

1.0 Manufacturer

MERIT LILIN ENT. CO. LTD
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Manufacturer shall warrant VD022 to be free from defects in material and workmanship for two years from the purchase date.

2.0 Description

The VD022 is a standalone 4-channel HD IP decoder that can display live video and remotely playback video from multiple NVR's and DVR's. The VD022 can decode live video or recorded video clips of DVR's/NVR's via the TCP/IP network to form part of a video wall.

The virtual matrix feature stores the IP addresses of the cameras and video decoders in a database, making access and identification quick and easy. IP addresses can be automatically imported via the IP scan utility. The VD022 has an IP scan facility, (WS Discovery) which locates all the cameras on the network and imports a preview thumbnail of each channel. This automated installation wizard speeds up commissioning.

The VD022 can be controlled via multiple methods including; LILIN IR remote control, LILIN keyboard with PTZ joystick, touch screen monitor, or USB mouse. When connected to a touch screen monitor, Smartphone style features like 'pinch and zoom' can be used to navigate the system.

The VD022 provides various export methods including USB flash disk and HTTP download playable via Backup Manager. Extensive support for iPhone, iPad, BlackBerry and Android allows for remote viewing of the connected cameras at high frame rates. Browser based remote live monitoring and video playback features are also supported.

3.0 General Specifications

VD022 shall have Linux based structure, instead of using PC based structure. The maximum connection of 3D keyboard shall be 4 units..

VD022 shall provide H.264 decoding capacity from IP cameras up to 4 channels at resolution 1920 * 1080. Each camera frame rate shall be up to 25 FPS.

VD022 shall provide remote live monitoring for a NVR/DVR at resolution 1092 * 1080, up to 16 channels, and up to frame rate 25 FPS.

VD022 shall provide remote playback for a NVR/DVR at resolution 1092 * 1080, up to 16 channels, and up to frame rate 25 FPS.

VD022 shall provide remote file backup for a NVR/DVR at resolution 1092 * 1080, up to 16 channels, and up to frame rate 25 FPS.

VD022 shall provide various input devices including multi-touch screen input, mouse input, 3D joystick RS-485 input, and IR remote controller input for it operations.

VD022 shall provide multi-touch features and connect to a multi-touch LCD/LED panel via USB for easy installation purpose. VD022 should provide ePTZ features on the touch screen for the content of live video and playback.

VD022 shall have multiple PTZ protocols supported including MLP1, MLP2, Pelco P, and Pelco D protocols.

VD022 shall provide network IP cameras scanning. The scanning result shall be listed for IP addresses of the cameras and camera snapshots which can be used for assigning a channel of VD022.

VD022 shall scan DVRs/NVRs on a network. VD022 shall be able to import the IP address setting of DVRs/NVRs.

VD022 shall support motion detection area setup in which there are 20 * 12 motion grid available for each channel. The motion detector shall provide 8 levels of motion detection sensitivity.

Each camera shall be adjusted for its video including contrast, brightness, hue, and saturation via network. VD022 shall provide load default for the camera video setting.

VD022 shall connect to the external digital input devices to have the function of alarm triggering recording by NO/NC dry-contact inputs. The alarm output can be triggered by motion detection alarm or an alarm input for the dry-contact output. VD022 can be set for buzzer alert when an alarm gets triggered.

VD022 can be set for sending email message notification for IP cameras with alarm snapshot attached or sending alarm snapshot to an FTP server.

VD022 shall keep the digital alarms and motion detection alarms for IP cameras in a list with JPEG snapshots stored. The alarm list with JPEG snapshots can be later retrieved for video playback and JPEG snapshots purposes.

VD022 shall be built-in web server. The web server shall provide remote H.264 and/or JPEG live video monitoring, recording playback, PTZ control, split-window display feature, remote features configuring, and remote backup file download feature.

VD022 shall provide 3G mobile remote live monitoring capability for iPhone, iPad or Android mobile phones.

VD022 shall be able to store video clips recorded by NVRs/NVRs to a USB flash disk.

4.0 Minimum Performance Specifications

H.264 1080P Real-Time IP VD022 Specification	
Models	VD022 HD Video Decoder
IP Video Supports	Network camera, network speed dome, and video server
IP video input	Up to 4 Channel 1080P
Network throughput	24 MBPS
Matrix	
Video Input	IP cameras / NVR live video / NVR playback
Remote playback	Yes
Remote backup	DVR / NVR
Alarm	
Alarm mode	Alarm full screen for remote IP camera's or NVR's external alarm / motion detection
Resolution	1080p / 720p / D1 / VGA
Video Output	
HDMI output	1920 x1080P
Backlight saving	LCD backlight saving mode
Multi-touch	Support USB multi-touch screen
Multiplexer	Freeze
Split screen	4
Digital zoom	64x on live and NVR playback
Management	
Reports	Full alarm, configuration, and operation reports exporting over HTTP or USB
Authentication	User authentication with feature configurable
Alarm/Event	DI * 2 and DO* 2 (NO/NC)
Motion	Motion grid 20*12 each channel, and 8 sensitivities
Event	External alarm, video loss, power recovering, motion detection, and logon
Email	Alarm notification with JPEG attachments
Accessories	Remote controller addressable up to 255 IP cameras and DVRs / NVRs
PTZ protocol	LILIN MLP1/2 over HTTP
Keyboards	PIH-931D keyboard
IR receiver	Extra IR extension connector with remote controller
Mouse	USB, mouse-click, mouse scroll, mouse drag
Audio out	RCA, 1 output
Remote control	Yes
Network Ports	Gigabit LAN, RJ45 *1
Network	Direct Internet browser access / multiple users access
Protocols	ARP / TCP/IP / UDP / HTTP / SMTP / FTP / DDNS / PPPoE / RTSP / RTCP
Web	Live / event log
VD022 status	HTML VD022 status
IP Scan	IPScan supported, automatically quick IP address setup for IP cameras and VD022s
Software	
Mobile phone	iPhone, iPad, Black Berry and Android mobile phone supported
Others	
WDT	Hardware watchdog timer
DST	Daylight saving time
Multilanguage	English, Chinese, French, Germany, Italy, Spanish, Portuguese
CPU/OS	ARM Cortex A9 Processor @ 600 MHz CPU, Linux 2.6 kernel
Power	DC 12V, 1.5A / 18W
Working Env.	Temp: 0°C ~ +45°C / Humidity: 0%~80%
Dimension	180 * 130 * 43 mm
Weight	0.5 Kg (w/o HDD)