

The Calibur digital video multiplexer/recorder (DVMR<sup>e</sup>) is ideal for applications where high quality multiplexed digital recording is required and economy and ease of use are desired. The DVMR<sup>e</sup>-16CS has an internal HDD (hard disk drive) which eliminates the need for the outdated analog VCRs.

The “e” in DVMR<sup>e</sup>-16CS means Ethernet ready. Review, retrieve and send images or clips from the DVMR<sup>e</sup>-16CS through your LAN/WAN network—all while continuing to record. You can even watch live action at the DVMR<sup>e</sup> through your network or take a “snapshot” for sending on email. The DVMR<sup>e</sup>-16CS improves playback picture quality and eliminates hours spent searching VCR tapes for critical events. Direct access to select events is done via a simple on-screen search menu and front panel controls. Search by alarm, time, date, camera or cash register/ATM text. No PC or complicated software is needed. With optional DAT, AIT or CS-Writer digital recording accessories, continuous recordings, images and clips can be archived automatically for days, weeks or longer.

The DVMR<sup>e</sup>-16CS is set up through QuickInstall on-screen menus. Record and playback



The DVMR<sup>e</sup>-16CS, a 16-camera, color, simplex digital video multiplexer/recorder

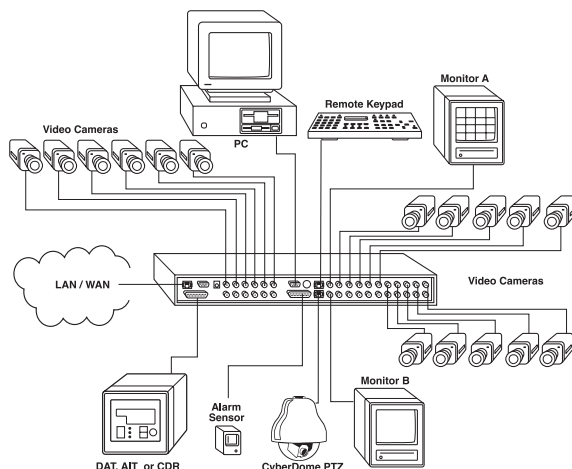
### Features

- Multiplexer functionality with built-in, state-of-the-art digital recording
- Ethernet LAN/WAN capability, TCP/IP protocol
- Live “look-in” through your network
- Continue recording and review, retrieve, store images on your network
- WaveReader software supplied with DVMR<sup>e</sup>
- Wavelet compression
- Event or various time lapse record speeds from 2- or 3-hour mode, up to 960-hour mode
- Video motion detection (intrusion) and activity detection with active feedback setup scope
- Pre- and post-alarm recording
- Selectable record image quality: high, medium and extended record duration
- Archive on DAT, AIT or recordable CDs
- Secret watermark verifies that recorded or shared images have not been altered
- Save images as JPEG or BMP for easy distribution on email
- ADM auto delete mode to automatically delete recordings after 30 days
- Electronic PTZ
- Motorized PTZ control with CBR-KB3/J keyboard\*
- Cascade up to 31 DVMR<sup>e</sup>s via RS-485
- RS-232 and/or RS-485 remote control, setup upload/download, and diagnostics
- AutoInstall™ with AutoList™, automatic termination, automatic camera detection, automatic gain control

\* Call Kalatel for a list of supported third-party PTZ hardware. Additional Calibur hardware may be required in some systems.

functions closely emulate a security VCR, so operation is intuitive. There are no new technologies to learn.

The DVMR<sup>e</sup>-16CS. Exceptional digital quality recording, multiplexer functionality, automation, internal and external digital archiving, easy setup and use.



### System Diagram

The DVMR<sup>e</sup>-16CS connects to up to 16 cameras. Two monitors can be used to view multiscreen in play and live or switched full-screen display. Archiving can be done to DAT/AIT/CD via SCSI port. LAN/WAN connection via RJ45 connector. External alarm sensors can be connected via DB25. Remotely controlled by a PC via RS-232 or RS-485 port. A total of 32 DVMR<sup>e</sup>s and keyboards can be connected to the same RS-485 network.

