



TDR-40

MULTICHANNEL DIGITAL RECORDER FOR TELECOMMUNICATIONS AND SECURITY

**COMPACT
RELIABLE
SECURE**



TEMA TELECOMUNICAZIONI
*Leading Technologies in
Communication's Monitoring*

Main Features:

- 3 / 4 / 8 / 10 channels
- 1 - 4 Analog and telephone lines / 1 - 4 ISDN BRI
- Auxiliary inputs for Microphone and Line Signal
- Playing and Recording simultaneous
- Live Monitor of active communications on machine
- Over 10.000 hours of recordings on local Hard Disk
- Over 18 hours of recording on Compact Flash
- Control and remote Archive over the Ethernet
- Backup on CD, DVD through LAN network
- In-band DTMF protocol
- ISDN monitor on digital line
- VOX/RING on analog line
- Time Stamp on archived records
- Search of communications with parameters settings
- High quality sound / voice Recording
- Remote control software via LAN and RS-485/RS-232
- Remote Alarms
- Backlight display and front access keypad
- Multilevel password for system access
- Conference call feature via Analog/ISDN
- DTMF password protection for access in Conference call

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Voice and Data Recorder

When your radio and phone communications gain vital importance for your business or in emergency and security matters, then it becomes crucial to report them in a reliable and accurate way.

Events reconstruction based on conversations is hardly carried on with written notes or with statements that rarely agree: that's why communications recording, with date/hour/minute/second, becomes essential for clarifications, controls, analysis and transcriptions.

Public Security
Fire Brigades
Police - Law Agencies
Commercial Offices
Private Surveillance
Insurances - Utilities
Call Centres
Telemarketing

Emergency Services
Naval Communications
Airports
Banks - Finance transactions
Radio / Television
Audio Conference Meetings
Order Entry
Public Opinion Pools

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TDR40 is a digital integrated system for recording and indexing radio-telephonic calls, especially designed for application that require up to 8 lines (either analog or ISDN or in mixed configuration) where small dimensions, low power consumptions, low costs, user-friendly interface, immediate play of the recorded communications and reliability are strategic requirements.

TDR40 allows to record communications over all channels connected, even with contemporary listening, for a minimum of over 1.380 hours of not compressed recordings on local Hard Disk (10.000 compressed) or over 18 hours on local Compact Flash support before oldest data are deleted.

The recorder is provided with a LAN support which allows remote control and access. Permanent archiving is managed via software, as well as advanced functions in recordings management; the communications recorded can be saved on dedicated server (via LAN) and after on CD or DVD supports for historical archive.

The exclusive TEMA powerful operative software makes the search/listen functions simple and intuitive, searching by date, hour, period, length, called number, etc.

TDR40, based on DSP (Digital Signal Processing) technology, is a prompt answer to the most sophisticated operative requirements today and tomorrow.



TDR-40



Recording Methods

VOX:

Typical recording method for analog and radio communications. Each active communication starts automatically the recording on relative line.

