

Intelligent Motion Detector

YS-D100

Operating Instructions page 2

Before operating the unit, please read this manual thoroughly and retain it for future reference.

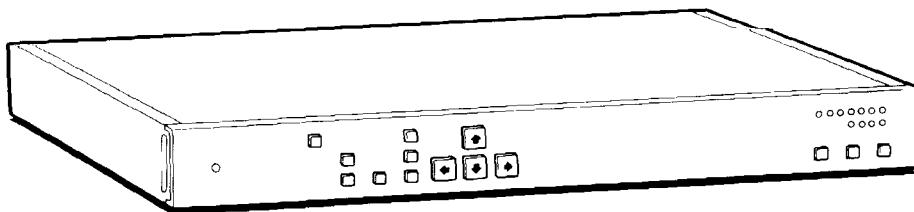
Owner's Record

The model and serial numbers are located on the bottom. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. YS-D100 Serial No. _____

Mode d'emploi page 20

Avant la mise en service de cet appareil, lire attentivement ce mode d'emploi et le conserver pour toute référence ultérieure.



WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

Warning—This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Important—To insure that the complete system (including this peripheral) is capable of complying with the FCC requirements, it is recommended that the user make sure that the individual equipment of the complete system has a label with one of the following statements.

“This equipment has been tested with a Class A Computing Device and has been found to comply with Part 15 of FCC Rules.”

-or-

“This equipment complies with the requirements in Part 15 of FCC Rules for a Class A Computing Device.”

-or equivalent.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a computing device pursuant to Subpart J of Part 15 of FCC rules.

For the customers in Canada

This apparatus complies with the Class A limits for radio noise emissions set out in Radio Interference Regulations.

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Precautions

Safety

- Operate the unit only on 120 V AC.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Installation

- Place the unit on a flat, even surface.
- Do not install the unit in a hot or humid place or in a place subject to excessive dust or mechanical vibration.

Cleaning

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzene as they might damage the finish of the cabinet.

