

Security System for Tomorrow



The Panasonic **System850** high density video matrix system provides scalable CCVE system architecture for easy expansion that supports configurations up to 8,192 video inputs, 1,024 video outputs and 128 system controllers with unified system design.

The core components consist of a multiplex camera controller, matrix switcher, on-screen display and main CPU. The system have flexible system architecture and be able to interface with other surveillance system. Besides, main card cage unit WJ-SX850 support an Ethernet controller network. And built-in cable compensation circuit on every input channel provide high quality picture, control and synchronization of up to 3,000 ft(900m) of RG-59/U cable.

It is used primarily for large security and surveillance operations where system reliability and feature programmability are paramount. So that the **System850** is suitable for Hotel/Casino, Stadium, HQ Building, Airport, Station, Shopping Mall e.t.c.

Key Features

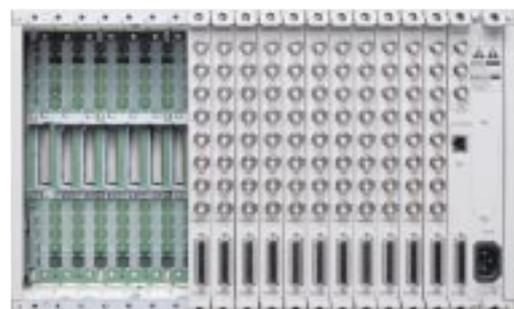
- Supports configuration of up to 8,192 video inputs, 1,024 video outputs and 128 Ethernet keyboards
- Scalable and high density modular architecture for easy expansion
- Three(3) system level up to:
 - Standard model:
 - up to 512 X 64 with 6 RS485 controllers
 - Enhanced model:
 - up to 1,024 X 256 with 12 RS485 controllers
 - High speed model:
 - up to 8,192 X 1,024 with 24 RS485 controllers
- Ethernet controller network (10Base-T)
- Centralized time/date generation
- 900m(3000 ft) cable expansion with RG-59U coaxiable cable
- Video, control and synchronization over a single coaxial cable
- Full nonblocking video switching
- Video and data connection : Single coaxial cable or two pair twisted cable
- Active plug in/out "Hot-swapping" modules and front access maintenance
- Fail safe functions built in each module to prevent total system failure
- Alarm interface for communication and integration between matrix and other system such as alarm, card access and intercommunication
- Optional redundant main CPU
- Several system partitioning
- Three (3) modes of automated sequence
- Alarm events, alarm switching, multiple alarm display and alarm acknowledge



WJ-MPU850 CPU unit, WJ-SX850 card cages (matrix control, matrix switching, matrix on-screen display), WV-CU350 RS-485 system controller, WV-CU850 enhanced Ethernet system controller