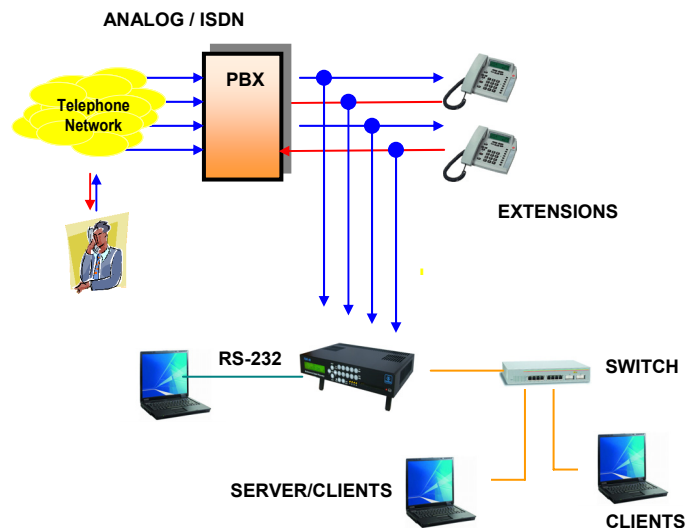
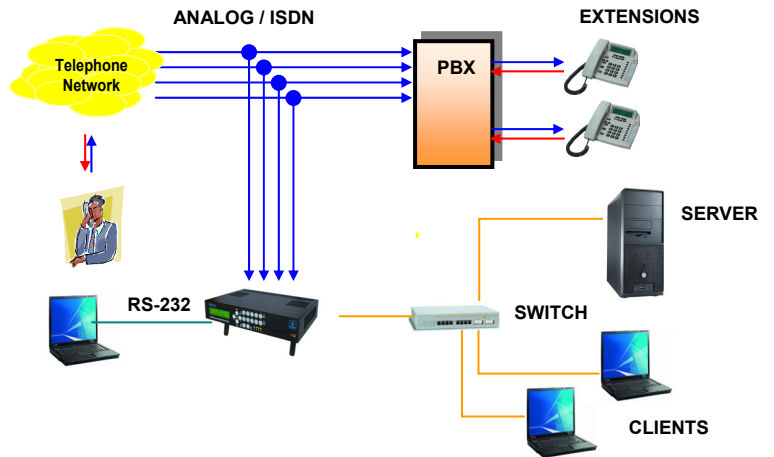
CONFERENCE CALL:

The system is connected on Analog/ISDN lines waiting a ring for starts the recording. Useful for including, in conference, the recorder on a communication, only when important (e.g. during a commercial transaction).

In this method the system simulates a terminal apparatus. The recording starts on a direct call in conference call. Before starting the recording a short advice message is played.

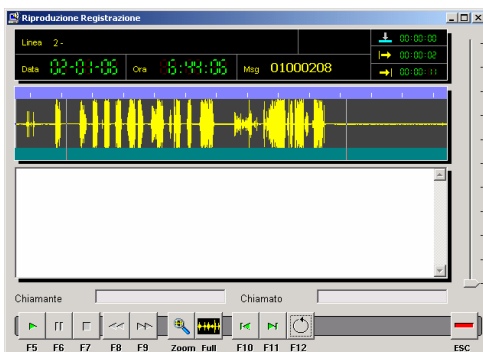
ISDN MONITOR:

The System is able to record communications on ISDN network in a "non intrusive" mode. Incoming and Outgoing signals are mixed and recorded in the same original quality.



	Msg	Space (Mb)
Recorder 1	126.071	272.864
Recorder 2	168.360	350.112
Recorder 3	97.024	412.736
Recorder 4		
Recorder 5		
Recorder 6		
Recorder 7		
Recorder 8		

Hard disk: ██████████



- **Remote access with Workstation Software**

Easy communication playback and backup is possible, even in remote, by the Workstation application Software.

- **Automatic and Centralized Backup**

All Communications, collected from maximum 8 TDR-40, can easily saved on a central remote archive.

- **Fast and Easy Communication Searching**

Using Workstation is possible to search the communications using special filters and methods like time, date, conversation length, caller/called ID, etc.

It's also possible to add text and notes on recorded file to easy mark important the conversation.

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HARDWARE PLATFORM

DSP (Digital Signal Processing) 225Mhz BGA, Flash Eprom, RAM, mass storage available on standard Compact Flash and Hard Disk 2,5", RS232 port, Ethernet LAN, RS485 for mini remote terminal (optional).

Enter functions by keypad and backlight display on front panel, Embedded Operative System.

ARCHIVING TECHNOLOGY

Compact Flash/Hard Disk onboard, other supports via LAN.

INPUT LINES INTERFACE

Analog lines – high input impedance > 20KΩ - low input impedance 600Ω, sensitivity 20mV / 2Vrms.

RECORDING AND PLAYBACK

Transfer function: 300...3400Hz
Sampling: 8Khz 8 bit PCM 64kb/s
Compression: 1:1 A-Law 8.0 kB/s 8:1 Mode

DATE/HOUR TIME STAMP

Date/hour automatically linked to recorded communications, internal clock with Lithium battery to keep time information stored even during power supply fall.

RECORDING FUNCTIONS

Start from VOX/RING (on analog lines) and Monitor ISDN/TE (on digital lines). Recording and Playback simultaneous. Recording driven even by external contact.

