# TS-DVR0404/0804/1604HF-L











## Model

**TS-DVR0404HF-L:** Full D1 recording, 4 channel video inputs, 4 channel audio inputs, 4 channel loop outputs and 1 channel spot output with multi split display. It can support VGA, HDMI, eSATA, USB2.0 and 4 HDDs.

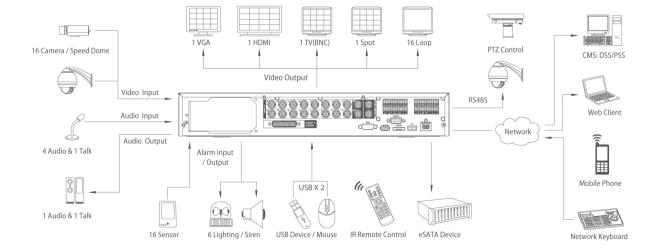
**TS-DVR0804HF-L:** Full D1 recording, 8 channel video inputs, 4 channel audio inputs, 8 channel loop outputs and 1 channel spot output with multi split display. It can support VGA, HDMI, eSATA, USB2.0 and 4 HDDs.

TS-DVR1604HF-L: Full D1 recording, 16 channel video inputs, 4 channel audio inputs, 16 channel loop outputs and 1 channel spot output with multi split display. It can support VGA, HDMI, eSATA, USB2.0 and 4 HDDs.

#### **Features**

- 4/8/16 channel Full D1 1.5U standalone DVR
- Dual-core CPU presents the powerful preview, recording, playback and network performance
- Up to 4/8/16 cameras with 1080P realtime preview
- H.264 dual-stream video compression
- Full channel @ D1(4CIF) realtime recording
- HDMI / VGA / TV/Spot(BNC) synchronous video output
- All channel simultaneous realtime playback, GRID interface & smart search
- Smart video detection: MD, camera blank, video loss
- 3D intelligent positioning with Thyonix PTZ dome camera
- Easy backup: USB devices, CD/DVD-RW & network download
- Alarm triggering screen tips, buzzer, PTZ, e-mail & FTP upload
- Support 4 SATA HDDs up to 12TB, 1 eSATA up to 12TB, 2 USB2.0
- Built-in web server, CMS(DSS/PSS) & DMSS