WJ-SX850 "Hot-swapping" modules



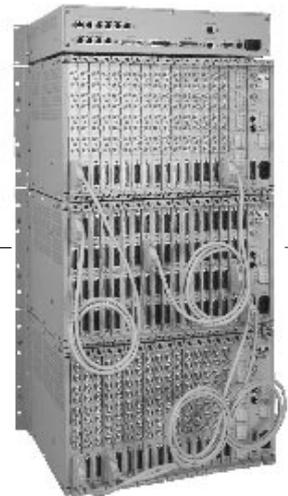
WJ-SX850 Rear-view

Basic System Configuration

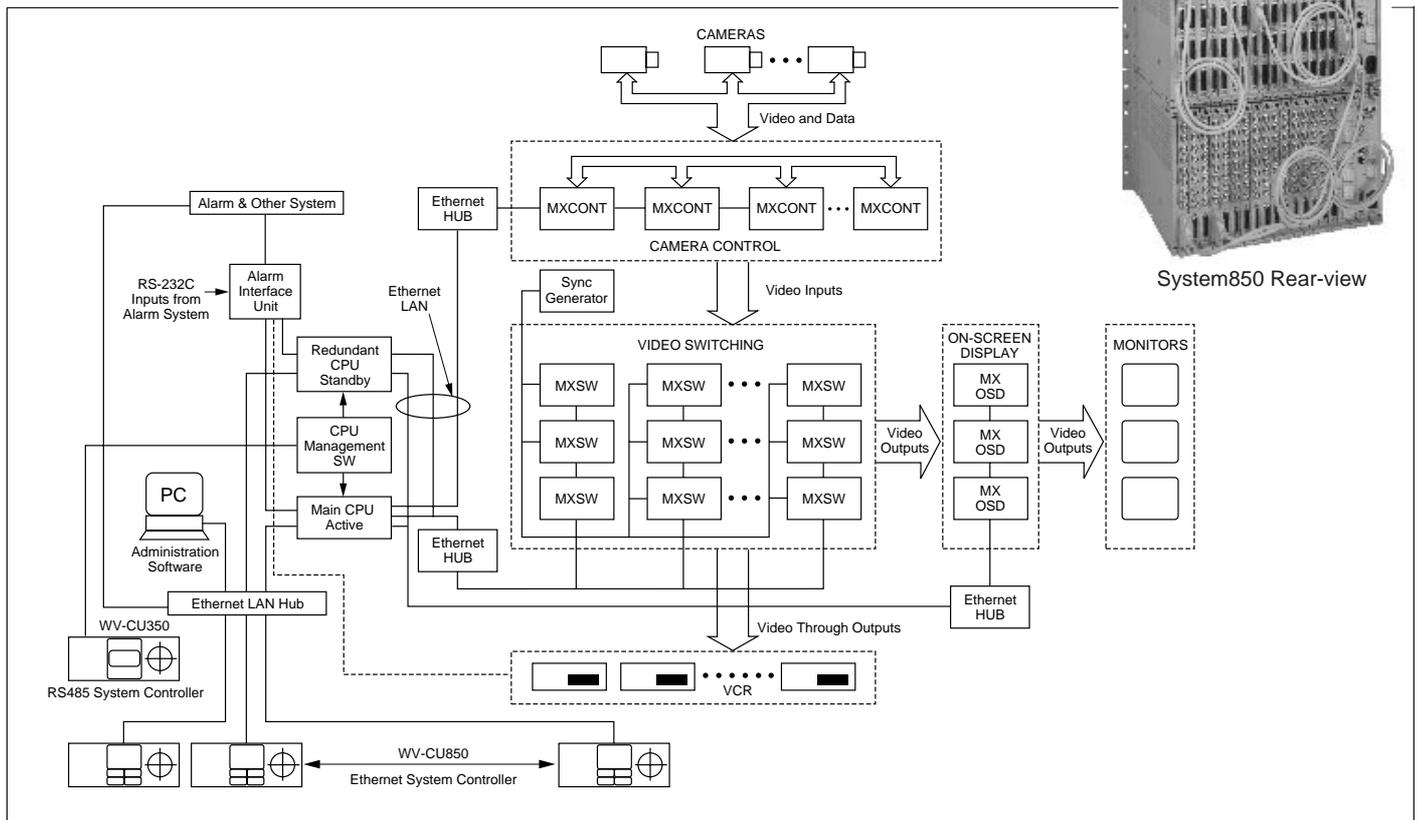
The Multiplex Camera Controller (MXCONT) provides camera sight control. A single MXCONT controls and receives video from 128 cameras. A maximum of 8,192 cameras can be controlled with several MXCONTs. Camera interface is provided by 8-channel multiplex video input board (WJ-PB85X08) and/or 8-channel RS-485 data communication board (WJ-PB85R08). The Matrix On Screen Display Unit (MXOSD) has on screen display functions of camera ID, time and date. The System 850 is able to insert 3 lines/30 characters text information through MXOSD. This message can include time and date, logical camera number, camera ID, monitor number, lock, activated tour sequence number, alarm ID and etc. The MXOSD can provide output interface through 8-channel character generator board (WJ-PB85T08). Several MXOSDs can be combined to provide up to 1,024 outputs. The System850 is able to switch any input to all or any output through the basic switching element called Matrix Switch (MXSW). Each MXSW can switch a maximum capacity of 256 inputs and 32 outputs by adding the 16-channel video cross point board (WJ-PB85C16) and 16-channel output board (WJ-PB85M16). The entire card cage that has local CPU is controlled through Ethernet from central CPU units (standard, enhanced and high speed). WV-CU850 system controller can be connected up to a maximum 128 units. In addition to this, RS485 type controller the WV-CU350 can be connected to the main CPU unit. Total number of WV-CU350 depends on the type of CPU unit used for. The standard CPU can be up to a maximum six controllers. The enhanced CPU is able to use up to a maximum 12 units and high speed CPU is up to a maximum 24 units.

External system such as card access, intrusion detection and fire alarm system can be integrated with the Matrix System850 through either Ethernet hub or parallel in/out of 32-channel alarm input board (WJ-PB85A32) and 32-channel alarm output board (WJ-PB85L32).

All of unit within the system can be programmed, controlled and back up by PC based administration software WJ-ASC8501.



