

# SONY®

## YS-DX504

### Duplex Multiplexer



The Sony YS-DX504 Duplex Multiplexer is designed for use in multiple-camera monitoring and recording systems. This unit allows up to 4 video channels to be displayed on a single monitor.

The YS-DX504 provides a high level of functionality in surveillance systems. Features include sequential switching, picture zoom and freeze, and a full range of alarm functions. This model is equipped with an RS-232C interface, allowing it to be remotely controlled by an external computer.

With these and many more features, the YS-DX504 multiplexer can make an important contribution to efficient and effective monitoring and recording in surveillance systems.



# Multi-screen display

The YS-DX504 display modes include full screen, sequential, and 4-division split screen mode. These display modes are available in both live and playback.



The following chart shows the screen modes available from the Monitor 1 and Monitor 2 outputs.

	Monitor 1 output		Monitor 2 output
	Live pictures	Playback pictures	Live pictures
Full screen	YES	YES	YES
4-division split screen	YES	YES	*
Automatic sequential	Refer to tables below	Refer to tables below	YES

\* The Monitor 2 output displays the same image as the Monitor 1 output.

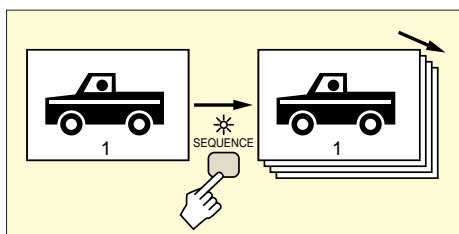
## Live Picture Mode

	Full screen	4-division split screen
Freeze	YES	YES
Zoom	YES	YES
Automatic sequential	YES	YES

## VCR Playback Mode

	Full screen	4-division split screen
Freeze	YES	YES
Zoom	YES	YES
Automatic sequential	YES	YES

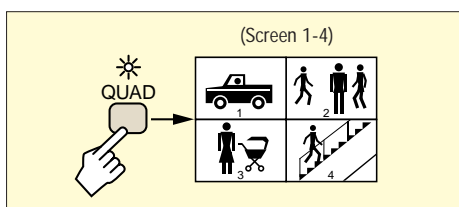
## Monitor 1



### Full Screen

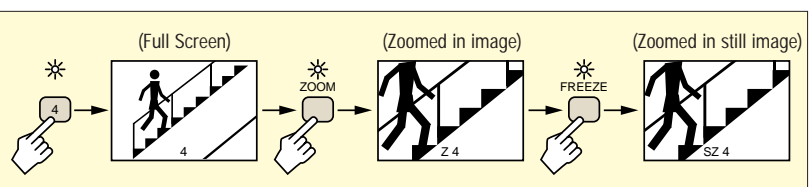
Live and playback pictures from the selected camera are displayed full screen.

Automatic sequential full-screen display of the 4 video cameras is also available by pushing the Sequence button.



### 4-division split screen

The "Quad" button allows you to view a 4-division split screen in both live and playback modes.

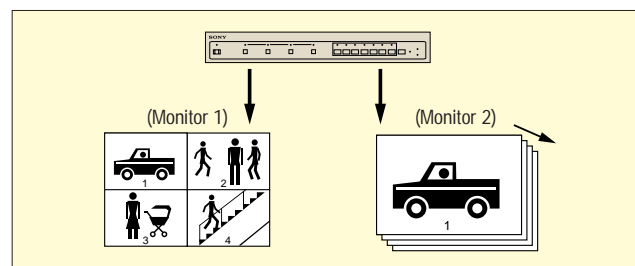


### Zoom and Freeze functions

Zoom and Freeze functions are available in the full-screen and 4-division split screen mode to add greater surveillance flexibility. In 4-division split screen mode, free selection of one of the four pictures can be zoomed in and frozen.

These Zoom and Freeze picture functions can also be used together (i.e. you can zoom in and then freeze the enlarged image).

## Monitor 2



A full-screen or full-screen automatic sequential screen can be displayed on Monitor 2. Also, the same image as on Monitor 1 is available on Monitor 2.

# Powerful alarm functions

Alarm functions are indispensable in surveillance systems. The YS-DX504 incorporates a number of powerful alarm functions and these can be tailored to optimize the information displayed to the operator.

