



Changes for the Better



SECURITY DIGITAL RECORDERS

Recording Time Table (Recording without audio)

DX-TL5716E: Connects up to 16 cameras

Picture size setting: CIF

Quality	d: day, h: hour								
	25	12.5	6.25	3	1.5	0.8	0.4	0.2	0.1
L1	445h 51m	701h 19m	1201h 19m	2242h 20m	2661h 14m	5301h 6m	10641h 10m	10641h 10m	10641h 10m
L2	361h 44m	601h 11m	1001h 20m	1940h 00m	2361h 14m	4601h 6m	9201h 10m	9201h 10m	9201h 10m
L3	282h 20m	561h 3m	941h 21m	1441h 23m	2001h 10m	4001h 23m	8001h 21m	8001h 21m	8001h 21m
L4	211h 17m	421h 17m	631h 23m	941h 17m	1361h 17m	2041h 17m	4081h 17m	4081h 17m	4081h 17m
L5	161h 17m	321h 17m	481h 17m	721h 17m	1081h 17m	1621h 17m	3241h 17m	3241h 17m	3241h 17m
L6	121h 17m	241h 17m	361h 17m	541h 17m	811h 17m	1211h 17m	2421h 17m	2421h 17m	2421h 17m
L7	91h 17m	181h 17m	271h 17m	401h 17m	601h 17m	901h 17m	1801h 17m	1801h 17m	1801h 17m
L8	61h 17m	121h 17m	181h 17m	271h 17m	401h 17m	601h 17m	1201h 17m	1201h 17m	1201h 17m
L9	41h 17m	81h 17m	121h 17m	181h 17m	271h 17m	401h 17m	801h 17m	801h 17m	801h 17m

DX-TL308E: Connects up to 8 cameras

Picture size setting: CIF

Quality	d: day, h: hour								
	25	12.5	6.25	3	1.5	0.8	0.4	0.2	0.1
L1	841h 10m	1541h 15m	2541h 15m	4541h 17m	5341h 5m	10641h 12m	21241h 17m	21241h 17m	21241h 17m
L2	681h 9m	1281h 2m	2141h 6m	3941h 0m	5341h 5m	10641h 12m	21241h 17m	21241h 17m	21241h 17m
L3	541h 17m	1041h 7m	1841h 4m	2941h 22m	5241h 21m	9341h 23m	18741h 18m	18741h 18m	18741h 18m
L4	411h 17m	811h 17m	1211h 23m	1811h 17m	2711h 17m	4011h 17m	8011h 17m	8011h 17m	8011h 17m
L5	311h 17m	611h 17m	911h 17m	1361h 17m	2041h 17m	3061h 17m	6121h 17m	6121h 17m	6121h 17m
L6	241h 22m	481h 22m	721h 22m	1081h 22m	1621h 22m	2421h 22m	4841h 22m	4841h 22m	4841h 22m
L7	181h 22m	361h 22m	541h 22m	811h 22m	1211h 22m	1811h 22m	3621h 22m	3621h 22m	3621h 22m
L8	131h 22m	261h 22m	391h 22m	581h 22m	871h 22m	1311h 22m	2621h 22m	2621h 22m	2621h 22m
L9	91h 22m	181h 22m	271h 22m	401h 22m	601h 22m	901h 22m	1801h 22m	1801h 22m	1801h 22m

DX-TL304E(EX): Connects up to 4 cameras

Picture size setting: CIF

Quality	d: day, h: hour								
	25	12.5	6.25	3	1.5	0.8	0.4	0.2	0.1
L1	161h 21m	311h 7m	511h 6m	911h 11m	1061h 0m	2131h 0m	4261h 11m	4261h 11m	4261h 11m
L2	131h 19m	261h 15m	391h 9m	651h 21m	781h 15m	1561h 21m	3121h 15m	3121h 15m	3121h 15m
L3	101h 19m	201h 15m	301h 9m	501h 21m	601h 15m	1201h 21m	2401h 15m	2401h 15m	2401h 15m
L4	81h 17m	161h 2m	241h 23m	401h 23m	481h 14m	961h 17m	1921h 17m	1921h 17m	1921h 17m
L5	61h 23m	121h 0m	181h 0m	301h 23m	361h 0m	721h 0m	1441h 0m	1441h 0m	1441h 0m
L6	41h 23m	81h 0m	121h 0m	201h 23m	241h 0m	481h 0m	961h 0m	961h 0m	961h 0m
L7	31h 23m	61h 0m	91h 0m	161h 23m	191h 0m	381h 0m	761h 0m	761h 0m	761h 0m
L8	21h 23m	41h 0m	61h 0m	121h 23m	151h 0m	301h 0m	601h 0m	601h 0m	601h 0m
L9	16h 23m	31h 0m	46h 0m	91h 23m	106h 0m	213h 0m	426h 0m	426h 0m	426h 0m

