



The CBR-MDT, a 16-camera, monochrome, Triplex™ video multiplexer

The CBR-16MDT offers today's best playback and live display, system automation and alarm management. Cameras can be viewed in any of several different multiscreen formats while full resolution pictures from all cameras are recorded to a VCR. Unique Triplex™ performance displays a custom mix of live and playback images simultaneously on one monitor. Patented Parallel Video Processing (PVP™) outputs up to 50/60 (CCIR/EIA) unique pictures to your monitor and VCR to deliver more recorded documentation and closer-to-real-time display than conventional multiplexers. VEXT automatically optimizes multiplexer/VCR synchronization and prevents loss of critical pictures regardless of VCR record speed or how often record speeds change.

Easy to use, intelligent and watchful, the CBR-16MDT is set up through QuickInstall on-screen menus. Connected VCRs can also be controlled from the multiplexer. Macros trigger a prerecorded key sequence, offering one-button response to alarms, guard shift change or day/night setups. Video motion detection "sees" alarm

### Features

- Triplex™ simultaneous live and playback on one monitor
- PVP™ ultrafast VCR and monitor update speed
- VEXT automatic VCR record speed synchronization
- Video motion detection (intrusion) and activity detection with active feedback setup scope
- S-VHS VCR input and output
- S-VHS monitor output
- Live in full-screen, sequencing, PIP, quad, 7, 9, 10, 13 or 16-up display
- Covert camera feature removes selected camera(s) from display without altering recording
- Playback in full-screen, sequencing, PIP, quad, 9, 10 or 16-up display
- One-touch "freeze"
- Electronic PTZ
- Associated multicamera display upon alarm
- 16 alarm inputs, 2 relay outputs
- Alarm history display (100 events)
- Manually activated alarm
- VCR control from the multiplexer
- 16 macros
- Motorized PTZ control and programmable presets on alarm with CBR-KB3/J keyboard\*
- Supports up to 31 keyboards via RS-485
- Cascade up to 31 multiplexers and control up to 496 PTZs via RS-485
- RS-232 and/or RS-485 remote control, setup upload/download and programming
- Plays back tapes made by other manufacturers' multiplexers\*\*
- Setup view screens show entire system setup
- Two passwords for supervisor or standard user
- AutoInstall™ with AutoList™, automatic camera detection, automatic termination, automatic gain control
- Time, date and titling display
- Battery backup

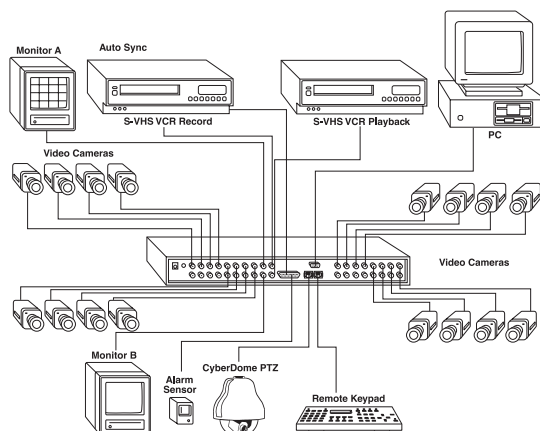
\* Call Kalatel for a list of supported third-party PTZ hardware. Additional Calibur hardware may be required in some systems.

\*\* Call Kalatel for a list of other multiplexer manufactures whose tapes our units will play back.

conditions, displays user-defined associated cameras, activates external devices and keeps a history log.

The CBR-16MDT. Today's

most advanced picture processing, intelligent control and integration, alarm detection and management.



### System Diagram

The CBR-16MDT connects to up to 16 cameras. Two monitors can be used, one to view multiscreen display and one to view sequencing full-screen display. Two VCRs can be used, one to record and one to play back. VEXT connection ensures automatic and precise multiplexer/VCR synchronization. One external alarm sensor can be connected per camera. Remotely controlled by a PC via RS-232 or RS-485. A total of 32 multiplexers and keyboards can be connected to the same system.

## Technical Specifications

### Video

**Display memory:** 2048 x 2048 memory array, 32 MB live/play plus 32 MB Record = 64 MB total display memory  
**Grayscale:** 256 levels  
**Horizontal resolution:** 720 pixels  
**Vertical resolution:** 484 active lines EIA, 576 active lines CCIR  
**Sampling rate:** 17.7 MHz (CCIR), 14.2 MHz (EIA)

### Alarm Handling

**Alarm inputs:** 16 NO or NC setup 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 relays, alarms

### Remote Control and Programming

**RS-232:** DB-9, female. 3-wire, N-8-1, baud rate selectable in menus. Allows remote programming of menus, upload of status data, remote control of front panel buttons.  
**RS-485:** RJ-45, remote keyboard input, looping, up to 3000' without adapters. System time I/O.

### DB-25 Pinouts

Pin #	Designation
1-16:	Alarm inputs, NO or NC, programmable
17, 21:	Alarm out #1, NO or NC, isolated
18:	Ground
22, 25:	Alarm out #2, NO or NC, isolated
23:	Alarm acknowledgment. Input, NO
24:	VCR camera SWITCH INPUT (VEXT)

### DB-9 Pinouts

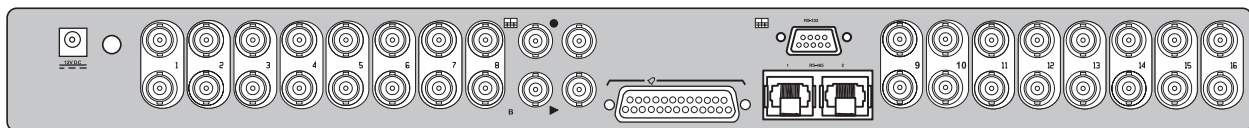
Pin #	Designation
2:	Tx
3:	Rx
5:	Ground

### Miscellaneous

**Input voltage:** 12 VDC, 90 V - 264 V AC/DC adapter included  
**Power:** 25 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

**CBR-16MDT:** 16-camera, Triplex™, monochrome, EIA  
**CBR-16MDTX:** 16-camera, Triplex™, monochrome, 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 probridge for PTZ applications (contact Kalatel for available models)



Rear Panel Inputs and Outputs

### Inputs

**Camera:** 16 looping, BNC connectors, EIA or CCIR compatible.  
**VCR:** 2 EIA or CCIR compatible: 1 BNC connector; 1 4-pin, mini-DIN, S-VHS YC input.  
**Conditioning:** AGC, 0.7 to 2.0 Vp-p video accepted.  
**Termination:** Automatic, 75 ohm or Hi-Z if looped.

### Outputs

**Monitor:** 3: 1 MON-A multiscreen output, BNC connector, EIA compatible; 1 MON-A multiscreen output, S-VHS, 4-pin, mini-DIN; 1 MON-B full-screen switched, BNC connector, EIA compatible.  
**VCR:** 2: 1 BNC connector, EIA or CCIR compatible; 1 S-VHS VCR, 4-pin mini-DIN, output.

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