System850 Rear-view



PC Base Administration Software

Main menu



Camera setup menu



G-tour setup menu



Alarm setup menu



Alarm target



PC based **administration software WJ-ASC8501** can program, control and back up entire data within the Matrix System850. Programming of the WJ-ASC8501 includes camera, monitor, controller, operator, group tour, group preset, card cage, grade of CPU and alarm.

The Main menu shown to next is the set up of camera. By using this menu physical channel ID, logical channel ID, cable compensation, video loss detection, information of camera and title can be set up. Group tour set up menu. Physical group tour number, group tour step, area, local ID, are set up, also, corresponding monitor number are displayed as well in the group tour set up menu. Alarm set up menu. This menu can provide logical alarm channel, physical alarm channel, type of alarm, acknowledge time, arm/disarm and dwell time for multi-alarm sequence.

The last example, which we are showing here is, alarm target menu. This menu allows you to program target number, hold/sequence and assignment of monitors.

Product Configuration and System Example

The table is showing system example of three type configurations, which are 128 times 16 with 2 system controllers, 256 times 32 with 4 system controllers and 512 times 64 with 8 system controllers.

Model No.	Description	Inputs × Outputs × Controllers		
		128×16×2	256×32×4	512×64×8
WJ-SX850	System850 card cage, w/PS & LCPU	3	4	9
WJ-BX850	System850 passive card cage		2	4
WJ-PB85X08	8-channel multiplex video input board	16	32	64
WJ-PB85D01	8-channel ANK character generator daughter board	16	32	64
WJ-PB85R08	8-channel RS-485 data communication board			
WJ-PB85Y08	8-channel video loopthrough board		32	64
WJ-PB85C16	16-channel video cross point board	8	16	64
WJ-PB85M16	16-channel video output board	1	2	8
WJ-PB85T08	8-channel monitor character generator board	2	4	8
WJ-PB85A32	32-channel alarm input board			
WJ-PB85L32	32-channel alarm output board			
WJ-MPU850	Standard main CPU unit	1	1	1
WJ-MPU855	Enhanced main CPU unit			
WJ-MPS850	CPU management switch			
WV-CU850	Ethernet system controller	2	4	8
WV-CU350	RS-485 system controller			
WJ-ASC8501	System850 administration software	1	1	1
WJ-CA85L10	1m multiple video cable	18	36	208
WJ-CA85L50	5m multiple video cable		32	64



