Control and Confidence

Built-in Web Server

- Viewing of live images in full and split screen.
- Search and playback
- Password Authentication
- Multiple user access

(Live 5 person, Search / Playback 1 person / Total 5)

Internet

LAN

Network PC Software

- Viewing of live images in full or split screen
- Search and Playback

Dome Camera Control

Dome camera control (PTZ) can be managed from a remote PC over the network.

Remote Set up

One user may connect to the unit in a password protected admin mode, that allows access to the menus as they appear on the unit themselves. System adjustments can then be made remotely over the network, such as change of record rate, set up the motion mask, timer etc.

Password Authentication

Password Authentication controls level access to the machine. User name, Password and level access are registered in the machine in advance.

Image File Download

Digitally signed images can be downloaded to a networked PC, Such data can be copied to PC compatible external archiving media, CD-R/RW, DVD-RAM, HDD, DDS2/3 or ZIP.

Playback Images From Copy Media by PC

DX-PC25E enables playback by PC of images from archive/copy media, CD-R/RW, DVD-RAM, CFC, MO, DDS2/3 or ZIP.

Recorder Control

Any of the front button functions of the machine can be controlled over the network.
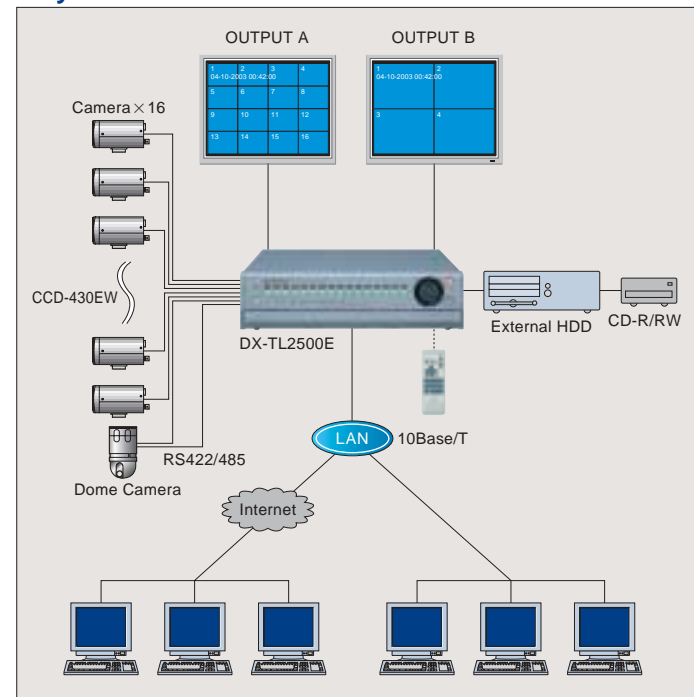

DX-TL2500E DIGITAL RECORDER

■Front Panel

■Rear Panel

■System structure

OUTPUT A   OUTPUT B

Camera×16

CCD-430EW

DX-TL2500E

External HDD   CD-R/RW

RS422/485

Dome Camera

LAN   10Base/T

Internet

■Recording capacity

The below table shows the approximate recording time with a 120GB HDD. The camera operation setting is set to the same interval for all cameras.

D:Days H:Hours

Picture Grade	SUPER	HIGH	STANDARD	BASIC	LONG
50.0 Pictures/sec.	13H	18H	1D 7H	1D 19H	3D 23H
25.0 Pictures/sec.	1D 3H	1D 12H	2D 14H	3D 14H	7D 22H
16.66 Pictures/sec.	1D 17H	2D 7H	3D 21H	5D 10H	11D 22H
12.5 Pictures/sec.	2D 7H	3D 1H	5D 5H	7D 5H	15D 21H
10.0 Pictures/sec.	2D 21H	3D 20H	6D 12H	9D	19D 21H
8.33 Pictures/sec.	3D 11H	4D 14H	7D 19H	10D 20H	23D 20H
6.25 Pictures/sec	4D 15H	6D 3H	10D 10H	14D 11H	31D 19H
5.00 Pictures/sec.	5D 19H	7D 16H	13D	18D	39D 18H
1.00 Pictures/sec.	29D	38D 9H	65D 4H	90D 9H	198D 20H

*50 pictures/sec recording is only possible with more than one camera.