## External alarm

The YS-DX504 provides 4 alarm inputs - one for each corresponding Camera Input connector.

When an input alarm signal is received, the associated video input is displayed. The display on Monitor 1 can be pre-selected from one of the following two options:

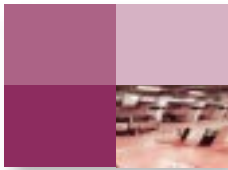
### A) Full screen

When an alarm trigger is received, the picture from the camera corresponding to the alarm input is displayed in full screen.

### B) 4-division split screen

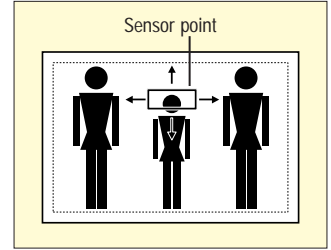
When an alarm trigger is received, the display switches to a 4-division split screen.

When an input alarm signal is received, the associated video input is automatically displayed in full screen on Monitor 2. When two or more alarm triggers are received simultaneously, Monitor 2 sequentially displays the images from the cameras corresponding to the alarm triggers.



## Activity detection (Video sensor alarm)

The operator can designate one sensor point per camera anywhere on the screen. If the brightness level at this point changes, an alarm is initiated and the Active Recording mode is triggered. An important feature is that a sensor point can be allocated such that it senses change in ambient light to avoid a false alarm being triggered. The overall sensitivity of the sensor point can be set for both day time and night time conditions. External alarm inputs also trigger the Active Recording mode.

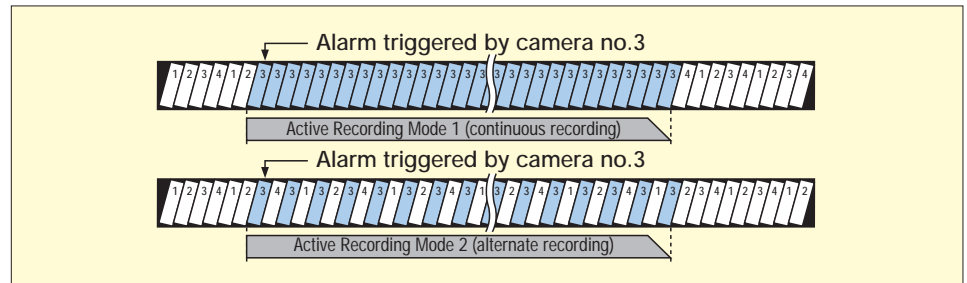


The sensor point can be freely set on the screen within the dotted line area.

### Recording modes:

**Mode 1:** The video signal from the alarmed camera is recorded exclusively.

**Mode 2:** Recording of the video signal from the alarmed camera alternates with sequential recording of the remaining cameras.



## Video Loss alarm

If any of the input video signals are lost, a buzzer sounds and an LED associated with the failed camera input flashes. If a split-screen display is being viewed on the Monitor 1 screen, the most recent image of the lost signal is frozen, with the words "Video Loss" flashing. When a full-screen display is in use, Monitor 1 continues to display the selected camera. If this is the camera that has failed, then the image is frozen and the flashing "Video Loss" message is displayed.

## Individual alarm duration/output

The duration of an alarm event can be individually set from 1 to 180 seconds for each camera.

# Timer functions

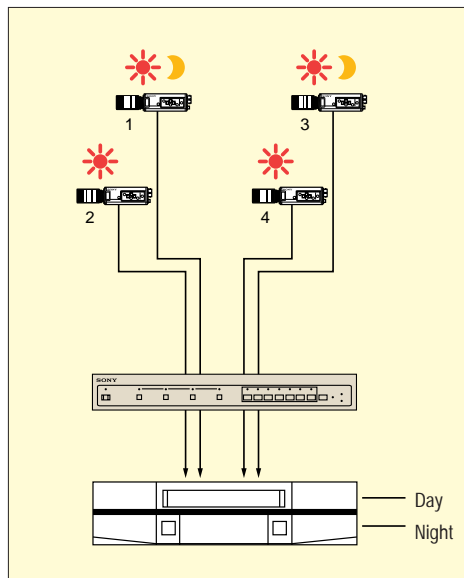
## Recording duration

The recording time of each video camera can be programmed individually. You can increase or decrease the number of cameras recorded according to the time of day.

