



The CBR-16CD, a 16-camera, color, duplex video multiplexer

The CBR-16CD is ideal for applications that require exceptional live monitoring and multiscreen live and playback display. Cameras can be viewed in any of several different multiscreen formats while full resolution pictures from all cameras in your system are sent to a VCR. Patented Parallel Video Processing (PVP™) outputs up to 50/60 (PAL/NTSC) 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-16CD 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
- 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
- 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

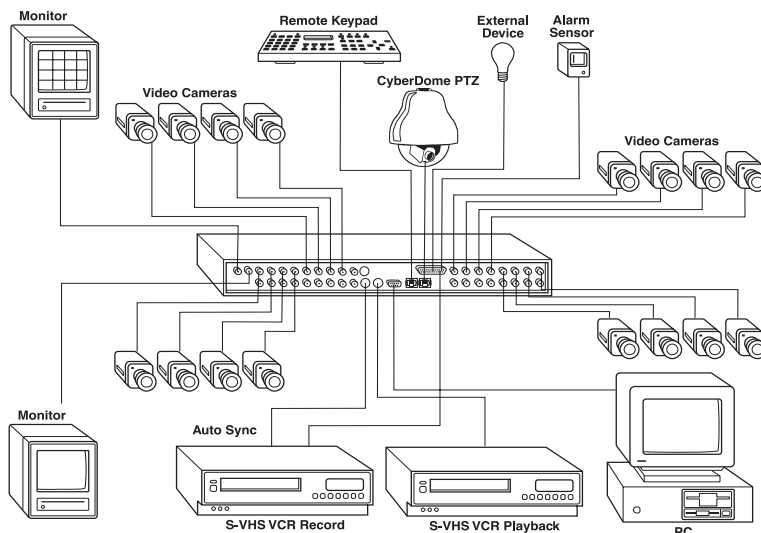
* Call Kalatel for a list of supported third-party PTZ hardware. Additional Calibur hardware may be required in some systems.

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

- Motorized PTZ control with CBR-KB3/J keyboard*
- 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 manufacturers whose tapes our units will play back.

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



System Diagram

The CBR-16CD 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
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
Sampling rate: 17.7 MHz (PAL/CCIR), 14.2 MHz (NTSC/EIA)

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: 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

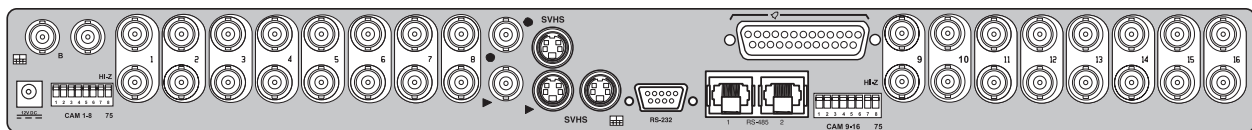
RS-232: DB-9, female. 3-wire, N-8-1, baud rate selectable in menus. Allows remote programming of menus, upload of status data, remote control of front panel buttons.
RS-485: RJ-45, remote keyboard input, looping, up to 3000' without adapters. Time I/O system. Allows remote programming of menus, upload 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-16CD: 16-camera, duplex, color, NTSC/EIA
CBR-16CDX: 16-camera, duplex, 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-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, NTSC/EIA or PAL/CCIR compatible
VCR: 2 NTSC/EIA or PAL/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: Manual ON/OFF 75 ohm on rear panel, per camera.

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.
VCR: 2 NTSC/EIA or PAL/CCIR compatible; 1 BNC connector, 1 4-pin mini-DIN, S-VHS YC output.

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