GANZ

ZR-DH921NP
ZR-DH1621NP

9 & 16 CHANNEL DIGITAL VIDEO RECORDERS

1.2TB

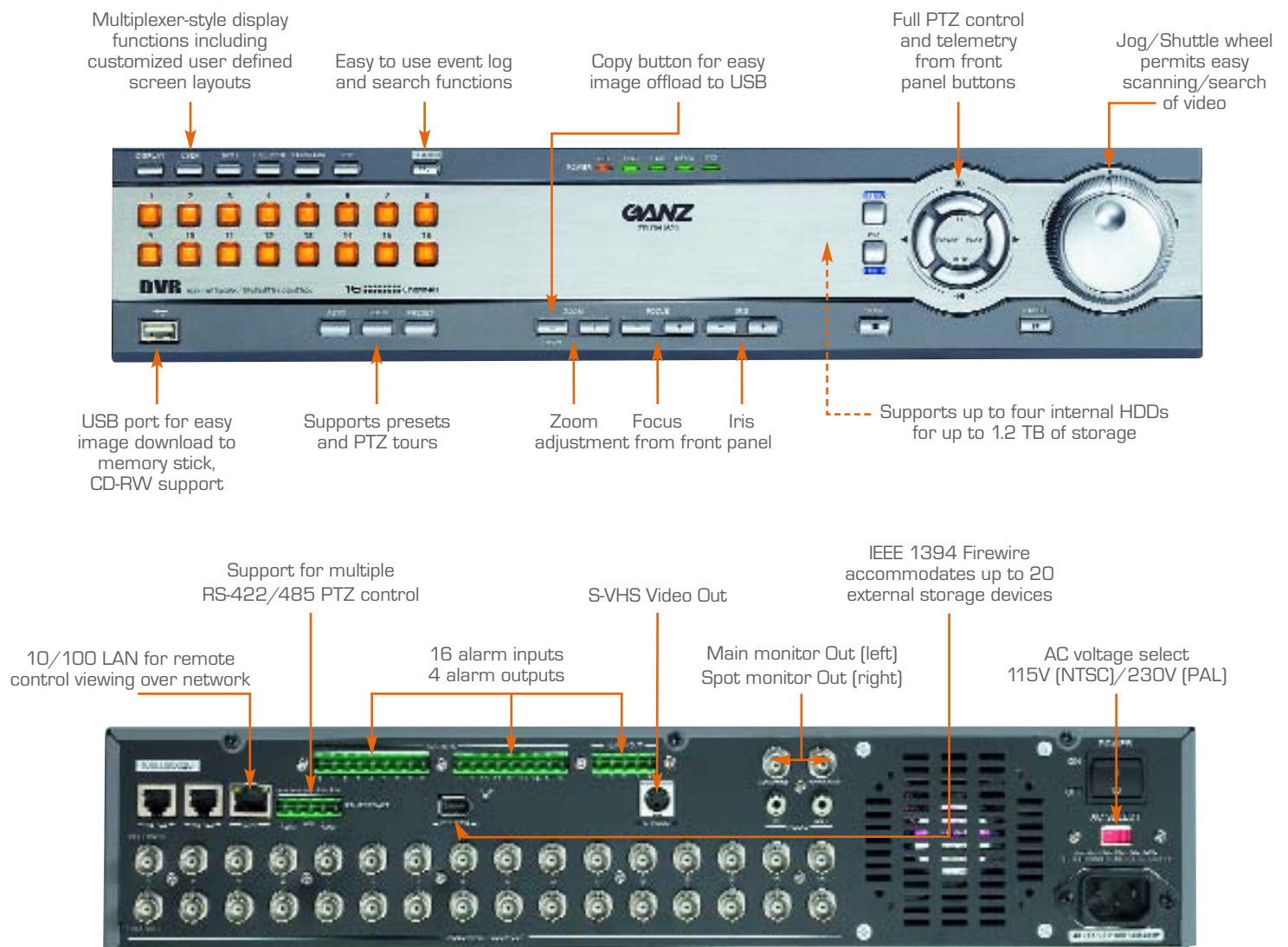**1.2 Terabyte capacity provides over 3 months recording time***