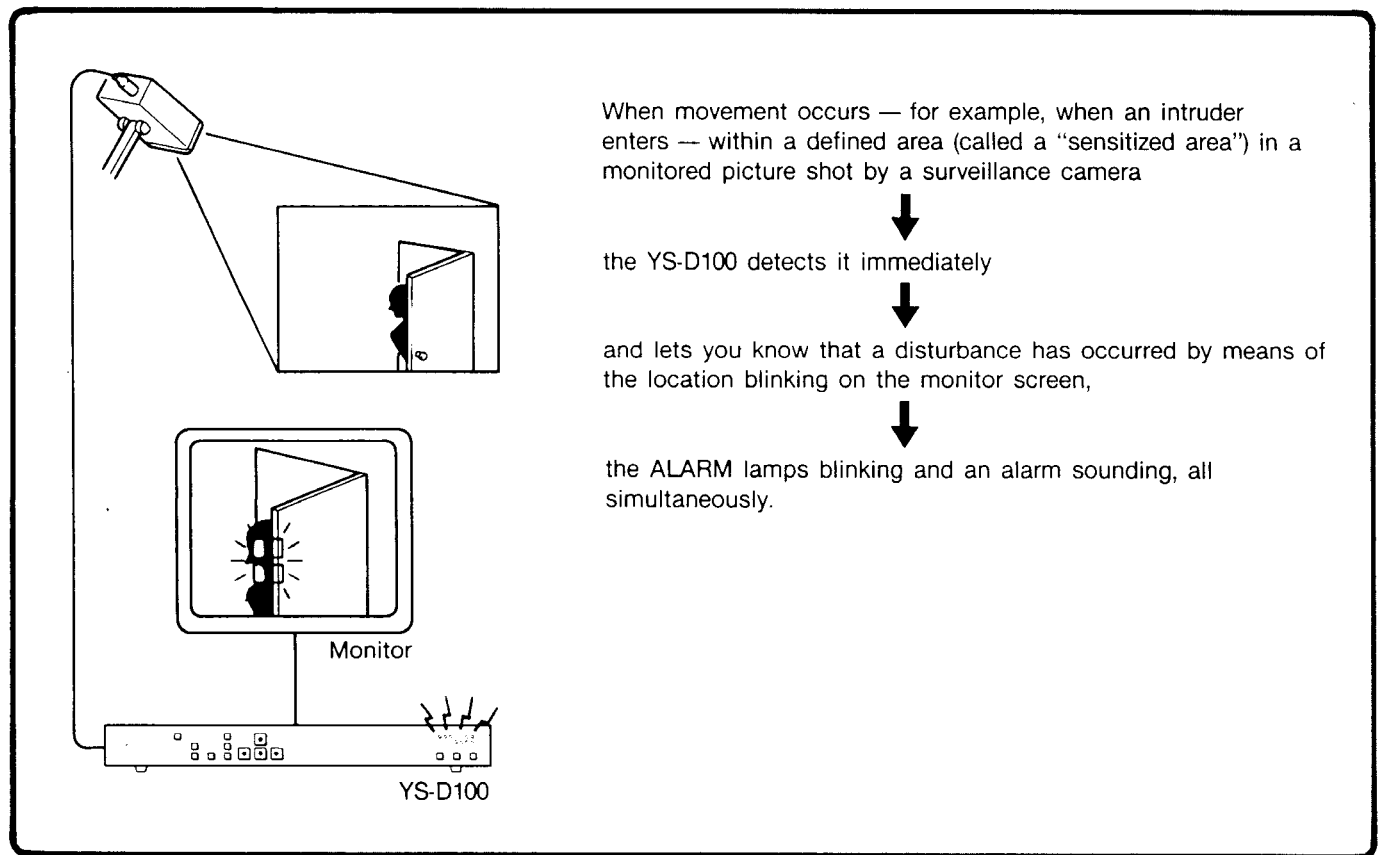
Repacking

Retain the original carton and packing materials for safe transport of this unit in the future.

The unit will raise an alarm by sensing the luminance change of video input from the camera, and accordingly the unit may not operate correctly if there is a movement of the camera or a sudden change of background brightness of the camera location.

Outline and Features

The YS-D100 is a motion detector for use with a monitor and a camera as a security surveillance system. It will sense disturbances (movement in front of the camera) and automatically raise an alarm.