Tables show approximate recording time; when data are recorded to the 250 GB HDD mounted on the recorder and assuming that the settings of the picture quality and the FPS are same among all cameras.



KYOTO WORKS: 1 ZUSHO BABA, NAGAKAWA CITY, KYOTO 617-8550, JAPAN. PHONE: +81 (0)75-998-3545 FAX: +81 (0)75-998-3720

DX-TL5716E/DX-TL308E/DX-TL304E(EX)

Security Solutions

— Superlative picture quality, response, operating ease —
Mitsubishi Electric security digital recorders play a key role in
CCTV-based security systems, offering
first-rate performance and reliability around the clock!



High performance: 400fps (25fps x 16ch)*

Real-time recording & live monitoring

MPEG-4 for extended recording times

New user-friendly interface for easy setup/operation

Connect up to 16 recorders, 16 HDD extension units* (max. 256 cameras)

POS/ATM transaction data recording

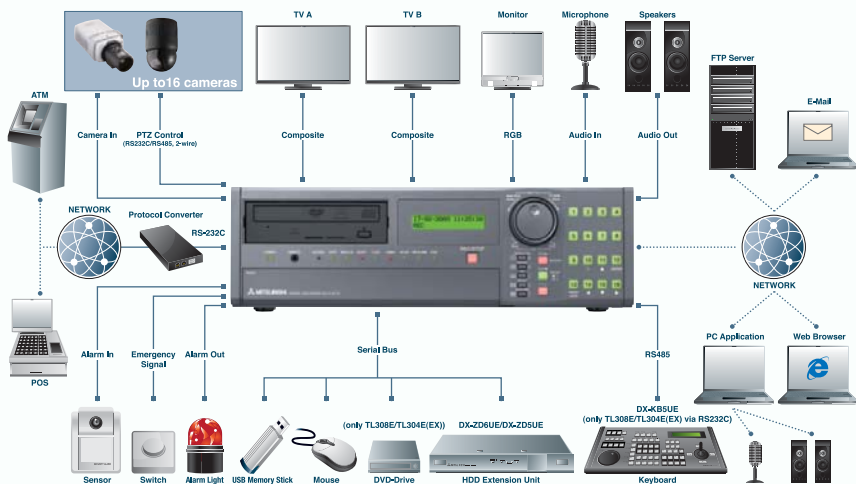
*DVR/16/16ch

SECURITY DIGITAL RECORDERS

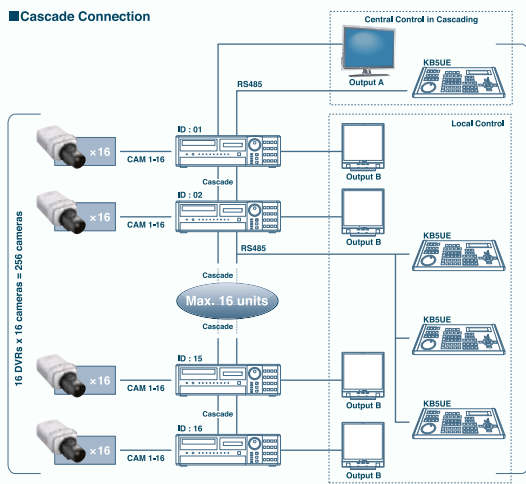
Concept

With a sterling reputation as a reliable solution provider in the field of video surveillance, Mitsubishi Electric is the security digital recorder industry leader in Japan, outselling its competitors for the past 3 years. The market is expected to continue to expand in order to meet diversified user requirements, and this new series has been designed specifically to address those needs.