- 1.2 TB Internal HDD capacity using 4 x 300 GB HDD

- Built in PTZ control compatible with major supplier models

- 120 IPS (images per second)

- External Storage via Firewire (Records via CD-RW & External HDD up to 20 x 250GB)

- Triplex (Playback / Record / Live View simultaneously)

- Networking (full remote control over network using client software or web browser)

- Firmware and PTZ drivers upgradable via website or USB device

- Front panel USB port enables easy archiving of data via USB storage device

- Event / alarm / video loss notification sent via e-mail.

*Based on 16 cameras at 1 image per second at 360x240 (CIF) resolution at average image quality (Q4).
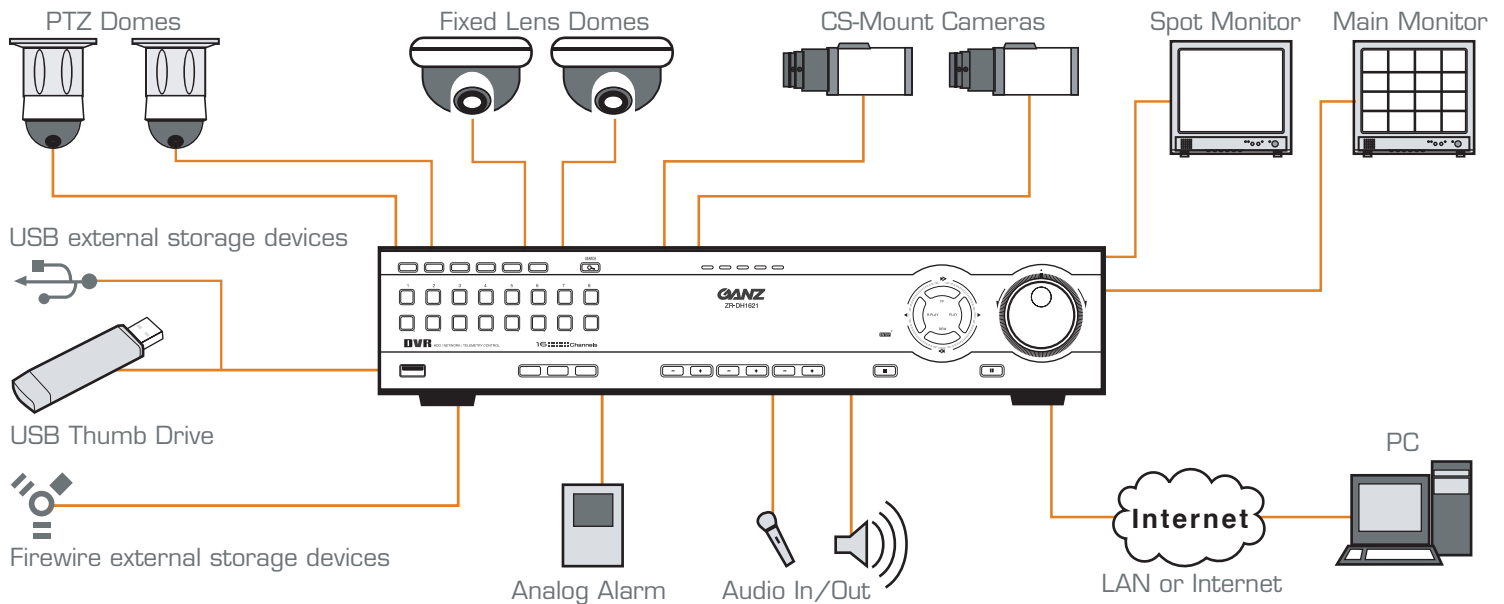
features highlights

GANZ ZR Series 9 & 16 Channel DVRs

Ganz introduces 9 and 16 channel triplex DVRs that are compact, versatile, and very powerful. The units allow the user to play back and record while viewing live video in multi-screen mode, with the added functionality of remote control and viewing over a network connection. The ZR Series boasts large storage capacity, supporting four internal HDD (for up to 1.2TB) and up to 20 external storage devices (CD-R/W and HDD) via FireWire. Data backup and portability are supported by the use of removable media, such as a memory stick or CD-R, via the front panel USB port. Wavelet compression reduces individual image size for more efficient use of disk space. The series was designed to be both intuitive and functional, with many powerful features accessible directly from the front panel.