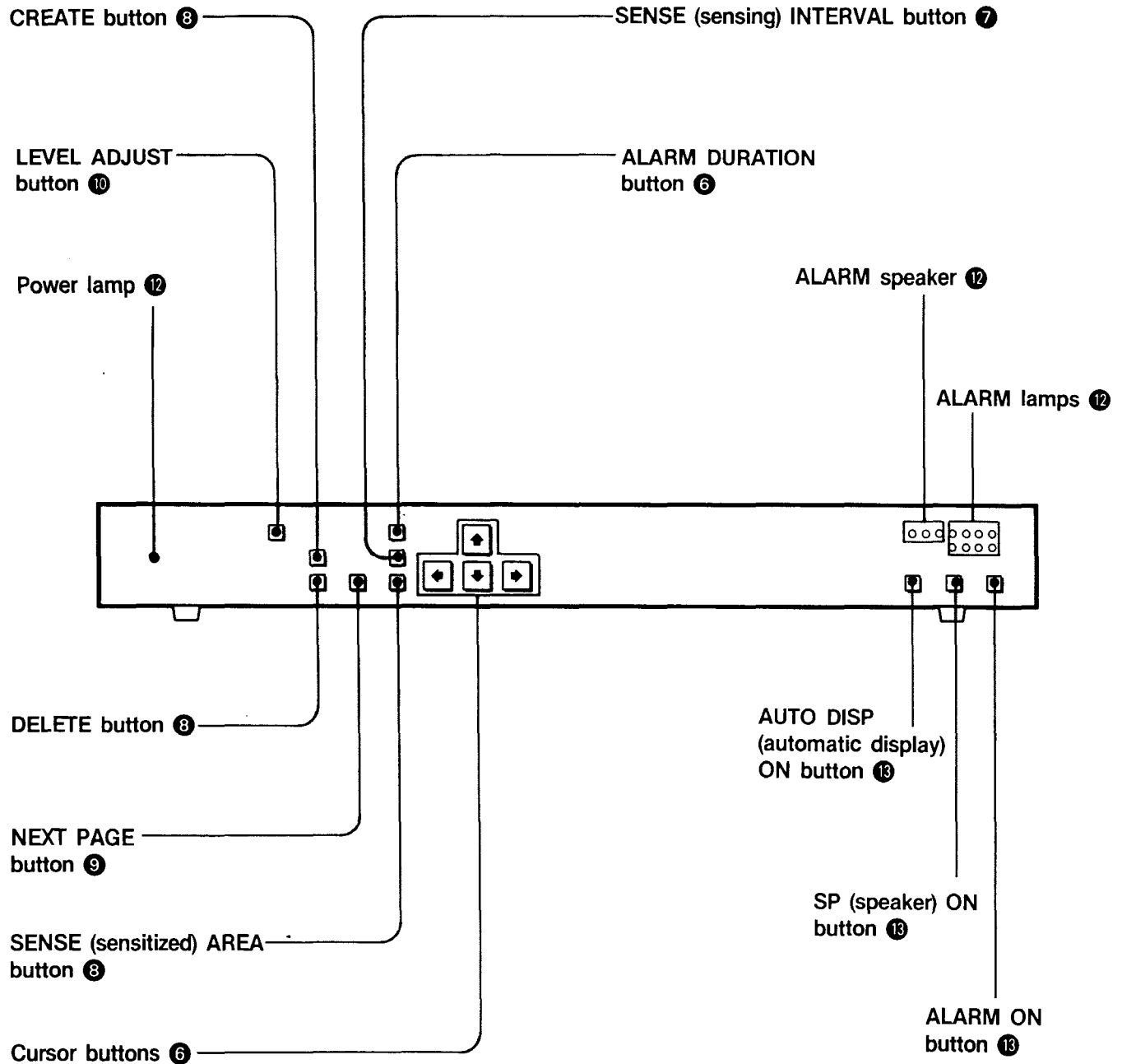
Features

- The sensitized area can be defined in the size and location you desire using the 288 picture elements.
- Two different sensitized areas can be defined and by a combination of these, another three sensing ways can be set. These five settings can be switched according to the purposes, the time periods, etc.
- You can locate on the monitor screen where a disturbance has occurred.
- The unit can be used with the Sony YS-S100 sequential switcher to obtain a more multi-functional security surveillance system.
- An interface unit is equipped, which allows the YS-D100 to be controlled by the central computer through RS-232C or RS-485 connector.

Location of Controls

For detailed instructions, see the pages indicated in ●.
For the location of the connectors at the rear panel, see page 14.

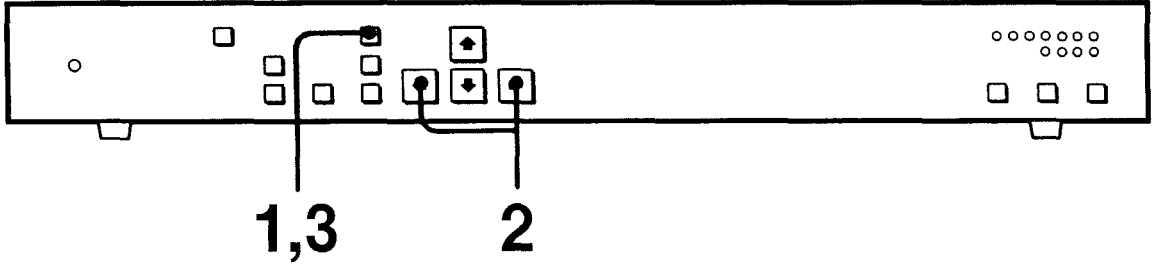
Front



Make sure you have completed the connections (page 15) before you turn on the power of the unit and the connected monitor.
Once all the preparations have been completed, begin with "How to Use" on page 12.