The illustration to the right shows outputs of all the cameras recorded during daytime, but only cameras showing a moon (1, 3) are also recorded at night.

## Sensitivity

The sensitivity range of the video alarm sensor can be changed to accommodate day and night time light levels.



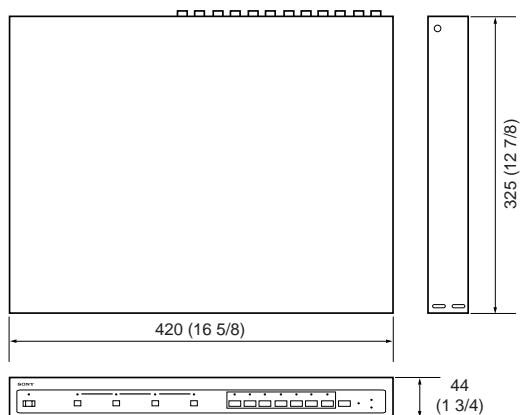
# Other features

- RS-232C interface
- S-video output/input
- Loop-through capability for each camera input
- Power failure protection
- Alarm memory recall feature (up to 100 alarms)
- Alarm reset function
- Daylight savings time
- Character generator
- Screen display language selectable: English, French or Spanish (NTSC)
- Supplied rack mount brackets

## Specifications

		YS-DX504
<b>General</b>	<b>Video signal system</b>	NTSC standard
	<b>Power requirements</b>	AC 120V, 60 Hz
	<b>Power consumption</b>	19 W
	<b>Operating temperature</b>	5 to 40°C (37 to 104°F)
	<b>Dimensions</b>	16 5/8 x 1 3/4 x 12 7/8 inches (420 (W) x 44 (H) x 325 (D) mm)
	<b>Weight</b>	7 lb.8 oz. (3.4 kg)
<b>Video inputs</b>	<b>Camera input 1 to 4</b>	BNC type, VS or VBS, 1.0 Vp-p, 75 Ω
	<b>VCR inputs</b>	BNC type, VS or VBS, 1.0 Vp-p, 75 Ω
	<b>S-VHS input</b>	DIN connector (1), Y: 1.0 Vp-p, 75 Ω, unbalanced, synchronous; C: 0.286 Vp-p, 75 Ω, unbalanced
<b>Video outputs</b>	<b>Camera outputs 1 to 4</b>	BNC type, VS or VBS, 1.0 Vp-p, 75 Ω
	<b>Monitor 1 outputs</b>	BNC type (1), VS or VBS, 1.0 Vp-p, 75 Ω DIN connector (1), Y: 1.0 Vp-p, 75 Ω, unbalanced, synchronous; C: 0.286 Vp-p, 75 Ω, unbalanced Camera live picture or VCR playback picture signal output: full screen, sequential display, 4-division split screen
	<b>Monitor 2 output</b>	BNC type (1), VS or VBS, 1.0 Vp-p, 75 Ω Camera live picture signal output: full screen and automatic sequential (can be set to display the same image as monitor 1)
	<b>VCR output</b>	BNC type, VS or VBS, 1.0 Vp-p, 75 Ω
<b>Other</b>	<b>S-VHS output</b>	DIN connector (1), Y: 1.0 Vp-p, 75 Ω, unbalanced, synchronous; C: 0.286 Vp-p, 75 Ω, unbalanced
	<b>Synchronization</b>	Asynchronous individual inputs
	<b>Sensor alarm output</b>	Alarm output (4) (Low output, normally open)
	<b>Alarm duration</b>	01, 02, 03, 04, 05, 10 (default), 30 sec or CC, NC CC: Output the buzzer at least 1 second. NC: Output the buzzer until the alarm is reset.
	<b>Control terminals</b>	Alarm input: No voltage, make-contact switch input (4) (Low input) Alarm output: DC 5 V, 5.7 k (Low output) Remote input: 2-wire type with resistance-based identification system Switch input from VCR: Low active (100 k pull-up)
	<b>RS-232C terminal</b>	9-pin D-SUB
	<b>Sequence time</b>	1 to 30 sec
	<b>On-screen display</b>	10-character title, date/time
	<b>Buzzer</b>	On/Off

## Dimensions



Unit: mm(inch)



YS-DX504 Front Panel



YS-DX504 Rear Panel

# SONY

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