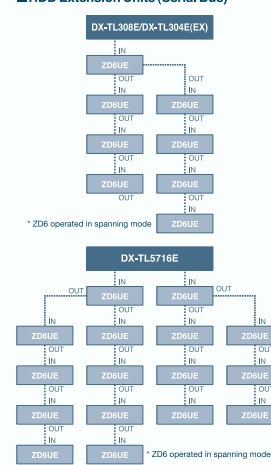
Offering unique flexibility, these security digital recorders can be connected to virtually any surveillance-related equipment. They will suit any facility, however large, and offer the critical benefits of 24/7 dependability, smooth multitasking, and a user-friendly interface.



■ Cascade Connection



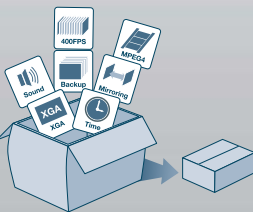
■ HDD Extension Units (Serial Bus)



Dependability

Reliable recording of everything from all cameras – 24/7

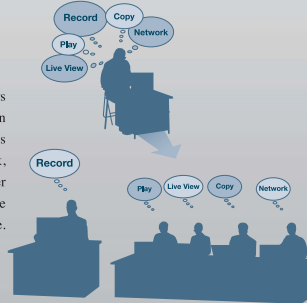
Cutting-edge MPEG-4 compression effectively halves data volume, doubling storage capacity and recording times. Combined with the high-capacity internal storage, this means you can record continuously for a year or more. And it's easy to expand storage even more using optional DX-ZD6UE HDD extension units, so you no longer have to fine-tune your setup and economize on storage by reducing picture size or resolution. And data dependability is further enhanced with such features as HDD mirroring.



Performance

Effortless recording performance, stress-free operation

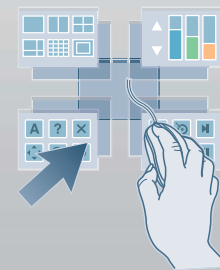
Mitsubishi Electric security digital recorders maintain high recording performance. Even when performing 5 different tasks simultaneously – monitoring, playback, recording, copying and transferring data over a LAN – there is no noticeable performance hit. What you get is real pictures, in real time. No waiting, no frustration.



New user-friendly interface

Less manual consultation, thanks to intuitive setup and operation

The newly designed GUI (graphical user interface) features large icons to ensure superb operating ease. Everything from basic setup and camera selection to playback, search, and copy can be performed simply using the mouse.



Easy Setup & Operation

New GUI

Thanks to intuitive operating ease, there is very little need to consult the manual, even when setting up a new system. Each screen is laid out for optimum clarity and convenience, with advice always at hand in the form of a Help button. The newly designed interface combines with familiar mouse operation to ensure that daily operations are completed quickly and efficiently.

Easy Setup

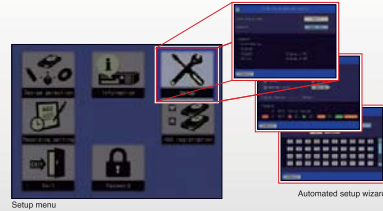
Front access

Up to 2 HDDs can be housed inside the recorder. No additional mounting kit is needed. Installing, replacing or removing an HDD is quick and easy thanks to quick access – the recorder does not even have to be removed from its rack since the front panel is easily removed.



Easy setup

An automated wizard speeds you through the initial setup process, in which you synchronize the clock, and set up the HDDs and cameras. Recording setup too has been automated as much as possible. For example, if you specify the recording interval and period, recording quality will be set automatically. And your complete setup profile can be easily saved using external media.



Easy Operation

Various search functions

A wide range of search functions is provided for enhanced operating ease.

Time/date search

This makes use of the on-screen calendar.



Time/date search

Alarm list search

Emergency recordings in the alarm list can be searched, and up to 8 can be selected for batch copying to a disc or external storage.



Alarm list search

Motion-detect search

The operator is not limited to alarm recordings triggered by movement. Search criteria (sensitivity, area) can be set for specific locations so as to narrow down such motion searches.



Motion search

Bookmark search

If something needs further review, a bookmark can be added at that point by pressing the pause button; bookmark search enables the operator to jump back to that point for confirmation.



