



The CBR-4MSq, a 4-camera, monochrome, simplex video multiplexer

The CBR-4MSq is an economical four channel, monochrome video multiplexer designed for simple installation and operation in virtually any sized CCTV system. The CBR-4MSq is so simple, no user setup is required.

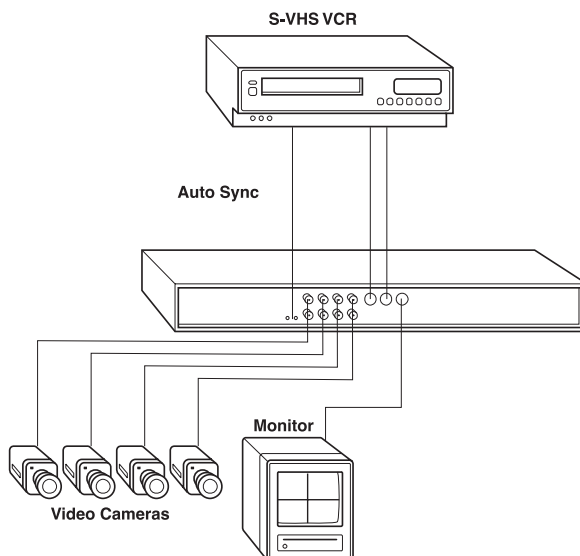
Among the many user and installer friendly features, the CBR-4MSq will automatically start recording when it receives a VEXT pulse from a VCR. VEXT ensures correct VCR synchronization regardless of the recording speed selected or how often it is changed. Even the new 24 hour Real Time VCRs are easily synchronized using VEXT. In addition, the CBR-4MSq can sense which camera inputs are actually connected and automatically configures the unit to record only those cameras. Should video be lost from a camera, automatic video loss detection will notify the user.

VCR setup is accomplished by setting external DIP switches or by connecting the VEXT feature. A pixel resolution of 720 ensures a crisp, high resolution, broadcast quality video output is provided.

While recording, the user has several display options including quad, full-screen or sequencing full-screen. In addition, the exclusive AutoList™ feature permits the user to create custom sequence lists and custom dwell times. No matter how the live images are being displayed, the CBR-4MSq is always locked in the record mode eliminating the chance of operator error. In playback, all four cameras can be viewed in quad or sequencing, or just one may be selected and displayed full-screen. In addition, the “freeze” feature permits a one-touch pause of the replay for closer scrutiny.

### Features

- Fast recording speed, up to 30 unique pictures per second
- VEXT automatic VCR record speed synchronization
- High-resolution display in record and playback
- Live or playback in quad, full-screen or sequencing display
- One-touch “freeze”
- Record mode lock eliminates operator error
- Video loss notification
- AutoInstall™ with AutoList™, automatic camera detection, automatic gain control
- Optional 19” rackmount kit



### System Diagram

The CBR-4MSq provides high-resolution picture signal and rapid-speed record output when connected to cameras and a time-lapse VCR. VEXT provides automatic and precise multiplexer/VCR synchronization.

### Technical Specifications

#### Video

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

#### Installation

**Record speed:** 8 switch selectable speeds: 2 hr, 12 hr, 24 hr, 48 hr, 72 hr, 120 hr, 168 hr, 240 hr. When VEXT is active, speed control is automatic.  
**Record lock:** Locks unit in record mode, switch selectable.  
**VEXT edge:** Selects VEXT pulse switch edge, internal jumper. Installer use only.  
**AGC range:** Installer use only. Used for cameras with abnormally high white levels, beyond EIA standards. Selects a higher range, per camera input, for the AGC to operate within, 4 internal jumpers.

#### Electrical

**Input voltage:** 12 VDC, 90 V - 264 V AC/DC adapter included  
**Power:** 25 W nominal  
**Power:** 9 W nominal

#### Environmental

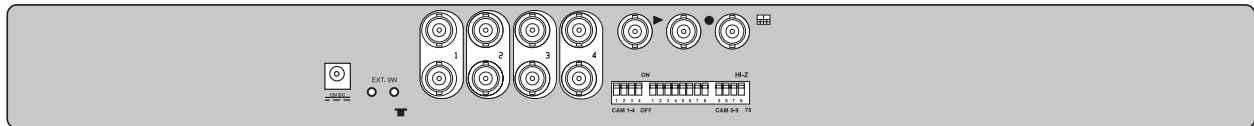
**Temperature:** 0 to 40° C (32 to 104° F), operating  
**Relative humidity:** 90%, noncondensing

#### Physical

**Dimensions:** 17.5 x 14 x 1.7 in. (444 x 360 x 43 mm)  
**Weight:** 9 lbs. (4 kg.)

#### Ordering Information

**CBR-4MSq:** 4-camera, simplex, monochrome, EIA  
**CBR-4MSqX:** 4-camera, simplex, monochrome, CCIR  
**CBR-RK2:** Optional 1U rackmount kit



Rear Panel Inputs and Outputs

#### Inputs

**Camera:** 4 BNC connectors, EIA or CCIR compatible.  
**VCR:** 1 BNC connector, EIA or CCIR compatible.  
**Conditioning:** AGC, 0.7 to 2.0 Vp-p composite video inputs accepted. AGC Range switch per camera, via internal jumpers for cameras with abnormally high white levels.  
**Termination:** Manual ON/OFF 75 ohm on rear panel, per camera.

#### Outputs

**Monitor:** 1 BNC connector, EIA or CCIR compatible.  
**VCR:** 1 BNC connector, EIA or CCIR compatible.

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