BOSCH

Invented for life

LTC 2682/90 Series System4 Video Management System

▸ **True Triplex operation**

▸ **Simultaneous playback and live view multiscreen display**

▸ **Playback six (6) recording formats**

▸ **Timed events feature**

▸ **Log events feature**

▸ **Custom alarm display with multiple presets**

▸ **Full duplex VCR controls with on-line status and time/ date/search functions**

▸ **Remote VCR setup**

▸ **Master clock synchronization**

System4 Video Management Systems incorporate advanced circuitry and expanded memory with improved color sampling and processing to produce high quality, true-to-life color video images. Enhanced circuitries allow increased image accuracy and faster display rates without annoying onscreen flickering (aliasing) common with multiscreen displays. These units can be used as matrix switchers, displaying any camera to either monitor A or B and include custom alarm display on monitor A with up to 4 pre-position call-ups in a single alarm contact. Also, with the internal universal power supply, the System4 intelligently detects the video input signal input voltage and automatically sets the unit for PAL/NTSC or EIA/CCIR.

Functions

The advanced features of System4 are accessible through the optional IntuiKey remote keyboard. The IntuiKey keyboard is capable of controlling Bosch AutoDome systems and receiver/drivers for pan/tilt/zoom control. The System4 remote keyboards control all primary functions of any selected Bosch VCR. Up to 30 System4 units and 30 VCRs can be programmed and controlled by one keyboard. With Master Clock Synchronization, the System4 automatically synchronizes all of the clocks. With a

keyboard port expander unit (see OPTIONS), up to four keyboards can be used to program and control a System4 video controller.

The LTC 2682/90 16-channel Triplex multiplexer allows for the following:

- Simultaneous recording and multiscreen viewing on both monitors.
- Simultaneous recording and playback and live viewing multiscreen.
- Can play back the recording formats of 6 different manufacturers.

The system's user-friendly controls allow fast and easy programming and operation. System4 units include an onscreen menu for programming which is available in English, French, German, Spanish, Dutch, or Italian. Programming allows for either AutoSet or customized system configuration via the Advanced Setup program. Help screens provide explanation and instruction, guiding operators step-by-step through the setup process. When the AutoSet feature is enabled, System4 will automatically configure itself for recording, sequencing, and video loss listing based on the number of connected cameras.

All System4 models provide digital motion detection, ensuring that cameras with motion present become the priority for recording. Recording may be programmed as either "exclusive" or "interleave", based on motion or alarm detection. Four levels of sensitivity are available including direction sensing, target size, and a special walk-through

setup to eliminate false alarms. A selectable audible buzzer is available in this mode. Parameter setup can be preprogrammed using the Timed Events feature, which allows several configurations for system operation and recording. Up to six separate System4 operational parameters may be programmed and stored in the system memory for manual call-up or time activation.