Bookmark search

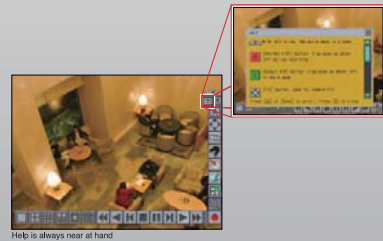
Mouse operation

Anyone can set up a system, and less training is required to operate it. All operations – including basic setup, camera selection, playback, search, and data copy – can be performed simply using the mouse. The most frequently used functions are grouped for instant access.



On-screen help

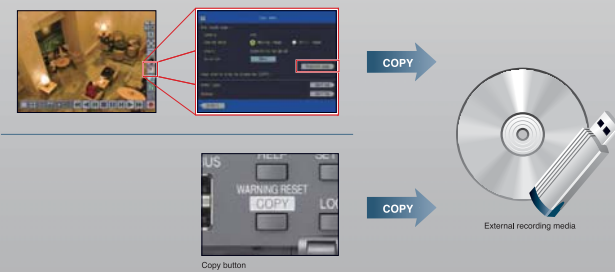
Clear instructions and advice are never more than a mouse-click away. That's because there is a Help button on almost every screen, ready to provide the answer to your question.



Help is always near at hand

Simple copy/archive (Just two touch)

You can copy recorded data – as still images or video footage – to a DVD/CD disc or USB memory device. There's a simple copy button on the front panel and another available via on-screen menu, ready to duplicate any scene you like. Two presses on the button (or two clicks with the mouse) is all it takes, unless you want to change any settings.



Copy button

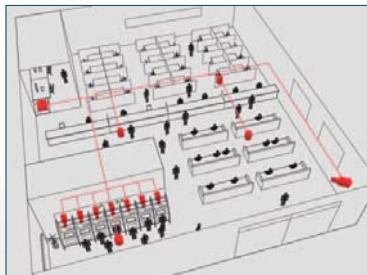
Solutions

Whatever the scale and whatever the needs, Mitsubishi Electric provides a flexible, scalable solution. The product lineup includes the powerful DX-TL5716E for centralized monitoring of large-scale facilities, and the small-footprint DX-TL308E/304E(EX) for small stores and offices.

It is possible to create a central management system to monitor even very large scale facilities. High-performance multitasking

Bank Solutions

Banks demand high security, and Mitsubishi Electric security digital recorders deliver. As well as offering customizable motion detection for each camera, they can be connected to external sensors and panic buttons. Location, date/time and transaction details provided by ATMs can be embedded in the MPEG-4 recorded images as text data. This information can then be displayed during playback. The high compression offered by MPEG-4 recording and the ability to connect up to 16 HDD extension units (8 in the case of the DX-TL308E/304E(EX)) makes it possible to store many months of camera footage. Security is further enhanced by such features as password lock and data protection. Also daily time synchronization means that the transaction data captured by the security digital recorder can be reliably matched with ATM camera footage for clear identification of illegal activity.



Retail Shop Solutions

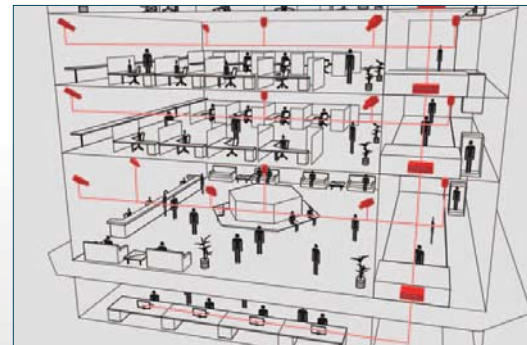
In a typical retail shop, cameras cover not only the cash register but also the entry/exit points, interior and exterior. Recording (including audio for the cash register) for each location can be customized depending on its importance (e.g. so as not to use up too much storage on backyard footage, etc.). Location, date/time and transaction details provided by POS units can be embedded in the MPEG-4 data as text. This information can then be displayed during playback. Also daily time synchronization means that the transaction data stored by the security digital recorder can be reliably matched with camera footage to identify events.



makes light work of complex tasks. Up to 16 recorders can be linked via cascade connection, and up to 16 HDD extension units (DX-ZD6UE). Connected via LAN, one operator can monitor and control multiple cameras at the same time. Solutions for ATM and POS monitoring systems can be tailored to your needs (for further details contact your nearest dealer).

