



The CBR-16MD, a 16-camera, monochrome, duplex video multiplexer

The CBR-16MD is ideal for applications where high resolution multiscreen live and playback display are required and budget is a concern. Live cameras can be viewed in any of several different multiscreen formats while full resolution pictures from all cameras are sent to a VCR. Patented Parallel Video Processing (PVP™) outputs up to 50/60 (CCIR/EIA) unique pictures per second to your monitor and delivers 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 install and integrate, the intelligent CBR-16MD is set up through QuickInstall on-screen menus. Macros trigger a pre-recorded key sequence, offering one-button response to alarms, guard shift change or day/night setups. Tapes recorded using other multi-

Features

- PVP™ ultrafast monitor update speed
- VEXT automatic VCR record speed synchronization
- Video motion detection (intrusion) and Activity detection with active feedback setup scope
- Live in full-screen, sequencing, PIP, quad, 7, 9, 10, 13 or 16-up display
- Playback in full-screen, sequencing, PIP, quad, 9, 10 or 16-up display
- Covert camera feature removes selected camera(s) from display without altering recording
- One-touch "freeze"
- Electronic PTZ
- 16 alarm inputs, 2 relay outputs
- Alarm history display (100 events)
- Manually activated alarm
- 16 macros
- Motorized PTZ control with CBR-KB3/J keyboard*

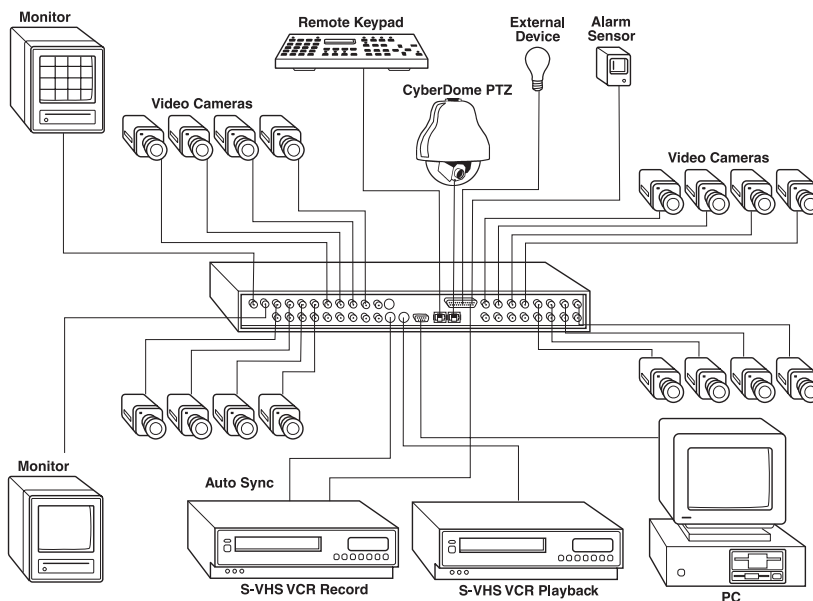
* Call Kalatel for a list of supported third-party PTZ hardware. Additional Calibur hardware may be required in some systems.

- Supports up to 31 keyboards via RS-485
- Cascade up to 31 multiplexers via RS-485
- RS-232 and/or RS-485 remote control, setup upload/download
- Plays back tapes made by other manufacturer's multiplexers**
- Setup view screens show entire system setup
- Camera histogram diagnoses correct camera setup
- Two passwords for supervisor or standard user
- AutoInstall™ with AutoList™, automatic camera detection, automatic gain control
- Time, date and titling display
- Battery backup

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

plexers can be played back, allowing retrofit without loss of investment or access to tape archives.

The CBR-16MD. Excellent live display, exceptional integration, automation and control.



System Diagram

The CBR-16MD 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 programmable 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: Automatically switch to alarmed camera

Video Motion and Activity Detection

Zones per camera: 256, 16 x 16 grid
Sensitivity settings: 10 levels with active feedback setup scope
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

DB-25 Pinouts

Pin #	Designation
1-16:	Alarm inputs, NO or NC, programmable
17, 21:	Alarm out #1, NO or NC, isolated
18-20:	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

Remote Control and Programming

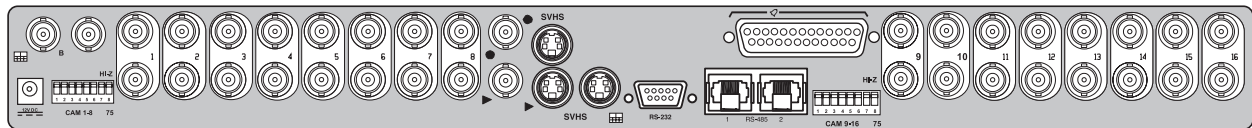
RS-232: DB-9, female. 3-wire, N-8-1, baud rate selectable in menus. Allows remote programming of menus, upload of status data, remote control of front panel buttons.
RS-485: RJ-45, remote keyboard input, looping, up to 3000' without adapters. Time I/O system. Allows remote programming of menus, upload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

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-16MD: 16-camera, duplex, monochrome, EIA
CBR-16MDX: 16-camera, duplex, 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-ALM: Optional alarm input module
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: 1 BNC connector, EIA or CCIR compatible. (S-VHS not used.)
Conditioning: AGC, 0.7 to 2.0 Vp-p video accepted
Termination: Manual ON/OFF 75 ohm on rear panel, per camera.

Outputs

Monitor: 2: 1 MON-A multiscreen output, BNC connector EIA or CCIR compatible; 1 MON-B full-screen switched, BNC connector, EIA or CCIR compatible. (S-VHS not used.)
VCR: 1 BNC connector, EIA or CCIR compatible. (S-VHS not used.)

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