PLAYBACK FUNCTIONS

Instantaneous playback on all channels, Off-line or On-line without stopping recording, from Hard Disk internal buffer and/or Compact Flash (capacity depending on user requirements). Play, Stop, Pause, Fast Forward, Loop functions. All communications can be exported in .wav format.

AUDIO OUTPUT

Output line towards external recorder for communication duplexing, output jack for headphones, internal loudspeaker with front panel volume settings.

AUDIO INPUT

Additional audio input for external microphone, additional audio input for external Line signal.

SECURITY AND ALARMS

Alarms signals in case of system errors. Multilevel password to enter the system with different privileges.

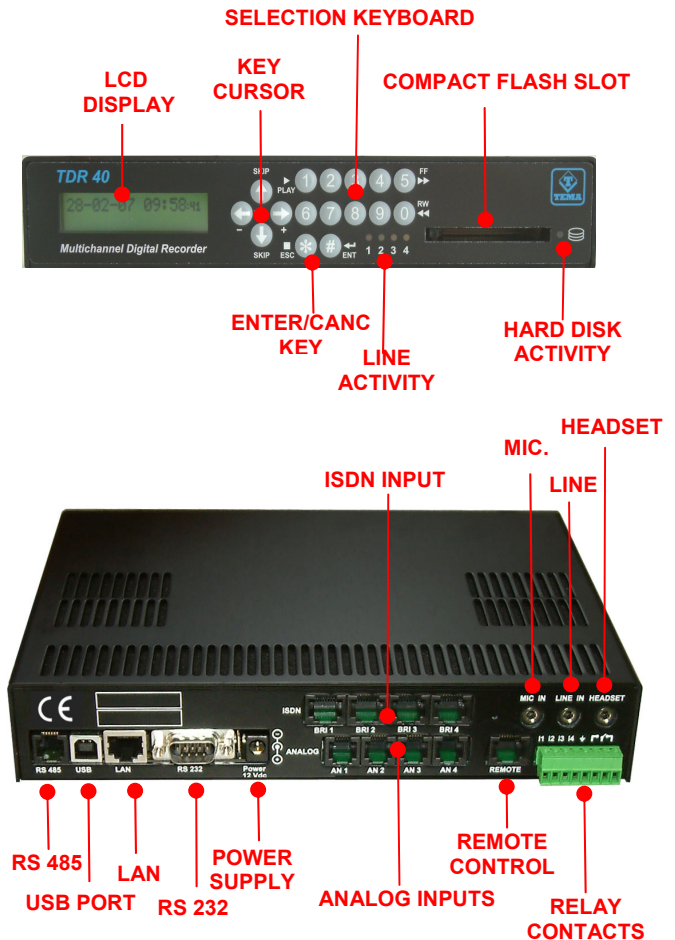
DATA ACCESS

Instant recall of the communication just recorded (even if not yet over), playback of the last one (Last Call Repeat), playback of any media stored in archive.

Remote management of archived communications and multiuser access.

APPROVEMENTS

TDR40 is compatible with CE requirements on security and EMC according to the current EU laws.



POWER SUPPLY - DIMENSIONS / WEIGHT

230V_{AC}, 12V_{DC}-7W with external power supply
L234 x H42 x P166,5mm WEIGHT 1500g,

TEMPERATURE - RELATIVE HUMIDITY

Temperature: installation in office, 5° ... 40°, stock
-20°....+60°. Humidity 10%-80% not condensing

MODELS: (with Hard Disk and Compact Flash*)

TDR40H/1	1 Analog tel. line, 2 IN Mic/Line
TDR40H/2	2 Analog tel. lines, 2 IN Mic/Line
TDR40H/4	4 Analog tel. lines, 2 IN Mic/Line
TDR40H/1B	1 ISDN BRI, 2 IN Mic/Line
TDR40H/2B	2 ISDN BRI, 2 IN Mic/Line
TDR40H/4B	4 ISDN BRI, 2 IN Mic/Line
TDR40H/22B	2 ISDN BRI, 2 Analog lines, 2 IN Mic/Line

* Also available without Hard Disk

The manufacturer reserves the right to change product characteristics without notice



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