■Specifications

Item	Description
Main Recording Medium	One large capacity HDD is built-in. Additional 2 HDDs can be added internally to increase on-board storage.
External Recording Medium	Extended recording HDD: Maximum 2TB×6 Ids Backup/Copying: DDS2/3, MO, ZIP, DVD-RAM, CD-R/RW CompactFlash™ Card slot for copying data
Colour system	PAL system
Signal Compression System	Wavelet: Sampling 13.5 MHz Compression unit: Field
Number of Picture Elements Processed	720×288 pixels
Video Terminal Input	16-channel input BNC: 1.0Vp-p 75Ω
Video Terminal Output	16-channel through output BNC: 1.0Vp-p 75Ω (during AC power supply) Monitor output 2 BNC: 1.0Vp-p 75Ω S terminal: Y 1.0Vp-p 75Ω/C 0.3Vp-p 75Ω Spot Monitor output 1 BNC
Audio Terminal	Input : 3.5ø Microphone -67dBs 600Ω RCA plug -8dbs 50KΩ Output: RCA plug on front and rear -8dBs 1KΩ
Horizontal Resolution	More than 450 lines (Super and High picture grade)
Recording Interval	Can be set for each camera with function to estimate recording possible time
Alarm Recording	Recording time: 2sec, 5sec, 10sec, 15sec, 30sec, 45sec, 1min, 2 min, 5min, 10min, 20 min, 30min, 60 min and contact input
Pre-alarm Recording	Can be set from 1 sec. to 180 sec.

Item	Description
Emergency Recording	Emergency input terminal (rear)
Power Failure Recovery Recording	Auto-re-start of unit after power failure
Used Capacity Recording	Displays percentage of hard disk space used
Menu Language	English, German, French, Spanish and Russian
Motion Detection Function	16(H)×12(V) detection area setting, 5 steps detection sensitivity setting, recording start dot number setting
Timer Adjusting Function	Time adjusting input (rear terminal)
Retrieval	Date & Time search, index search, skip search, alarm list search, camera filtering search
Multiplexer Function	Split display: 4/9/16 split display×2 Sequential display: 1/4/9 display×2
Remote Access Interface	RS-232C (D-SUB 9pins)
Power Supply	AC100-240V 50/60Hz
Power Consumption	0.3A (240V)
Operational Conditions	Temperature: 5˚C-40˚C Humidity: 30%-80% Altitude: Max 2000m
Dimensions (W×D×H)	425×375×118mm
Weight	7kg
Accessories	AC power code (UK and Continental plug) Instruction manual (English) Quick Guide (English, German, French, Spanish and Russian)

■ CompactFlash™ is registered trademarks of SanDisk Corporation.
■ The names of other products or companies mentioned are registered trademarks or corporate trademarks of the companies written herein.
■ Windows® and Windows®NT are registered trademarks of Microsoft Corporation.

ISO 9001
JQA-0521

MITSUBISHI ELECTRIC
Changes for the Better

DIGITAL RECORDER

Highly reliable and efficient digital recorder with PC networking for remote monitoring and control

MITSUBISHI DIGITAL RECORDER DX-TL2500

DX-TL2500E

Network Monitoring: Key to Greater

PC Networking, for Remote Monitoring and Control.

Standard ethernet connection provides live and recorded viewing on a networked PC via web pages using a standard internet browser.

The Network Software DX-PC25E provides additional functions, as well as live and recorded viewing.

DX-TL2500E

DX-PC25E functions:
- Alarm Notification
- Alarm Notification by e-mail
- Dome Camera Control
- Remote Set up
- Password Authentication
- Image File Download
- Playback Images From Copy Media by PC
- Recorder Control
- Multiple User Access

DX-TL2500E

BUILT-IN DUPLEX 16CH MULTIPLEXER

- The monitor screen can be switched between sequential displays including full, quad, 9 or 16 split-screen mode.

Full screen mode   4 split screen mode   9 split screen mode   16 split screen mode

- Two multiplexer outputs are supplied with this machine. While displaying a split screen image to OUTPUT A, another combination split screen can be displayed to OUTPUT B.

OUTPUT A   OUTPUT B

- Live picture from all cameras can be continualy recorded while simultaneously playing back any desired camera picture regardless of the monitor screen display.
* Local playback can not be done during network access to this machine.