System4 units include front panel controls, synchronization with VCR head switching, freeze, 4X zoom, video loss indicators, alarm capture, password security, multi-relay outputs, and full function time/date with 16-character titling record capability. All units are compatible with standard VHS and SVHS formats and normal and high density VCRs. No external synchronization of camera inputs is required, as integrated time based correction is included in all models.
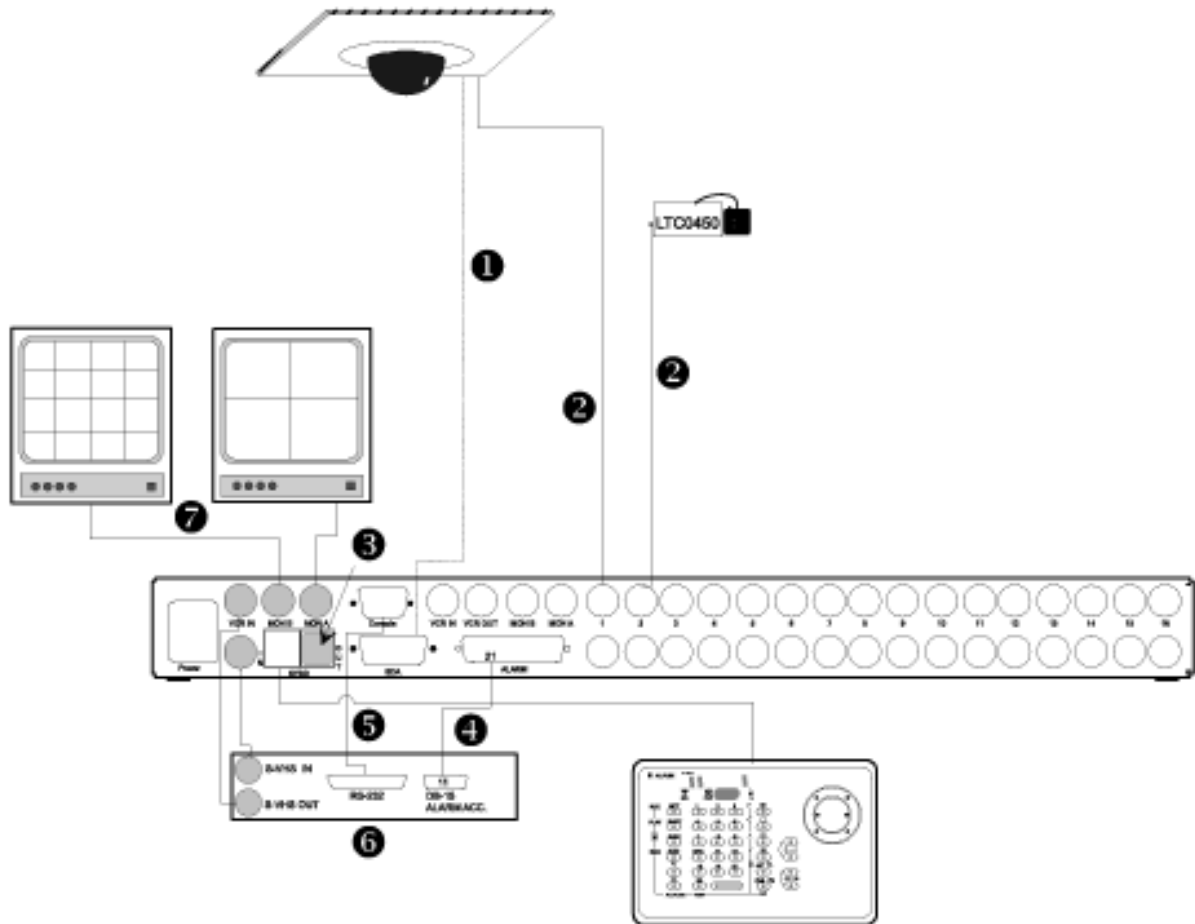
A Log Events feature tracks event history and a console port allows PC control of the system, full duplex VCR control including remote VCR setup and a time/date/search function to reduce tape viewing time, or interaction with Access Control Systems and Bosch LTC 2650/00 Graphical User Interface (GUI) software packages.

