LTC 8600 Series

Allegiant® Video Switcher/Control Systems



Security Systems



- 128 Camera by
 16 Monitor Switching
- Modular Construction
- Powerful Alarm Handling Capabilities
- SalvoSwitching® and SatelliteSwitch® Capability
- PC-based Software
 Package Available
- Economical Single-Bay Design

The LTC 8600 Series Allegiant video switcher/control systems combine both switching and computer technology to provide powerful performance and unique system features for the security user. Offering full matrix switching capability, these systems can be programmed to display the video from any camera on any monitor, either manually or via independent automatic switching sequences.

The LTC 8600 Series provide versatile modular construction accommodating up to 128-camera inputs, 16-monitor outputs, 16-keyboards, 512-alarm points, a computer interface port, and a logging printer port.

These systems can be programmed with up to 60 sequences which can be run independently of each other in either a forward or reverse direction. Any of the sequences can utilize the SalvoSwitching capability where any number of system monitors may be selected to switch as a group. Using the optional LTC 8059/00 master control software package, or the LTC 8850/00 (GUI) Graphical User Interface Software package, sequences can be made to activate and deactivate automatically based upon the time of day and the day of week.

On-site receiver/drivers permit operator control of pan, tilt, zoom, multiple pre-positions, four auxiliaries, autopan, and random scan. An integral local test function is also a standard feature. The LTC 8600 Series also supports variable speed operation and full programming functions of AutoDome® Series dome cameras.

When combined with an LTC 8016 Allegiant Bilinx[™] Data Interface unit, these switcher/controllers support operations using Bilinx communication. With Bilinx, PTZ control is accomplished using a bidirectional communication protocol embedded in the video signal of Bosch Dinion[™] and AutoDome CCTV cameras. In addition, Bilinx uses the standard video cable to transmit alarm and staus messages from the cameras, providing superior performance without the need for separate data transmission cables.

With the addition of the LTC 8540/00 Series alarm interface accessory units, an external contact closure or logic level can be used to automatically activate any camera to be displayed. Any monitor or group of monitors can be set to display cameras under alarm conditions. The base system contains three built in alarm response modes: basic, auto-build, and sequence & display. In addition to these three modes, the PC based



software packages now includes the ability to combine any or all of the three standard modes within the same system. Alarm video may be selected to reset either manually or automatically. In addition, a 16-character alarm title can be selected to appear instead of the camera title during alarm conditions.

The LTC 8600 Series includes a black outlined 48-character on-screen display for time-date, camera number, camera ID (16-characters), an icon to identify controllable cameras, and monitor (12-characters) or status information. Over 1000 characters are available when programming camera ID and monitor titles. Utilizing a standard Windows®-based PC and the optional LTC 8059/00 Master Control Software package or LTC 8850/00 Graphical User Interface (GUI) software, enhanced programming and switching features can be obtained. A user-friendly spreadsheet format provides the ability to enter camera titles, operator names, 64 timed events, change system parameters, program camera sequences, install lockouts, and access the advanced alarm handling screens with speed and efficiency. The programmed information may then be transferred into the Allegiant system, stored on disk, or printed out directly from a printer connected to the PC.

The LTC 8850/00 GUI software is designed around an intuitive graphic-based interface, the GUI provides high performance programming, control and monitoring of all system functions by using on-screen icons to reflect real time status of the devices controlled by the system.

The LTC 8850/00 GUI software also provides the ability to monitor system status events. System alarms, switching functions, sequence events, keyboard actions, and video loss information can be viewed in real time on the PC screen and, if desired, logged to the PC hard drive.

The LTC 8600 Series contain a logging printer output port which accepts a standard RS-232 serial printer. This provides a permanent record of system status showing time and date of changes such as: incoming alarms, acknowledgment of alarms, loading of sequences, user log-on to keyboard, transfer of system tables and sequences, video loss messages, and a power up reset message. In addition, the printer can be used to obtain a hard copy of the system's configuration tables and sequences.

The LTC 8600 system provides powerful macro capabilities. The macros can be activated using Allegiant Series system keyboards, system time event functions, alarm activations, and via special function icons in the LTC 8850/00 GUI software.

The LTC 8600 Series can serve as the master switcher in a SatelliteSwitch® configuration. This innovative SatelliteSwitch feature enables a single LTC 8600 Series system to communicate with remotely located "Satellite" systems. Any Allegiant system model can serve as a master or remote Satellite switcher. This powerful feature permits the design of a distributed matrix video switching system with control at one central location and individual control at the local sites. The main control site can view/control local cameras plus cameras located at any of the remotely distributed Satellite sites. The Satellite sites can view/control only cameras associated with their own site. When used in this type of configuration, the main LTC 8600 Series system can access up to 1024 cameras located anywhere in the system. By combining multiple Satellite systems of this type, matrix sizes of 1024 cameras by 16 monitors can be designed in an extremely reliable, "Distributed Processing" configuration.