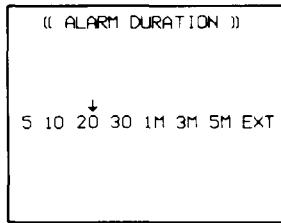
To Set Alarm Duration

To set the period of time during which an alarm is activated (i.e., an alarm sounds, etc.)



1 Press ALARM DURATION.

ALARM DURATION



The alarm duration setting display is shown on the connected monitor screen.

2 Select the desired duration.

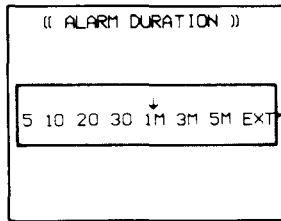


for smaller number (to the left)



for larger number (to the right)

Each press moves the cursor on the display.



Move the cursor to the desired setting time — 5, 10, 20 or 30 seconds, 1, 3 or 5 minutes or EXT (external)*.

3 Press ALARM DURATION.

ALARM DURATION



The alarm duration setting display will disappear and the unit starts to operate.

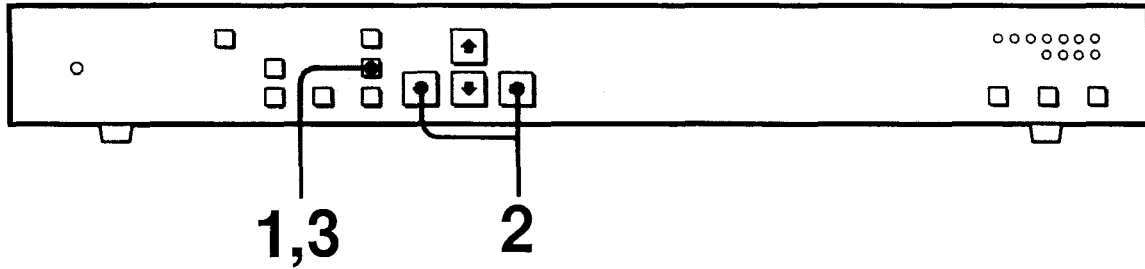
* To control the alarm duration via external equipment connected to the REV IN terminals at the rear, select "EXT".

Notes

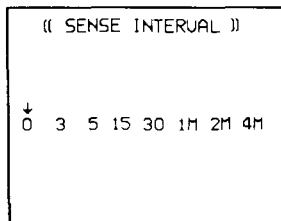
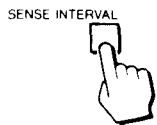
- When the alarm duration is set to "EXT" with no equipment connected to the REV IN terminals at the rear, an alarm continues active once it is raised.
- The upper and lower parts of the setting display may be cut in some monitors connected.

To Set a Sensing Interval

You can preset an interval at which the unit enters the sensing mode after once sensing*¹. Normally, set the interval to "0 second"*².

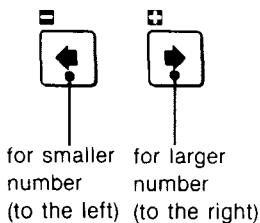


1 Press SENSE INTERVAL.

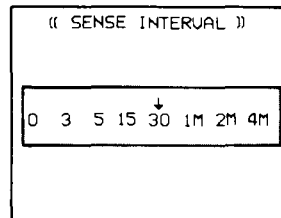


Sensing interval setting display

2 Select the desired sensing interval.

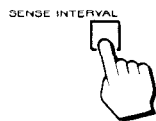


Each press moves the cursor on the display.



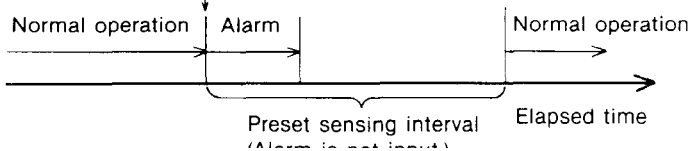
Move the cursor to the desired sensing interval — 0, 3, 5, 15 or 30 seconds, 1, 2 or 4 minutes.

3 Press SENSE INTERVAL.



The sensing interval setting display will disappear and the unit starts to operate.

