out)



Technical Data

Video Signal:
2 or 4 Video Input PAL - SDI on BNC
1 Video out selected by a remote panel
CONTACTS:
1 security ENABLE input
2 or 4 GPI “close to ground”
2 or 4 GPO “open collector” linked Out

POWER SOURCE:
Mains Ranges Voltages
220VAC
Frequency 50÷60Hz
Power Consumption 10VA

TEMPERATURE RANGE:
Operating 0÷50°C

PHYSICAL DIMENSIONS:
Height 44mm (1.75")
Width 482mm (19")
Depth 111mm (4.41")

7 PX200 protocol translator

PX 200 is an equipment designed to translate protocol from different brand routers so to interface dedicated automation with any commercial router. The unit is configured by the PX200 SW running on a PC with Win9x, NT or 2000.

Technical Data

SERIAL CONNECTIONS
COM 1 RS232 to PC
COM 2 RS232 to router
COM 3 RS232 to TDC automation SW
IP LINK
RJ45

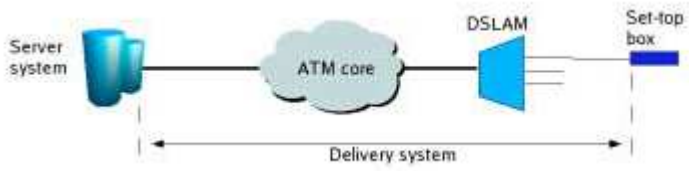
POWER SOURCE:
Mains Ranges Voltages
220VAC
Frequency 50÷60Hz
Power Consumption 10VA

TEMPERATURE RANGE:
Operating 0÷50°C

PHYSICAL DIMENSIONS:
Height 44mm (1.75")
Width 482mm (19")
Depth 111mm (4.41")

PX200 @ work:

Interfacing Tandberg TDC and MEM automation software, basically designed for Sandar router, with different brand routers.

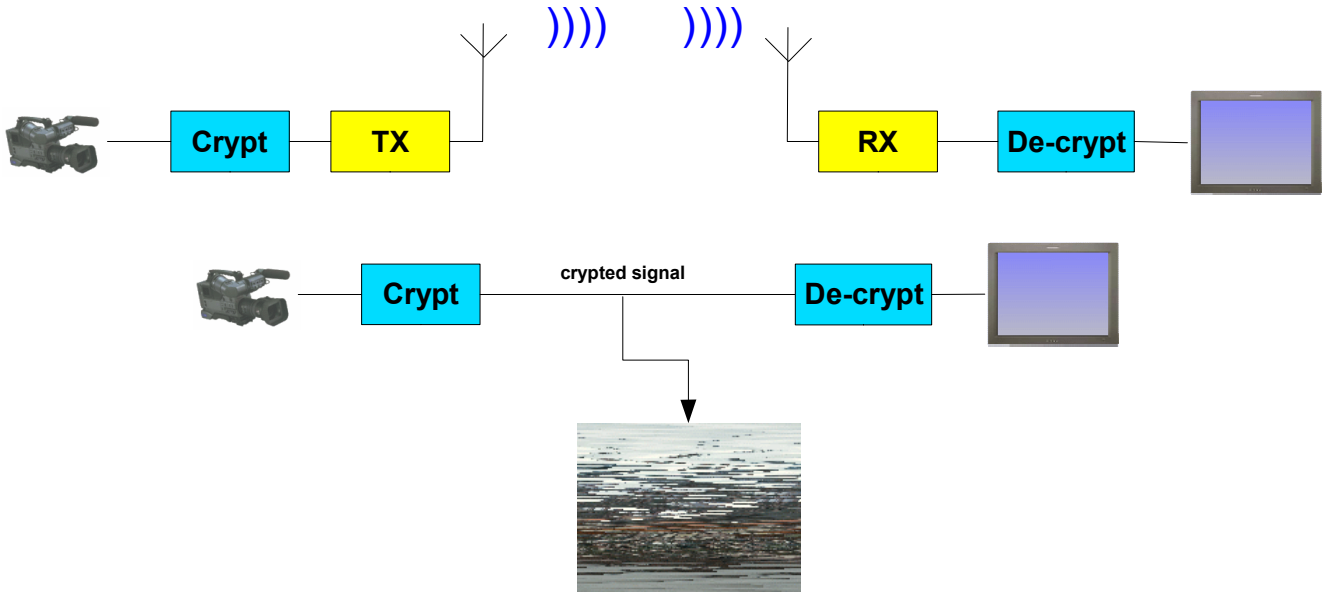


8 DCRYPT 200 digital Video scrambler/descrambler

DCRYPT 200 is a highly advanced system for video encryption, designed to safeguard the operational integrity of hard-wired or wireless video surveillance links. It provides the highest level of security and safety by utilizing cut-and-rotate or mirror video encryption method. Suitable for industrial, commercial and law enforcement video security applications.

Digital Video Scrambler/Descrambler for wireless or hard-wired video surveillance links

- :. Serial RS232 or IP remote control encryption settings and keys available
- :. cut-and-rotate or mirror video encryption method
- :. Very easy to install and operate
- :. industrial, commercial and law enforcement video security applications
- :. PAL and NTSC
- :. Rack-frame: 1 U Rack 19”



9 CGD 200 on screen display changeover system

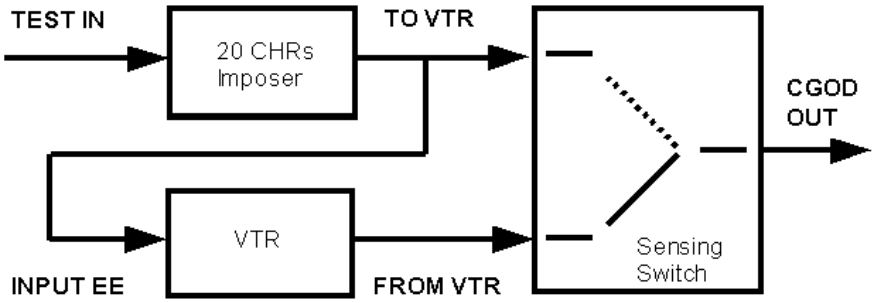
CGD 200 is a changeover with a 2 Analog video Signals sensing and On Screen Display of 20 characters.

Text can be positioned at the top or bottom on the screen.

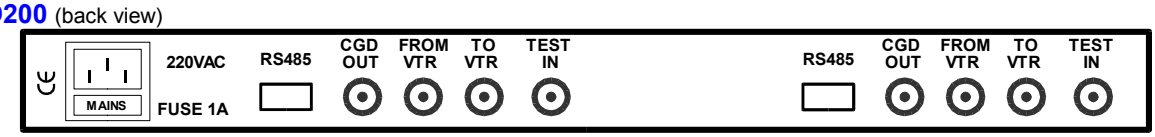
Rack-frame; 1 U Rack 19” can support 2 CGD200 boards.

Every changeover section, in presence of VTR Video Input Signal (VTR IN), will supply directly to output. In case of failure of the Input Video Signal (ALARM CONDITION), the CHANGEOVER section will switch the Input Signal (TEST IN) to the output (CGD OUT) superimposing the programmed text.

RS485 remote control software available.



CGD200 (back view)



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