Multiplexer-style display functions including customized user defined screen layouts

Easy to use event log and search functions

Copy button for easy image offload to USB

Full PTZ control and telemetry from front panel buttons

Jog/Shuttle wheel permits easy scanning/search of video

USB port for easy image download to memory stick, CD-RW support

Supports presets and PTZ tours

Zoom Focus Iris adjustment from front panel

Supports up to four internal HDDs for up to 1.2 TB of storage

Support for multiple RS-422/485 PTZ control

S-VHS Video Out

IEEE 1394 Firewire accommodates up to 20 external storage devices

10/100 LAN for remote control viewing over network

16 alarm inputs 4 alarm outputs

Main monitor Out (left) Spot monitor Out (right)

AC voltage select 115V (NTSC)/230V (PAL)

system diagram

PTZ Domes

Fixed Lens Domes

CS-Mount Cameras

Spot Monitor   Main Monitor

USB external storage devices

USB Thumb Drive

Firewire external storage devices

Analog Alarm

Audio In/Out

PC

Internet

LAN or Internet

System Diagram

Designed to work within a variety of system configurations, these units fit easily into your existing CCTV infrastructure. With built-in RS–422/485 telemetry control, the ZR Series operates nearly any PTZ device on the market—all from the front panel. Add any unsupported devices to the system easily, using firmware and driver upgrades uploaded from USB or downloaded from the Internet. The ZR Series features integrated motion detection, analog alarm inputs and outputs, pre- and post-alarm recording buffers, and e-mail notification of alarm events. Strong networking features include PTZ control, live viewing, event log search, and multi-channel playback. Each unit has advanced management and scheduling features, automatic Daylight Savings Time adjustment, and support for continuous time correction via Network Time Protocol (NTP). Multiple levels of password protection and selectable covert-channel recording effectively restrict access to only authorized users.

Recording Times

ZR-DH921NP - 9 Channels @ 720 x 240 (2CIF)

250GB	6ips	3ips	2ips	1ips	1TB	6ips	3ips	2ips	1ips
Q7 (high)	3 days	6 days	9 days	17 days	Q7 (high)	12 days	25 days	37 days	75 days
Q4 (average)	4 days	7 days	11 days	22 days	Q4 (average)	17 days	34 days	52 days	103 days
Q1 (low)	10 days	20 days	31 days	62 days	Q1 (low)	45 days	90 days	134 days	269 days

ZR-DH1621NP - 16 Channels @ 720 x 240 (2CIF)

250GB	3ips	2ips	1ips	0.5ips	1TB	3ips	2ips	1ips	0.5ips
Q7 (high)	3 days	5 days	10 days	19 days	Q7 (high)	14 days	21 days	42 days	84 days
Q4 (average)	4 days	6 days	12 days	25 days	Q4 (average)	19 days	29 days	58 days	116 days
Q1 (low)	11 days	17 days	35 days	70 days	Q1 (low)	50 days	76 days	151 days	302 days

specifications

9 Channel	ZR-DH921NP-250	250GB HDD
	ZR-DH921NP-500	500GB HDD
	ZR-DH921NP-750	750GB HDD
	ZR-DH921NP-1TB	1TB HDD
16 Channel	ZR-DH1621NP-250	250GB HDD
	ZR-DH1621NP-500	500GB HDD
	ZR-DH1621NP-750	750GB HDD
	ZR-DH1621NP-1TB	1TB HDD

VIDEO FORMAT	NTSC/PAL
COMPRESSION SYSTEM	Video: Wavelet, Audio: AC97(8/12bit, 8/12Khz)
DVR TYPE	Triplex (simultaneous Record, Playback, Live and Playback, LAN access)
OPERATING SYSTEM	Embedded Linux
VIDEO INPUT AND LOOP OUT (ZR-DH1621NP)	16 x Composite 1.0Vp-p, 75 ohm BNC
VIDEO INPUT AND LOOP OUT (ZR-DH921NP)	9 x Composite 1.0Vp-p, 75 ohm BNC
VIDEO OUTPUT	1 x Composite 1.0Vp-p, 75 ohm BNC 1 x S-Video Y: 1.0Vp-p, C: 0.286Vp-p 1 x SPOT Composite 1.0Vp-p, 75 ohm BNC
AUDIO INPUT	1 channel Mono, 8/12Khz sampling rate
AUDIO OUTPUT	1 channel Mono, −4dB RCA
SCREEN OPTIONS (ZR-DH1621NP)	1, 4, 9, 16, 6, 7, 8, 10, 13, PIP, CIF
SCREEN OPTIONS (ZR-DH921NP)	1, 4, 9, 6, 7, 8, PIP, CIF
RECORD MODE	Schedule, Manual, Continuous, Event
RECORD RATE	NTSC: 60 fps @ 720x240, 120 fps @ 360x240 PAL: 50 fps @ 720x280, 100 fps @ 360x280
RECORD RESOLUTION	NTSC: 720x240, 360x240 PAL: 720x280, 360x280
QUALITY LEVEL	7 levels
PRE- AND POST-ALARM	Yes
ALARM PROTECTION	Yes, via HDD event partition
MOTION DETECTION	14 x 14 grid
ALARM INPUT (ZR-DH1621NP)	16
ALARM INPUT (ZR-DH921NP)	9
ALARM OUTPUT	4 (NC/NO, selectable)
TELEMETRY CONTROL	Pan, Tilt, Zoom, Focus, Iris, Preset and Tour via front panel, 2 simultaneous protocols
TELEMETRY PORTS	2 x full-duplex RS-422 or 1 x full-duplex RS-422 and 1 x half-duplex RS-485
NETWORK INTERFACE	1 x RJ-45, 10/100 Base-T Ethernet
REMOTE CONTROL	Optional Keypad (RS-422), web browser or PC client software (via network)
INTERNAL HDD	4 x IDE ATA133
EXTERNAL STORAGE	Up to 20 IEEE 1394 (FireWire) devices
ARCHIVING	Via USB or IEEE 1394 (FireWire) CD-R/RW, HDD
TIME SYNCHRONIZATION	Automatic via NTP or via RS-422 master/slave
DAYLIGHT SAVING	Yes
SEARCH MODE	Date/time, motion, alarm, video loss, menu change
SOFTWARE UPDATE	Via USB or network (FTP)
NOTIFICATION	Via SMTP e-mail
SECURITY	Multi-level access control via user password
DATA INTEGRITY CHECK	Watermark
DIMENSION	432mm x 88mm x 450mm (WxHxD)
WEIGHT	10Kg (without HDD)
MOUNTING	19" 2U rack mountable
POWER CONSUMPTION	50W
INPUT VOLTAGE	AC 115/230V ± 10%, 50-60Hz, selectable
OPERATING TEMPERATURE	0 to 40° C
AMBIENT HUMIDITY	10 ~ 80%, no condensing

Selected GANZ° Cameras

ZC-D3000 Series
Hi-Res B/W or Color Domes

ZC-OH2 Housings
Outdoor Dome Kits

Pro-Pak Series
Pre-installed Outdoor Camera Kits

ZC-S120N Series
22x & 23x PTZ Domes

Spotcam™ Series
Hi-Res B/W or Color Camera w/integrated Lens

ZC-NH255N
Hi-Res Mechanical Day/Night Camera

CBC (AMERICA) Corp.

CS-16_9CH1205