Today's growing business demands security that is sophisticated, reliable and easy to use. From discount stores to commercial offices, System4 intelligently provides a multifunction system capable of handling up to 9 or 16 camera inputs with switching and multiplexer control, pan/tilt/zoom, and VCR control in one compact unit.
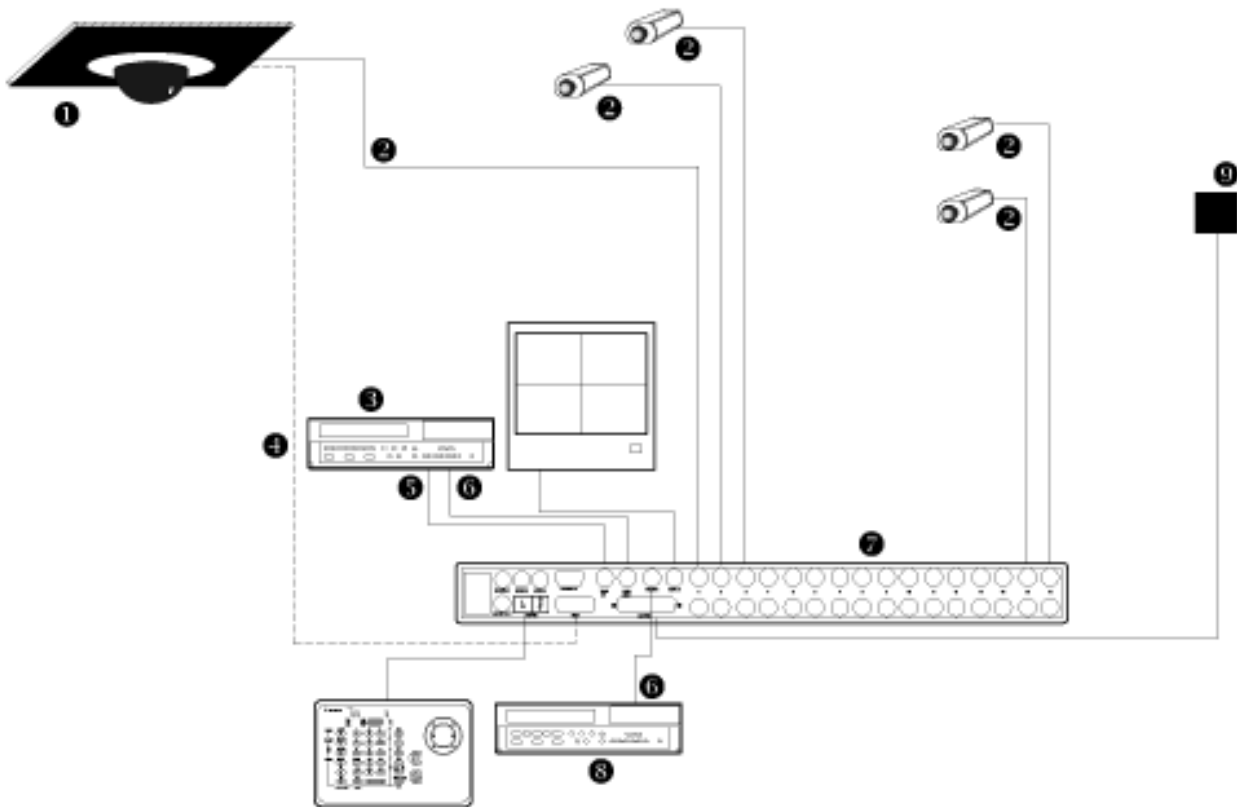
Certifications and Approvals

Electromagnetic Compatibility (EMC)	CE Immunity, CE Emission Class A, FCC Class A
Safety	CE, UL, cUL

Installation/Configuration Notes

System4 Triplex, Typical Operation

1	Data		6	S-VHS Type VCR
2	Video		7	S-VHS Video
3	Terminated Resistor			
4	VEXT Connection 21 to 11 and 25 to 15 (GND)			
5	S1383			

System4, Typical Configuration

1   AutoDome
2   Video
3   Record/Playback VCR
4   Data
5   Out
6   In
7   Up to 16 Cameras
8   Recording VCR
9   PIR Sensor

Simultaneous Recording to Two VCR's (Triplex Operation)

The LTC 2682 provides two independent VCR outputs; each output can be programmed to encode camera sequences. Using the LTC 2682 in this mode offers the flexibility to distribute the number of cameras between two VCRs to provide a fast update rate for each camera. Two VCRs may also be programmed so that one VCR may be used for normal encoding while the other is used for action/alarm encoding. In this triplex mode of operating, Monitor A always displays the image in multi-screen, quad, full, or multiple cameras in a sequence mode.