- The picture of a specified camera can be recorded without the image being displayed on the monitor screen.

- Picture from a particular camera can be displayed and not recorded in instances where recording of the camera picture is legally prohibited.

NETWORK PC SOFTWARE DX-PC25E

Alarm Notification (Resident software)

The machine notifies a networked PC.
When the PC receives an alarm or malfunction from the machine, Alarm POP-UPs appear on the PC screen.
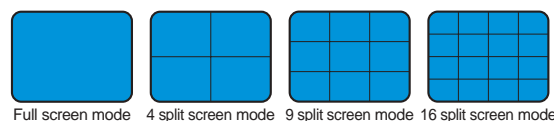
* Screen shot reprinted with permission from Microsoft Corporation.
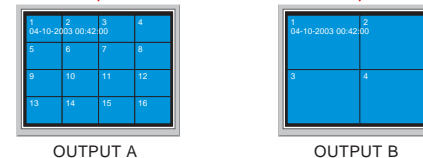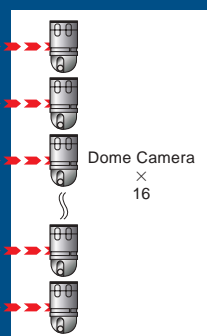
Alarm Notification by e-mail

The machine can notify "Alarm" or "malfunction" to up to 5 e-mail addresses. (through SMTP server)

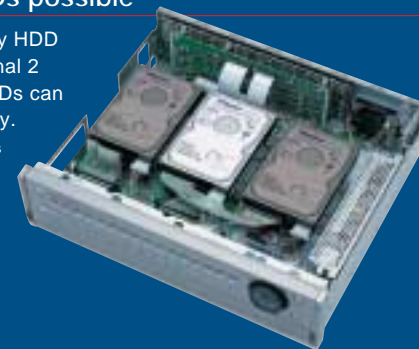## RECORDING

Recording rate 50pps

50 pps capture rate makes it possible that 3 pps for all 16 cameras. * Maximum 25pps/ch

Built-in one large capacity HDD, 3 built-in HDDs possible

One large capacity HDD is built-in. Additional 2 large capacity HDDs can be added internally.
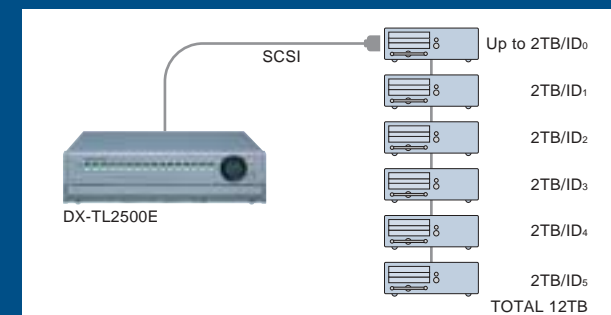* Mitsubishi recommends model names of HDD.
* The shaded HDDs are optional.

External Memory

Through SCSI interface, additional HDDS can be added externally to give up to 12TB (2TB×6ID) of memory
* Not all RAID systems are checked to work with the machine.

SCSI   Up to 2TB/ID$_0$
  2TB/ID$_1$
DX-TL2500E   2TB/ID$_2$
  2TB/ID$_3$
  2TB/ID$_4$
  2TB/ID$_5$
  TOTAL 12TB

Various record setting for each camera

Individual recording interval and picture grade for each camera both in normal and alarm recording.

EASE OF USE

Dome Camera Control

Up to 16 dome cameras can be connected with the machine. Even different manufacturers' dome cameras can be mixed and controlled individually using an remote controller.

Dome Camera ×16

Wired Remote Control

A wired remote control provides full operation of the machine. In addition, it can control dome cameras with full functions in a very compact body.
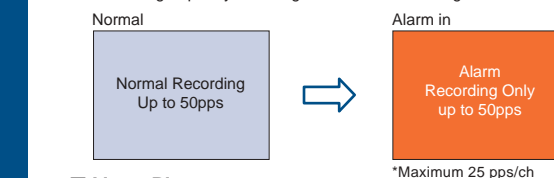
Remote Controller