WJ-SX850
WJ-BX850



WJ-MPU850
WJ-MPU855



WV-CU850



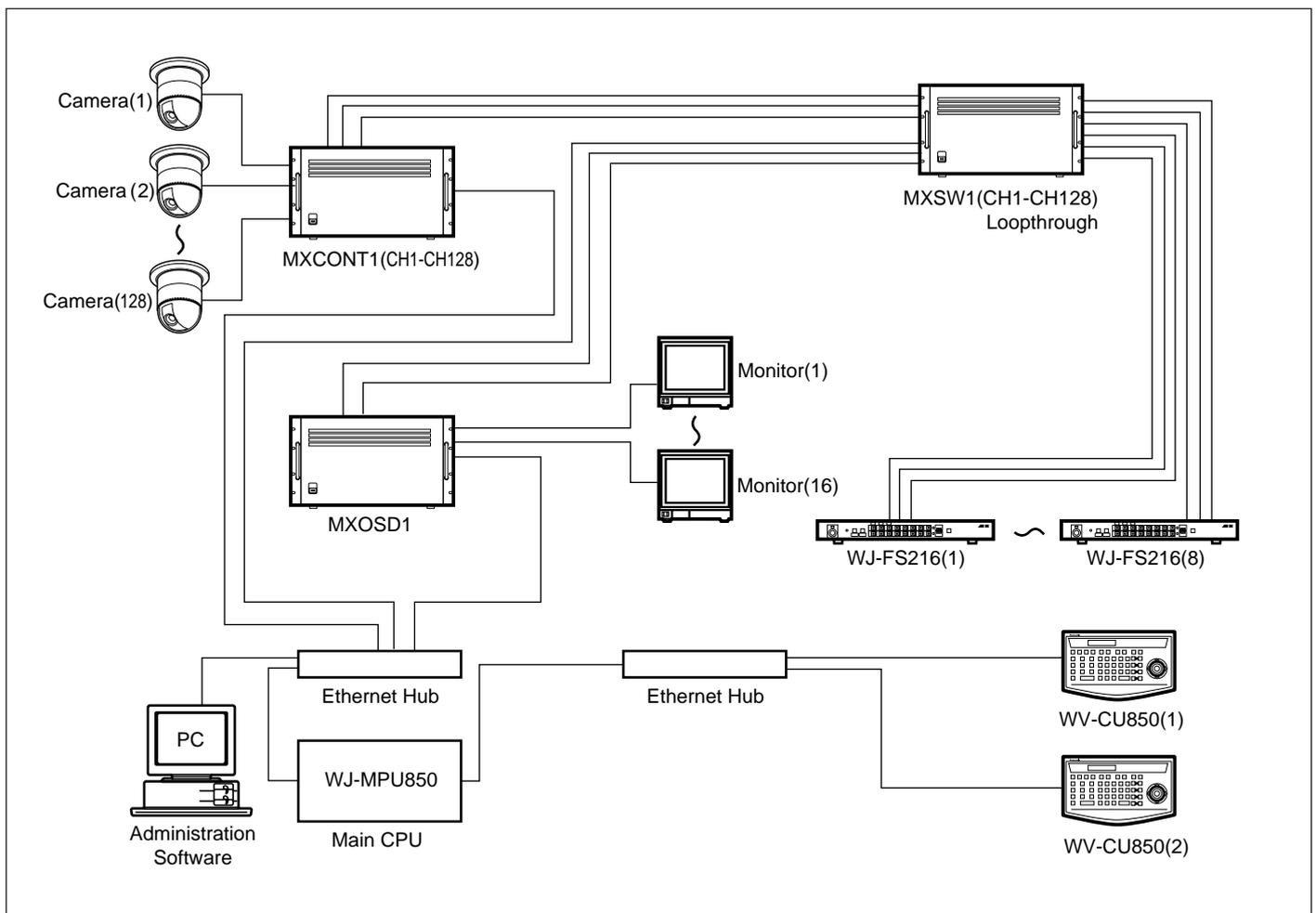
WV-CU350

System Examples

128 x 16 x 2 Single CPU System

This system diagram shows system example of 128 times 16 with two controllers and single CPU system.

The configuration for the system includes 16 units of WJ-PB85X08 8-channel multiplex video input board, 3 units of WJ-SX850 card cage, 8 units of WJ-PB85C16 16-channel video cross point input board, one unit of WJ-PB85M16 16-channel video output board, 2 units of WJ-PB85T08 8-channel on screen display board and 1 unit of WJ-PB85M16 16-channel video output board. Between 3 card cages and main CPU are connected through Ethernet 10Base-T, and PC based administration software can program, control and back up the system.

