

The CBR-10MD, a 10-camera, monochrome, duplex video multiplexer

The CBR-10MD 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<sup>™</sup>) 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-10MD is set up through QuickInstall on-screen menus. Macros trigger a prerecorded key sequence, offering one-button response to alarms, guard shift changes or day/night setups. Tapes recorded using other manufacturers' multiplexers can be played

### **Features**

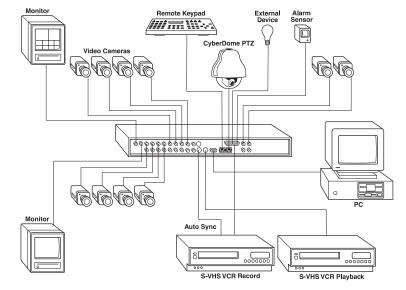
- → PVP<sup>™</sup> ultrafast monitor update speed
- → VEXT automatic VCR record speed synchronization
- Video motion detection (intrusion) and activity detection with active feedback setup scope
- Live in full-screen, sequencing, PIP, quad, 7, 9 or 10-up display
- Playback in full-screen, sequencing,
  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
- → 10 alarm inputs, 2 relay outputs
- → Alarm history display (100 events)
- → Manually activated alarm
- → 10 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
- back, allowing retrofit without loss of investment or access to tape archives.

- → 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 manufacturers' 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.

The CBR-10MD. Excellent picture quality, automated use, economical.

## System Diagram

The CBR-10MD connects to up to 10 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:** 10 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

1-10: Alarm inputs, NO or NC, programmable

11-16: Reserved

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-10MD: 10-camera, duplex, monochrome, EIA CBR-10MDX: 10-camera, duplex, monochrome, CCIR CBR-KB3(X): Optional remote keyboard, includes motorized PTZ control capability

CBR-KB3/J(X): Same as CBR-KB3 but with proportional

joystick control

**CBR-RK2:** Optional 1U rackmount kit **CBR-ALM:** Option alarm input module

CBR-PB2: Optional probridge for PTZ applications (contact

Kalatel for available models)



Rear Panel Inputs and Outputs

## Inputs

Camera: 10 looping, BNC connectors, EIA or CCIR compatible VCR: 1 BNC connector EIA or CCIR compatible. (S-VHS not

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.)

#### Kalatel

PMB 225, PO Box 3004 Corvallis, OR, USA 97339 www.kalatel.com

## Americas

toll free 800-469-1676 tel 541-754-9133 fax 541-754-7162

#### Asia

tel 852-2907-8108 fax 852-2142-5063

#### Australia

tel 61-3-9259-4700 fax 61-3-9259-4799

#### Europe

tel 32-50-51-32-34 fax 32-50-51-66-28

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