LTC 8600 Series System Specifications			
Capacities			
Video Inputs			
Standard	128		
Satellite Configuration	1024		
Video Outputs	16		
Keyboards	16		
Alarm Inputs	512		
Receiver/Drivers			
Standard	128		
Satellite Configuration	1024		

Electrical			
Video Bandwidth (-3dB)	12MHz typical		
Differential Gain	1% maximum		
Differential Phase	2° maximum		
K Factor	0.5%		
Signal-to-Noise Ratio	70dB minimum		
Crosstalk (Input to input isolation)			
	-50dB typical		
Feedthrough (Input to output isolation			
	-45dB typical		
Gain	Unity (into 75Ω termination)		
Tilt	1% typical		
Environmental			
Temperature			
	Operating: +4°C to +50°C		
	Operating: +4°C to +50°C (+40°F to +122°F)		
	(+40°F to +122°F)		
Altitude	(+40°F to +122°F) Storage: -40°C to +60°C		
	(+40°F to +122°F) Storage: -40°C to +60°C (-40°F to +140°F)		
Altitude	(+40°F to +122°F) Storage: -40°C to +60°C (-40°F to +140°F) 4500m (15,000ft)		
Altitude Humidity	(+40°F to +122°F) Storage: -40°C to +60°C (-40°F to +140°F) 4500m (15,000ft) 0% to 95% relative, noncondensing		
Altitude Humidity Vibration	(+40°F to +122°F) Storage: -40°C to +60°C (-40°F to +140°F) 4500m (15,000ft) 0% to 95% relative, noncondensing 3g swept sine wave, 15Hz to 2000Hz 50g, 11ms, 1/2sine wave		
Altitude Humidity Vibration Shock	(+40°F to +122°F) Storage: -40°C to +60°C (-40°F to +140°F) 4500m (15,000ft) 0% to 95% relative, noncondensing 3g swept sine wave, 15Hz to 2000Hz 50g, 11ms, 1/2sine wave		
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LTC 8601 Series Equipment Bay

Includes equipment rack, LTC 8610/00 microprocessor module, and LTC 8805 Series power supply.

Power

Model	Rated	Voltage	Nominal	
No.	Voltage	Range	Power ¹	
LTC 8601/60	120VAC, 50/60Hz	100 to 140	200W	
LTC 8601/50	220-240VAC, 50/60Hz	198 to 264	200W	
¹ Power at rated voltage fully loaded.				

Connectors		
Video Inputs 1 to 96, 1 Sync Input, and 16 Monitor Outputs		
	BNC	
Video Connections 97 to 128	Two 34-pin ribbon connectors	
	used in conjunction with the	
	LTC 8808/00 video interconnect	
	panel	
Looping Video Connections 1-128	Eight 34-pin ribbon connectors	
	used in conjunction with the	
	LTC 8808/00 video interconnect	
	panel	

External Accessory Interfaces	· · ·		
	9-pin D-type connectors		
CONSOLE	RS-232 port for external PC or		
	control interface		
	(Default = 19.2k baud)		
ALARM	RS-232 port for Allegiant alarm		
	accessory unit		
	(Default = 19.2k baud)		
PRINTER	RS-232 port for system logging		
	printer (Default = 19.2k baud)		
SDA	TTL level, hi-speed control data		
	output (biphase) for interface to		
	Allegiant series signal distribution		
	units (Data clock rate = 31.25kHz)		
COMM PORT 1	RS-485 port for external Allegiant		
	accessory use		
COMM PORT 2	RS-485 port for external Allegiant		
	accessory use		
KEYBOARDS	Eight 6-pin RS-485 ports for		
	Allegiant keyboard use		
Equipment Rack			
Size	EIA 19in rack 483W x 420D x		
	267H mm (19 x 16.5 x 10.5in)		
Weight	11.1kg (24.5 lb)		
Construction/Finish			
Top and Bottom	Steel		
Front, Sides, and Back	Aluminum		
Finish	Charcoal		
Microprocessor Module (LTC 8610/00)			
Size	300D x 250H mm (11.8 x 9.8in)		
Weight	0.5kg (1.1lb)		

Power Supply (LTC 8805/60 - 120VAC, LTC 8805/50 - 220-240VAC) Size 67W x 360D x 247H mm (2.63 x 14.2 x 9.7in) 5.2kg (11.5lb) Weight Indicators One power On/Off, ten fuse alert, and one external sync LED

LTC 8621/00 Video Input Module

Use up to eight per equipment bay

Camera Inputs 16

Size 300D x 250H mm (11.8 x 9.8in)

Weight 0.41kg (0.9lb)

LTC 8834/00 Video Output Module

Use up to four per equipment bay.