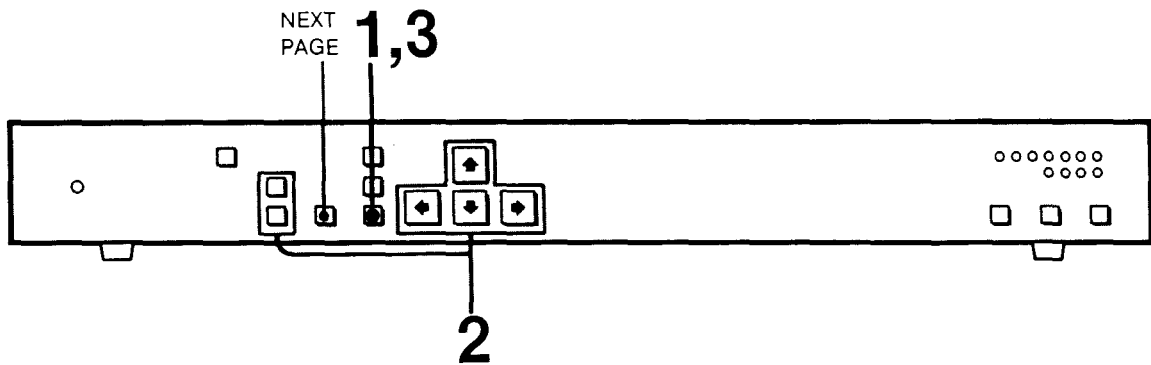
*¹ Disturbance occurred.



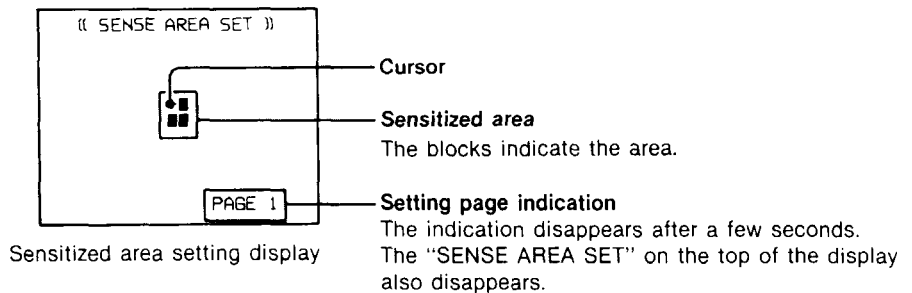
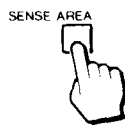
*² When "0" is selected, the unit always senses movement and accepts continuous alarm input.

To Define Sensitized Areas

The unit senses movement which occurs within a defined area. Various kinds of area can be defined according to need.



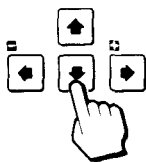
1 Press SENSE AREA.



2 Define the sensitized area.

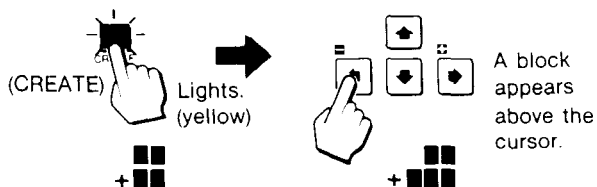
To create the sensitized area

How to move the cursor



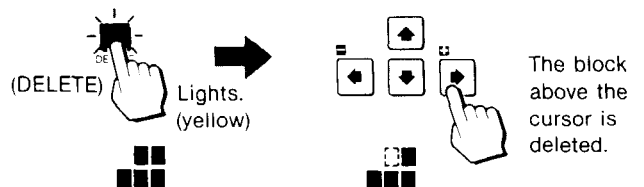
Every time the button is pressed, the cursor moves in the direction of the arrow indicated on each button.

To create a block — to enlarge the area



A block appears above the cursor.

To delete a block — to reduce the area



The block above the cursor is deleted.

While the **CREATE** button is lit, each press of the cursor button creates a block, one after another. If you want to move the cursor only, press **CREATE** so that the button illumination goes out and then move the cursor.