### **System Connection**



<sup>\*</sup> Take DVR1604HF-L for the example



# **Specifications**

| Model                     | TS-DVR0404HF-L   | TS-DVR0804HF-L   | TS-DVR1604HF-L                |
|---------------------------|--|--|-------------------------------|
| System                    |  |  |                               |
| Main Processor            | High performance Dual-core embedded microprocessor   |  |                               |
| Operating System          | Embedded LINUX   |  |                               |
| System Resources          | Pentaplex function: live, recording, playback, backup & remote access  |  |                               |
| Control Mode              | Front panel, USB mouse, IR remote control, Keyboard, Network   |  |                               |
| Video                     |  |  |                               |
| Input                     | 4 channel, BNC(1.0Vp-p, 75Ω)   | 8 channel, BNC(1.0Vp-p, 75Ω)   | 16 channel, BNC(1.0Vp-p, 75Ω) |
| Standard                  | NTSC(525Line, 60f/s), PAL(625Line, 5   |  | 1 1/                          |
| Output                    | 1 HDMI, 1 VGA, 1 TV, 1 Spot, BNC(1.0)  |  |                               |
| Loop Output               | 4 channel  | 8 channel  | 16 channel                    |
| Audio                     |  |  |                               |
| Input                     | 4 channel, BNC(200-2800mV, 30KΩ)   |  |                               |
| Output                    | 1 channel, BNC(200-3000mV, 5KΩ)  |  |                               |
| Bidirectional Talk        | 1 channel Input, BNC(200-2800mV, 30KΩ), 1 channel Output, BNC(200-3000mV, 5KΩ)   |  |                               |
| Display                   | , , , , ,  | ,  |                               |
| Display Split             | 1/4  | 1/4/8/9  | 1/4/8/9/16                    |
| Spot Split                | 1/4  | 1/4/8/9  | 1/4/8/9/16                    |
| Resolution                | 1920×1080, 1280×1024, 1280×720,  |  |                               |
| Tour Display              | Support  |  |                               |
| Privacy Masking           | 4 self-defined four-sided zones for privacy masking for each camera  |  |                               |
| OSD                       | Camera title, time, video loss, camera lock, motion detection, recording   |  |                               |
| Recording                 | ,,,,,,,  | ,,   |                               |
| Video/Audio Compression   | H.264 / G.711  |  |                               |
| Image Resolution          | D1/4CIF(704×576/704×480) / HD1(352×576/352×480) / 2CIF(704×288/704×240) / CIF(352×288/352×240) / QCIF(176×144/176×120)                 |  |                               |
| Encoding Speed            | Main Stream: D1/HD1/2CIF/CIF(1~25/30fps)   |  |                               |
| J                         | Extra Stream: CIF/QCIF(1~25/30fps)   |  |                               |
| Bit Rate                  | 32~4096Kb/s  |  |                               |
| Recording Quality         | CBR, VBR(1~6 level, level 6 is the best)   |  |                               |
| Recording Mode            | Manual, Schedule (Regular (Continuous), MD (Video detection: Motion detection, Camera blank, Video loss), Alarm), Stop                 |  |                               |
| Recording Priority        | Manual > Alarm > MD > Regular  |  |                               |
| Recording Interval        | 5  | cord: 1~30 sec., Post-record: 10~300 sec.  |                               |
| Video Detection & Alarm   | 1 120 mm (deldale 00 mm)/ 1 te rec   | 30 300,1 30 300,100  |                               |
| Trigger Events            | Recording, PTZ movement, Tour, Ala   | rm, Email, FTP, Spot, Buzzer & Screen tips   |                               |
| Motion Detection          | Zones: 396(22×18), Sensitivity: 1~6 (  | ·  |                               |
| Video Loss & Camera Blank | Support  | ever o is riighest,  |                               |
| Alarm Input               | 4 channel  | 8 channel  | 16 channel                    |
| Relay Output              | 6 channel  | o ename.   | 10 channel                    |
| Playback & Backup         | 0 0.101.11.101   |  |                               |
| Playback Channel          | 1/2/4/All  |  |                               |
| Search Mode               | Time/Date, Alarm, MD & Exact search (accurate to second), Smart search   |  |                               |
| Playback Functions        | Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, |  |                               |
| ,                         | Backup selection, Digital zoom(any size)   |  |                               |
| Backup Mode               | Flash drive/ USB HDD/ USB CD&DVD-RW / eSATA Device / Built-in SATA burner/ Network download  |  |                               |
| Network                   |  | 13 2 Same in State Duffler, Netwo  |                               |
| Ethernet                  | RJ-45 port (10/100M/1000M)   |  |                               |
| Network Functions         | HTTP, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPOE, DDNS, FTP, Alarm Server   |  |                               |
| Remote Operation          | Monitor, PTZ control, Playback, System setting, File download, Log information   |  |                               |
| Hard Disk                 |  | g, i ne de i neda, Log i nomidadi  |                               |
| Hard Disk                 | 4 SATA ports, 4 HDDs or 3 HDDs + 1 0   | CD/DVD-RW. Up to 12TB  |                               |
| eSATA                     | 4 External SATA ports, up to 12TB  |  |                               |
| Space Occupation          | Audio: 28.8MB/H, Video: 56~1800MB/H  |  |                               |
| HDD Management            | HDD Group, HDD hibernation technology, HDD faulty alarm & Raid(Redundancy)   |  |                               |
| Auxiliary Interface       | z c.cap, z macmadan technic  | and the second s |                               |
| USB Interface             | 2 ports, 1 for mouse control, 1 for backup   |  |                               |
| RS232                     | Thyonix keyboard, PC communication   |  |                               |
| RS485                     | PTZ control  |  |                               |
| Environmental             |  |  |                               |
| Power Supply              | AC 100~240 V, 50/60 Hz   |  |                               |
| Power Consumption         | 25W  | 30W  | 40W                           |
| Working Environment       | -10 ~+55°C / 10~90%RH / 86~106kg   |  | -1011                         |
| Dimension                 | 1.5U, 440mm×460mm×68mm(W×D×H)  |  |                               |
| Weight                    | 6.0KG(without HDD)   |  |                               |
| .3                        | S.O. C. (METOUCTIDD)   |  |                               |