Monitor Outputs 4

Size 300D x 250H mm (11.8 x 9.8in)

Weight 0.41kg (0.9lb)

LTC 8808/00 Video Interconnect Panel

The LTC 8808/00 assembly contains an interconnect panel which is used to convert 32 BNC connectors into two 16-channel ribbon cable connectors. The two 16-conductor ribbon cables (LTC 8809/00), designed especially for use with video signals, are then used to interconnect the video between the panel and the LTC 8600 Series system. One LTC 8808/00 assembly is included at time of shipment and is required for system video inputs 97 to 128. In addition to being used for video inputs 97 to 128, the LTC 8808/00 assembly can also be ordered as an option to provide looping capability. One LTC 8808/00 (includes panel and two, ribbon cables) is required for each group of 32 cameras.

Size EIA 19-inch rack. 483W x 42D x 44H mm

(19 x 1.65 x 1.75in)

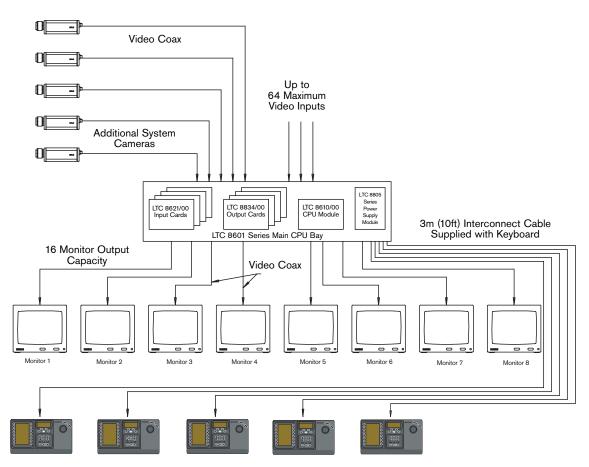
Weight

Panel 0.54kg (1.2lb) Ribbon Cables (2) 0.3kg (0.7lb)

Allegiant Accessories

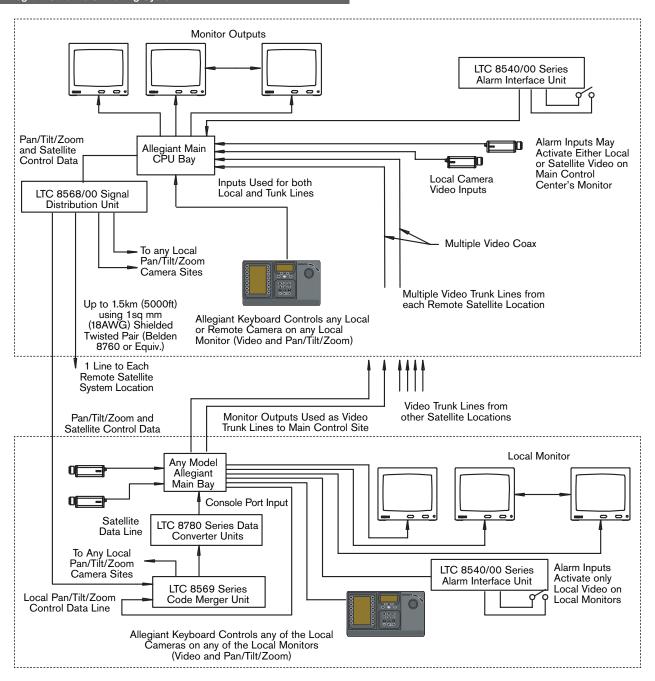
The LTC 8600 Series accessory products provide many optional features to the base Allegiant switching systems. Accessory products include keyboards, keyboard extension kits, receiver/driver units, switcher/followers, code merger units, Allegiant Bilinx Data Interface unit, and keyboard expansion units. All accessory products are designed to be installer-friendly and compatible throughout the Allegiant series systems. See Allegiant accessories datasheet.

LTC 8600 Series Configuration Diagram (128 Cameras by 16 Monitors)



- 16 Full Matrix Monitor Outputs Maximum 16 Full Function Keyboard Maximum

Allegiant Satellite Switching System



Windows is a registered trademark of Microsoft Corp.

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