### Technical Specifications

#### Archive

**DAT or AIT or CD-Writer:** 1 50-pin SCSI-2 port, DB 50-S-SCSI (reversed) (Contact Kalatel for recommended models)

#### Network

1 RJ45 connection

#### Video

**Display memory:** 2048 x 512 memory array, 8 MB total display memory  
**Colors:** YUV 4:2:2, 16.8 million colors  
**Grayscale:** 256 levels  
**Horizontal resolution:** 720 pixels  
**Vertical resolution:** 484 active lines NTSC/EIA, 576 active lines PAL/CCIR

#### Alarm Handling

**Alarm inputs:** 16 programmable NO or NC in menus.  
**Alarm outputs:** 2 form C relays, each NO and NC. Rated 0.5 A continuous, 1.0 A momentary.  
**Alarm latching:** 3 settings: latched; transparent; timed-out. Programmable 1-100 seconds.  
**Alarm recording:** Automatic priority control, interleaved or exclusive, or none. Programmable.  
**Alarm displays:** Automatic alarm multiscreens. Programmable

#### Video Motion and Activity Detection

**Zones per camera:** 256, 16 x 16 grid  
**Sensitivity settings:** 10 levels  
**Gray levels per zone:** 256 levels  
**False alarm rejection processing:** 3 levels  
**Size discrimination:** 256 levels  
**Recording Priority:** 2x, 4x, interleaved, or none  
**Status Output:** Link to relay

#### Recording

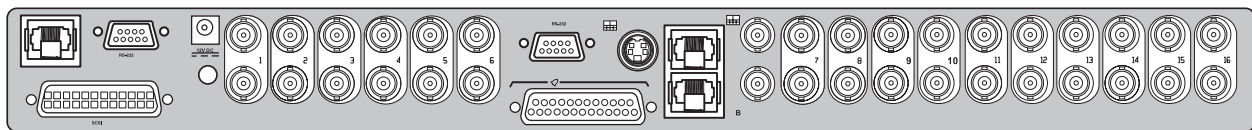
**Hard drive:** 15 GB - 30 GB standard to 75 GB optional (or larger-call Kalatel)  
**Record speed:** Selectable; event, 2/3, 12, 24, 48, 72, 168, or 960 hr (30/25 fps, 12 fps, 5 fps, 3 fps, 2 fps, 1 fps, .125 fps.)  
**Compression:** Wavelet format, standard, medium and high resolution settings selectable per camera

#### Miscellaneous

**Input voltage:** 12 VDC, 90 V - 264 V AC/DC adapter included  
**Power:** 35 W nominal  
**Temperature:** 0 to 40° C (32 to 104° F), operating  
**Relative humidity:** 90%, noncondensing  
**Dimensions:** 17.5 x 14 x 1.7 in. (444 x 360 x 43 mm)  
**Weight:** 9 lbs. (4 kg)

#### Ordering Information

**DVMR<sup>e</sup>-16CS:** Simplex, color, NTSC/EIA  
**DVMR<sup>e</sup>-16CSX:** Simplex, color, PAL/CCIR  
**CBR-KB3(X):** Optional remote keyboard, includes motorized PTZ control capabilities  
**CBR-KB3/J(X):** Same as CBR-KB3 but with proportional joystick control  
**CBR-RK2:** Optional 1U rackmount kit  
**CBR-PB2:** Optional probebridge for PTZ applications (contact Kalatel for available models)



Rear Panel Inputs and Outputs

#### Inputs

**Camera:** 16 looping, BNC connectors, NTSC/EIA or PAL/CCIR compatible, auto terminating.  
**Conditioning:** AGC, 0.7 to 2.0 V<sub>p-p</sub> video accepted.  
**Termination:** Automatic, 75 ohm or Hi-Z if looped.

#### Outputs

**Monitor:** 3: 1 MON-A multiscreen output, BNC connector NTSC/EIA or PAL/CCIR compatible; 1 MON-A multiscreen output, S-VHS, 4-pin mini-DIN; 1 MON-B full-screen switched, BNC connector, NTSC/EIA or PAL/CCIR compatible.  
**SCSI-2:** 1 50-pin SCSI-2 port, DB 50-S-SCSI

#### Kalatel

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