RS-485/RS-422

Alarm Recording

Very flexible and easy alarm recording setting can meet the various demands of surveillance.
- Easy setting
  Both Normal and Alarm setting appears on the same screen.
- Flexible setting
  3 kinds of Alarm Recording setting meet various alarm situations.
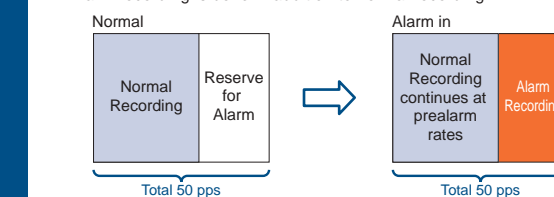
■**Alarm Channel**
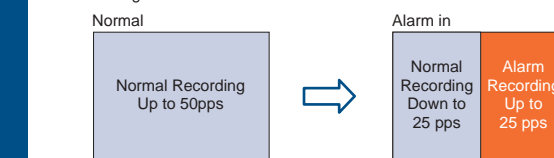All recording capacity is changed to alarm recording.

Normal	Alarm in
Normal Recording Up to 50pps	Alarm Recording Only up to 50pps *Maximum 25 pps/ch

■**Alarm Plus**
Alarm recording is done in addition to normal recording.

Normal	Alarm in
Normal Recording / Reserve for Alarm	Normal Recording continues at prealarm rates / Alarm Recording
Total 50 pps	Total 50 pps

■**Alarm 25**
Alarm recording can be done up to 25 pps by reducing normal recording rate.

Normal	Alarm in
Normal Recording Up to 50pps	Normal Recording Down to 25 pps / Alarm Recording Up to 25 pps

Pre-alarm Recording

Pre-alarm recording duration can be set from 1 to 180 sec.
* Available Duration depends upon recording intervals and picture grade
Long Pre-alarm recroding up to 30 mins can be done, when additional HDD (optional) is built-in.

Auto Set-up

After installed, powered on and setting clock / language, the unit can be set up auto-matically: All connected camera numbers are detected automatically and only by selecting recording period, (24hr, 96hr, a week, a month, so on), the unit assigns interval and picture grade for all cameras.

Archive / Copy

Digitally signed images can be exported through SCSI and downloaded to an external CD-R/RW, DVD-RAM, MO, DDS2/3, HDD or ZIP. * External drive units are limited.
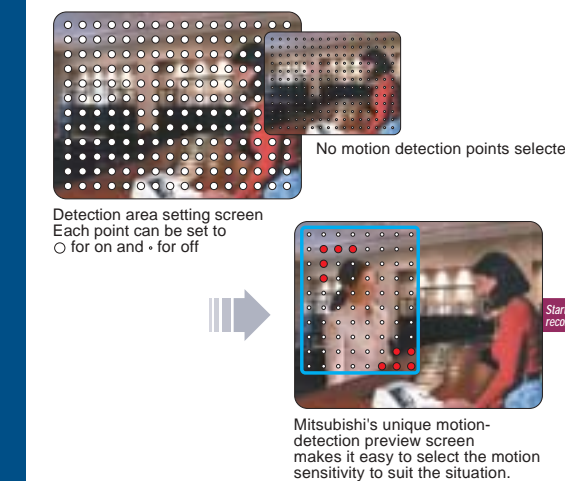
Alarm Partition Recording

Alarm images are recorded in a partition area to keep alarm images. Alarm images can not be erased automatically in repeat rec. off mode. The partition area can be set from 10% to 90% of HDD capacity.

Mirror Recording

Achieve complete data redundancy by using the Mirror Recording option.

Built-in Motion detection

High activity detection is achieved by the detection area of 192 [12(V)×16(H)] dots for efficient, prolonged recording by detecting only the pictures that needed to be recorded.

No motion detection points selected

Detection area setting screen
Each point can be set to ○ for on and • for off

Start of alarm recording

Mitsubishi's unique motion-detection preview screen makes it easy to select the motion sensitivity to suit the situation.

Wavelet compression

1ch Audio recording

Image-alteration recognition function

Password Lock

A three-level password (Operator, Manager, Security Manager) can be set up to limit access to settings and controls.

CompactFlash™ slot

- The image data in the digital recorder can be down-loaded to a CompactFlash™ card and then played back by a PC.
- The contents such as menu setups can also be recorded in a CompactFlash™ card so the data can be exchanged. Multiple digital recorders can then be used under the same setup conditions, with no need to set the digital recorders from the beginning.