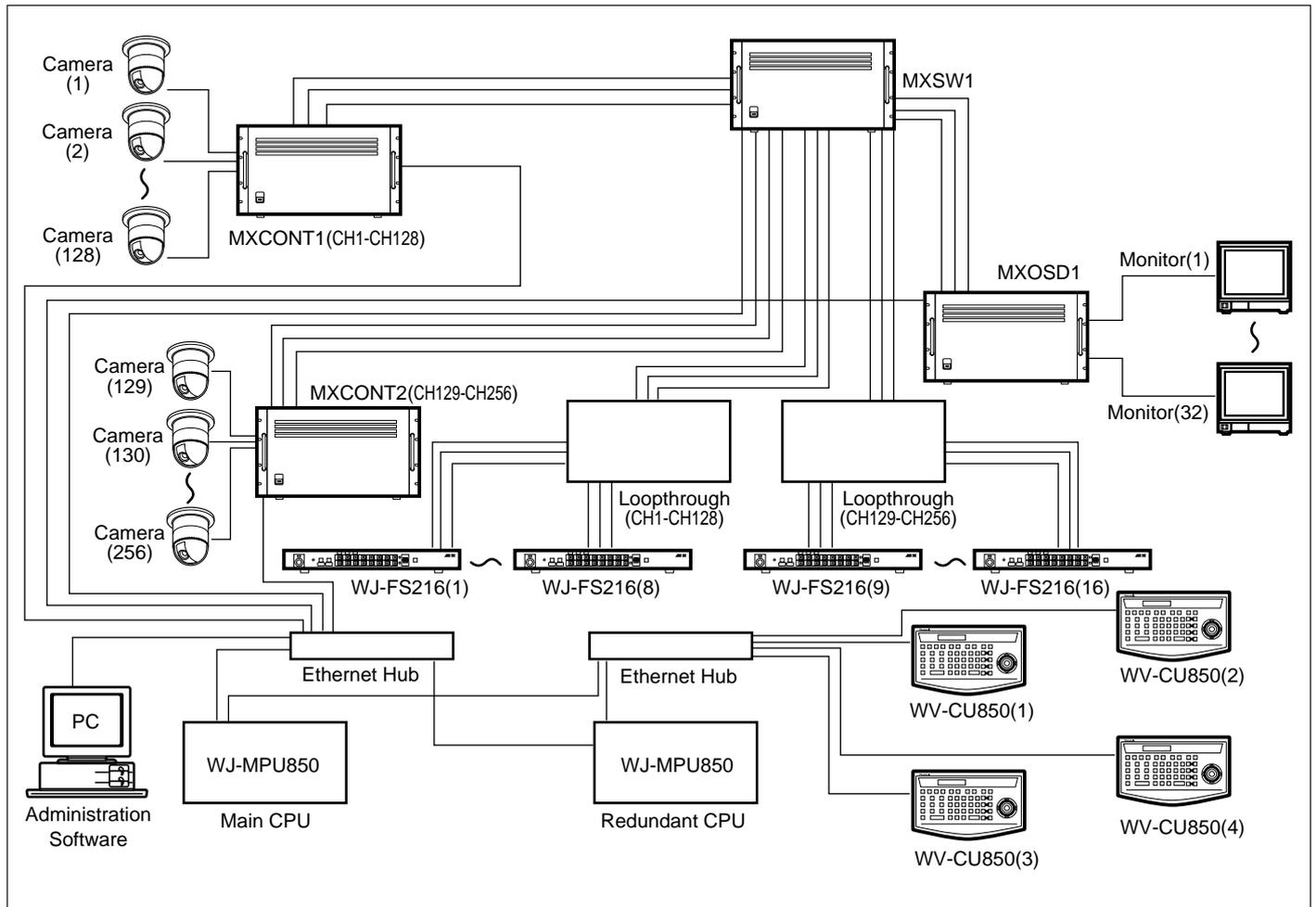


256 x 32 x 4 Dual CPU System

This system diagram is showing another example of the system that includes 256 times 32 with four controllers and dual CPU system.

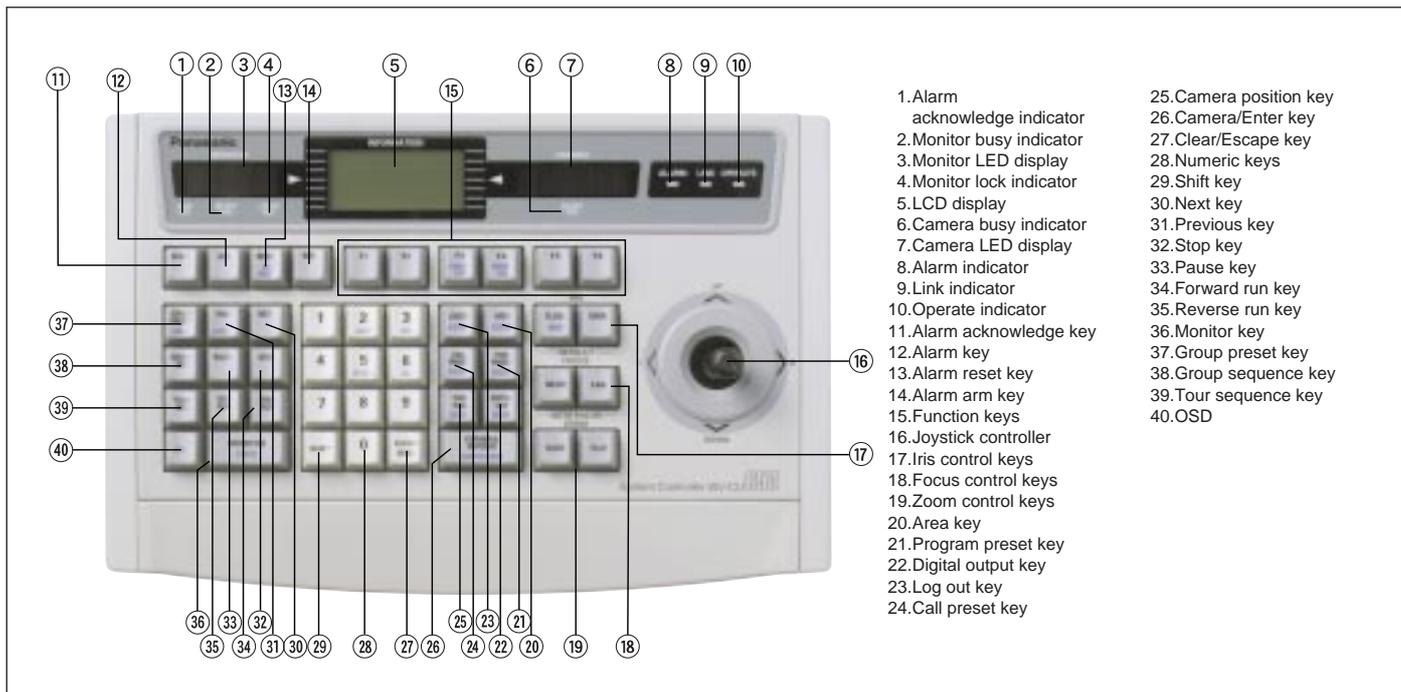
The configuration for the system includes 32 units of WJ-PB85X08 8-channel multiplex video input board, 4 units of WJ-SX850 card cage, 16 units of WJPB85C16 16-channel video cross point input board, 2 units of WJ-PB85M16 16-channel video output board, 4 units of WJ-PB85T08 8-channel on screen display board, 32 units of WJ-PB85Y08 8-channel video loop through board and 2 units of WJ-SX850 passive card cages. Again, connection between card cages and main CPU is Ethernet 10Base-T.