Building Management Solutions

There is an increasing demand for the efficient management of large multi-purpose buildings, offices, and residential blocks without having to invest in extra manpower. In particular, owners require centralized monitoring to protect against crime, fires and other emergencies. Mitsubishi Electric can offer a reliable and cost-effective way to achieve this using PC software for the simultaneous control and monitoring of a large number of cameras using multiple security digital recorders connected via LAN.



16ch high-performance model: DX-TL5716E

- Finance: main bank offices, branches (teller sections, etc.)
- Retail: supermarkets, shopping malls
- Public sector: utility/government buildings, train stations, sports stadiums, etc.

8ch/4ch small-footprint models: DX-TL308E, DX-TL304E(EX)

- Finance: ATM transaction monitoring
- Retail: convenience stores, petrol stations, small shops
- Buildings: residential flats (light surveillance)

Features & Functions At a Glance

	DX-TL5716E	DX-TL308E	DX-TL304E(EX)
No. of cameras/channels	16	8	4
Compression	MPEG-4	MPEG-4	MPEG-4
Internal HDD bays	2	2	2
DX-ZD6UE connectivity	Up to 16	Up to 8	Up to 8
DX-KBSUE connectivity	✓ (RJ11)	✓ (DB9)	✓ (DB9)
DVD drive	Built-in	External	External
Max. recording rate (CIF)	400 frames/s	200 frames/s	100 frames/s
Display rate (live)	800 fields/s	400 fields/s	200 fields/s
Two-way audio	✓	✓	✓
TCP/IP connectivity	✓	✓	✓
PC software	✓	✓	✓
Web browser	✓	✓	✓
Cascade connectivity	✓	-	-
Vertical installation	-	✓	✓

Options

DX-ZD6UE HDD extension unit

The DX-ZD6UE offers a reliable way to increase storage capacity.

Up to 16 can be connected to a single recorder, making use of all available storage modes, as well as the HDD sleep mode. You can also connect an extension unit directly to a PC for viewing the recorded data (with an additional viewer).



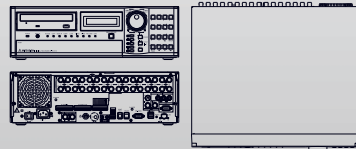
DX-KBSUE DVR control keyboard

Complete with joy stick for PTZ control of dome cameras, LCD status display and jog/shuttle dial, the DX-KBSUE is a full-featured control keyboard designed for security professionals. Up to 4 keyboards can be used with any single system (1-16 recorders) for camera/recorder control.

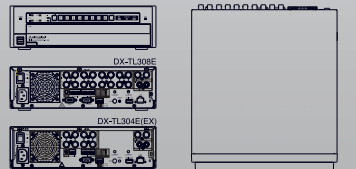


Dimensions

DX-TL5716E



DX-TL308E, DX-TL304E(EX)