Technical Specifications

Electrical

Description	Voltage Range	Power/ Current
16-channel Triplex	108 to 253 VAC, 50/60 Hz	30 W/0.5 A

Synchronization

Full Time-based Correction

Monochrome	625 line, 50 Hz, CCIR
Monochrome	525 line, 60 Hz, EIA RS-170
Color	625 line, 50 Hz, PAL
Color	525 line, 60 Hz, NTSC

Digital Memory

720 H x 576 V

AGC: Automatic or manual adjustment for each video input. Video Input Level: 0.5 Vp-p to 2.0 Vp-p composite video signal.

Operating Modes

Simultaneous record and multi-screen viewing on both monitors. Simultaneous record and playback and multi-screen viewing.

Display Modes

Live

Monitor A	Full, quad, or multi-screen display

Description	Voltage Range	Power/ Current
Monitor B	Full (alarm or action call-up only), quad, or multi-screen display	
Playback		
Monitor A	Full, quad, or multi-screen display	
Monitor B	Full	
Controls and Indicators - Front panel		
Inputs		
Camera	9 (16) inputs; 18 (32) BNC connectors, automatic looping termination BNC	
VCR IN	One (1) BNC	
VCR IN	One (1) Y/C	
Outputs		
Monitor A	One (1) BNC	
Monitor B	One (1) BNC	
VCR OUT	One (1) BNC	
Monitor A	One (1) Y/C	
Monitor B	One (1) Y/C	
VCR OUT	One (1) Y/C	
Connectors		
Power	IEC socket, 3-wire power cord with grounded plug; 1.8 m (6 ft)	
Accessory Inputs/ Outputs	One (1), 25-pin D-type connector for alarms and accessories	
Alarm Inputs	9 (16) individually selectable NO or NC alarm	
Inputs		
Relay Output	Three (3) relay outputs (selectable NO or NC), one (1) for action/alarm (VCR # 1), one (1) for action/alarm (VCR # 2) and one (1) for video loss (these relay contacts handle up to 1 A at 40 VAC/VDC)	
SDA	15-pin D type for 5 Bi-Phase outputs	
Console	9-pin D type for RS-232 controls	
VEXT inputs	Two (2)	
Mechanical		
Construction	Steel chassis with sheet metal cover and plastic bezel	
Finish	Charcoal case	
Dimensions (W x H x D)	440 x 305 x 40 mm (17.3 x 12 x 1.7 in.)	
Weight	5 kg (11 lb)	
Rack Mount Kit (Included)	For mounting one unit in an EIA 48 cm (19 in.) rack	
Environmental		
Operating Temperature	10℃ to 55℃ (50℉ to 131℉)	
Storage Temperature	−20℃ to 60℃ (−4℉ to 140℉)	
Humidity	0% to 90% relative, non-condensing	

Ordering Information

LTC 2682/90 Video Management System
16 channel multiplexer, color and B&W, triplex, 105–253 VAC, 50/60 Hz
LTC 2682/90

Accessories

KBD-Universal Keyboard
IntuiKey Universal Keyboard for use with LCD Displays for Allegiant, Divar and System4 Multiplexers
KBD-UNIVERSAL

KBD-Digital Keyboard
IntuiKey Digital Keyboard for use with Divar Digital Video Recorders and System4 Multiplexers
KBD-DIGITAL

LTC 2604/50 Keyboard Port Expander Unit
System4, 230 V, 50 Hz
LTC 2604/50

LTC 2604/60 Keyboard Port Expander Unit
System4, 120 V, 60 Hz
LTC 2604/60

LTC 2609/00 System4 Extension Kit
links up to six (6) System4 Multiplexers, 90 units
LTC 2609/00

LTC 2650/00 Graphical User Interface (GUI)
Graphical User Interface for programming and controlling
LTC 2650/00

LTC 2605/91 System4 Video Manager
for use with Divar and System 4 Multiplexers, 105–253 VAC, 50/60 Hz
LTC 2605/91

S1386 VCR Control Cable
for Philips LTC multiplexers and VCRs
S1386

S1383 VCR Control Cable
VCR control cable for mux to VCR
S1383

LTC 8558/00 Keyboard Cable
optional, 30.5 m (100 feet)
LTC 8558/00