In this case, consist of two CPU units, one is for normal operation and the other is for back up. If any failure happen in the normal CPU, WJ-MPS850 switches the operation of normal CPU over the back up CPU to maintain its operation.

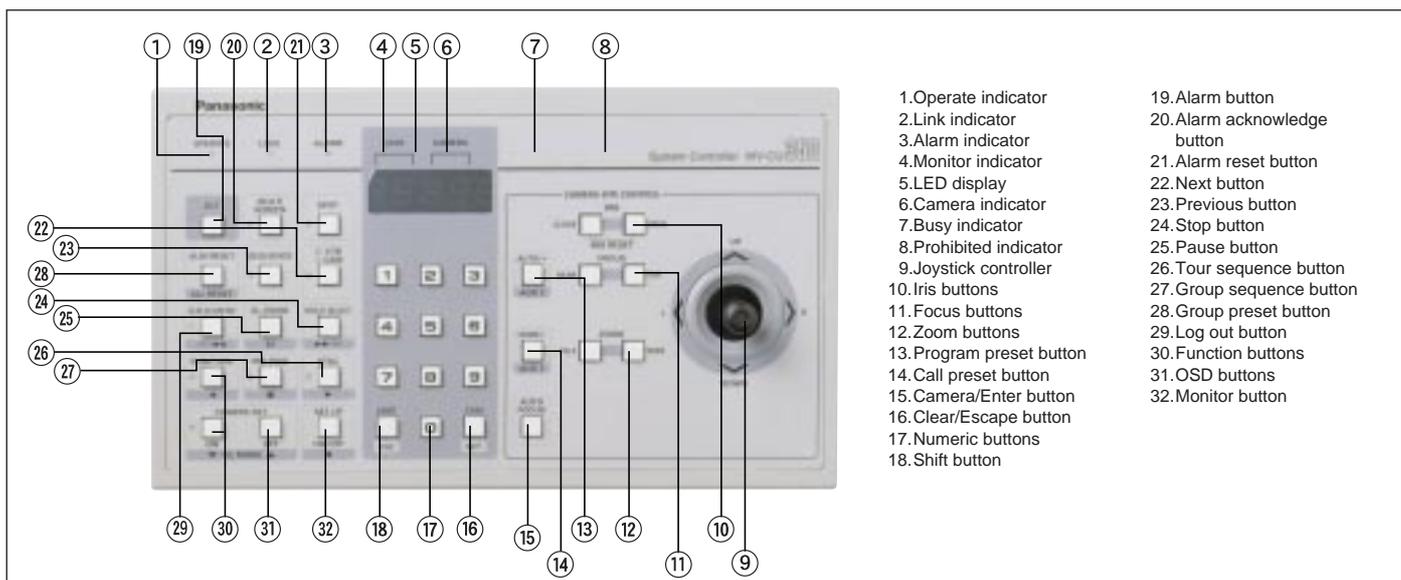


MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS

The WV-CU850 System Controller is designed to control the System850 by RS-485/Ethernet data communication.



The WV-CU350 System Controller is designed to control the System850 by RS-485 data communication.



DISTRIBUTED BY: