

## Digital Video Recorder NDR-HA4104



### Features

- QUADRUPLEX: simultaneous recording, live monitoring/playback, backup and networking
- Operating system based on Linux
- Real-time display
- Recording speed: up to 100 fps
- H.264 compression
- Recording resolution:
  - 720 x 576
  - 720 x 288
  - 360 x 288
- Supports 1 SATA HDD
- Advanced schedule recording & motion detection functions
- Pre- & post-alarm functions
- 4-channel audio recording
- External devices support ("Text-in" feature): ATM, POS, AC etc.
- Advanced search functions of recorded images
- PTZ control directly from the device or through the network
- Possibility of controlling NOVUS® cameras equipped with RS-485 interface
- Protocol: Novus-C, Novus-C1, Pelco-D and others
- NV-KBD70 & NV-KBD30 keyboards compatible
- Backup: onto USB Flash Memory through USB port & through the network
- Networking (simultaneous connections with multiple DVRs and alarm e-mail notification)
- Software: RASplus application for remote administration, live monitoring and recorded data search with a built-in module for graphical object visualization (maps), RASmobile application for viewing camera images on mobile devices (PDA)
- Self-diagnostic functions with automatic notification
- User friendly multi-lingual OSD
- Covert camera function
- IR remote control (in-set included) and PC mouse control
- Power supply: 12 VDC (100~240 VAC/12VDC PSU in-set included)

Specifications	Description
Operation Mode	QUADRUPLEX
Operating System	Linux
Video Input	4 x BNC
Video Output	Main Monitor (1 x BNC, 1 x VGA)
Alarm Input	4 TTL, NO/NC
Alarm Output	1 NO/NC
Audio Input	4 x RCA
Audio Output	1 x RCA

Specifications	Description
Recording Speed	Up to 100 fps (360 x 288), up to 50 fps (720 x 288), up to 25 fps (720 x 576)
Compression	H.264 - own algorithm
Recording Resolution	720 x 576, 720 x 288, 360 x 288
Recording Mode	Time-lapse, Event (Alarm, Motion detection and/or "Text-in")
Display Speed	100 fps (real-time)
Display Screen	Full screen, 4, sequence, user defined, digital zoom of a chosen screen area: 2x, freeze image function
Motion Detection	768 detection windows (24x32 grid) with sensitivity & active areas cells number needed for alarm activation defined individually for each channel
Video Loss Detection	Yes
Schedule Recording	Individually adjustable for each day/specific days (holidays etc.) per camera, combination of individual recording modes possibility
Recorded Data Search	By date/time or events (motion, disappeared object, "Text-in")
Event History Log	Up to 5 000 alarm events
Time Synchronization	Automatic time synchronization with NTP server
System Diagnostic	Automatic control of HDD bad sectors number ("Health") & temperature status with local and network notification function
Storage	Supports 1 SATA HDD
Backup	Onto Flash Memory through USB port, through the network
External Ports	1 x Ethernet - RJ-45 interface, 10/100 Mbit/s 2 x USB 2.0 for external drives (PC mouse, Flash Memory, Printer) 1 x RS-485 for PTZ cameras or NV-KBD70 & NV-KBD30 keyboards 1 x RS-232 for POS, ATM, AC etc.
PTZ Functions	Directly from the device or through the network (RASplus, RASmobile, IE)
Protocol	Novus-C, Novus-C1, Pelco-D and others
Control	Front panel, IR remote controller (in-set included), Network (RASplus, RASmobile, IE), NV-KBD70 & NV-KBD30 keyboards, USB PC mouse
Set-up	Multi-lingual On Screen Display (OSD)
Software	RASplus, RASmobile
User Authorization	Creation of user groups and accounts with diverse grants, password protection
Auto System Recovery	Hardware WATCHDOG function
Power Supply	12 VDC (100~240 VAC/12VDC PSU in-set included)
Power Consumption	Max. 25 W with HDD
Operating Temperature	5°C ~ 40°C
Relative Humidity	0% ~ 90% (non-condensing)
Dimensions (mm)	265 (W) x 52 (H) x 288 (D)
Weight	1.7 kg (without HDD)