Specifications

	DX-TL5716E	DX-TL308E	DX-TL304E(EX)
Colour System	PAL	PAL	PAL
Compression	MPEG4	MPEG4	MPEG4
Main Recording Device	Serial-ATA HDD (max. 2 HDD bay)		
Video	Display Rate 800 field/sec./display (50 field/ch)	400 field/sec./display (50 field/ch)	200 field/sec./display (50 field/ch)
Resolution	704 x 576 pixels : 4CIF 704 x 288 pixels : 2CIF 352 x 288 pixels : CIF		
Audio	Recording System AD-PCM		
In / Out	2 (RCA) / 1 (RCA)	1 (RCA) / 2 (RCA)	1 (RCA) / 2 (RCA)
Recording	Recording Rate 400 frame/sec. (CIF)	200 frame/sec. (CIF)	100 frame/sec. (CIF)
(Guaranteed)	Yes		
Alarm	Yes		
Pre-alarm	Yes		
Long Pre-alarm	Yes		
Emergency	Yes		
Power Failure Recovery	Yes (RS-232C, for ATM/POS)		
Video Terminal	Text 16 (BNC) / 16 (BNC, loop)	8 (BNC) / 8 (BNC, loop)	4 (BNC) / 4 (BNC, loop)
In / Out	1 (BNC) / 1 (RCA) / 1 (S)	1 (BNC) / 1 (RCA)	1 (BNC) / 1 (RCA)
Output A	1 (BNC, Live only)		
Output B	1 (DB15)	1 (DB15)	1 (DB15, only TL304EX)
Menu Language	English, French, German, Spanish, Italian, Russian, Portuguese, Polish and Czech		
Archiving	DX-ZDSUE/DX-ZD6UE (option) USB memory (copy only)		
	DVD/CD-drive (built-in)	USB DVD/CD-drive (copy only)	
Search	Date & Time Yes		
Alarm List	Yes		
Bookmark	Yes		
Motion	Yes		
Multiplexer	Text 4, 9, 10, 13, 16 (output A/B)	4, 9 (output A/B)	4 (output A/B)
Split	1, 4, 9, 10, 13 (output A/B) 1	1, 4 (output A/B)	1 (output A/B)
Sequential	Yes		
Covert	Yes		
Interface	Alarm Display 16 (alarm), 1 (emergency), 3 (event)	8 (alarm), 1 (emergency), 3 (event)	4 (alarm), 1 (emergency), 3 (event)
Inputs	16 (alarm), 4 (mode out), 1 (call out), DC12V	2 (mode out or alarm out), 1 (call out), DC12V	2 (mode out or alarm out), 1 (call out), DC12V
Outputs	1 (DB9, for DVR control and ATM/POS)	1 (DB9, for DVR control (ex. DX-KBSUE) and ATM/POS)	
RS232C	1 / 1 (2-wire, for PTZ control)		
RS422/RS232C	Supported PTZ cameras : A.D., BBV, BOSCH, DENNARD, ELBEX, JVC, OMKRON, PELCO-D, PELCO-P, SAMSUNG, VDO, PANASONIC, PELCO-COAXITRON		
Serial BUS (Front / Rear)	2 / 2	2 / 1	2 / 1
Network	LAN 1 (RJ45, 10 Base-T/100 Base-TX)	1 (RJ45, 10 Base-T/100 Base-TX)	1 (RJ45, 10 Base-T/100 Base-TX)
Alarm Notification	Yes	Yes	Yes (no still image attachment)
E-mail Alarm	Yes		
FTP Notification	Yes		
Two-way Audio	SNTP		
Time Synchronization	Yes		
Web Browser	Yes		
Others	PC Software 16 programs		
Timer Program	3 levels + HDD protect		
Password Lock	2 patterns (5 sensitivity)		
Motion Detection	500 positions		
Protect Data	Yes		
Easy HDD Replacing	Mitsubishi Original (Hush)		
Tampered Image	Yes		
Power Supply Detection	AC100-240V 50/60Hz		
Rated Input	Auto Expired Date 0.9A-0.4A (100-240V)	0.7A-0.33A (100-240V)	0.7A-0.33A (100-240V)
Operating Conditions	Temperature: 5°C (41°F) — 40°C (104°F) Humidity: 30-80%RH Altitude: 2,000m (Max.)		
Design	425(W) x 133(H) x 375(D) mm	300(W) x 91(H) x 340(D) mm	300(W) x 91(H) x 340(D) mm
Weight	9.7kg (without HDD)	5.7kg (without HDD)	5.6kg (without HDD)
Options	Dimensions Yes (max. 8 units, Serial Bus)	Yes (max. 4 units, Serial Bus)	Yes (max. 4 units, Serial Bus)
Weight	Yes (max. 16 units, Serial Bus)	Yes (max. 8 units, Serial Bus)	Yes (max. 8 units, Serial Bus)
DX-ZDSUE	Yes (max. 4 units, RJ11)	Yes (RS232C, DB9)	Yes (RS232C, DB9)
DX-ZD6UE	Yes	Yes	Yes
Accessories	DX-KBSUE Yes	2 (UK and Continental plugs)	
Mouse	English (please contact your local branch for other languages)		
AC Power Cord	User's manual (English, French, German, Spanish, Italian, Dutch and Russian)		
Installer's Manual	* Safety notice is also described in Portuguese, Swedish, Czech and Polish		
User's Manual	RS232C Operation Manual		

Other

*Except DX-TL304E(EX)