While the **DELETE** button is lit, every press of the cursor button deletes the block if it is above the cursor. If you want to move the cursor only, press **DELETE** so that the button illumination goes out and then move the cursor.

To define different sensitized areas by changing a setting display

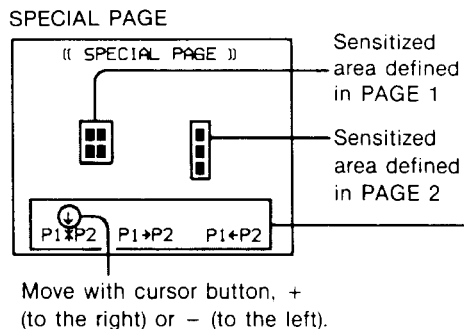
You can switch the desired sensitized area among five different ones (① to ⑤) according to the time periods, purposes, etc.

Each time you press NEXT PAGE, the display changes in the following sequence:
PAGE 1 → PAGE 2 → SPECIAL PAGE

You can define different sensitized areas in PAGE 1 and PAGE 2.

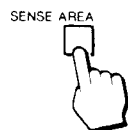


In SPECIAL PAGE, three ways of sensing in combination of the areas defined in PAGE 1 and 2 can be selected.



- ③ **P1 * P2**
When movement is sensed in the areas defined in PAGE 1 and PAGE 2 at the same time, an alarm will be raised.
- ④ **P1 → P2**
If movement is sensed in the area defined in PAGE 1 and then sensed in the area defined in PAGE 2 within 30 seconds, an alarm will be raised.
- ⑤ **P1 ← P2**
If movement is sensed in the area defined in PAGE 2 and then sensed in the area defined in PAGE 1 within 30 seconds, an alarm will be raised.

3 Press SENSE AREA.



The sensitized area of the display last shown on the screen will be effective.

The sensitized area setting display will disappear and the unit starts to operate.

To check each sensitized area

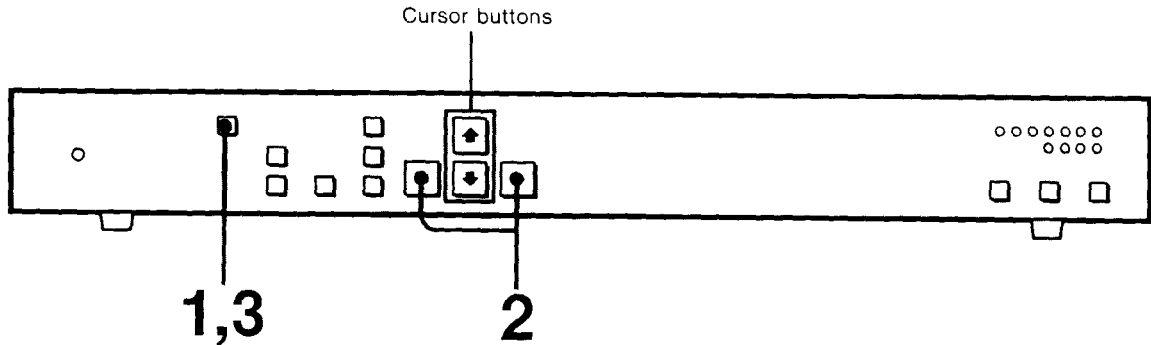
Press SENSE AREA, so that the sensitized area setting display currently in effect will appear. Press NEXT PAGE to show the other displays.

Note

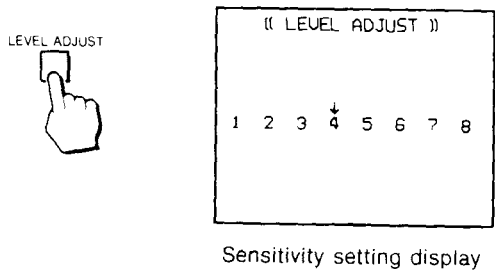
The upper and lower parts of the setting display may be cut in some monitors connected.

To Set Sensitivity Level

Background brightness will vary according to camera location. To ensure proper detection of movement in sensitized area, the sensitivity level can be adjusted. Normally, set the level to "4". Adjust if alarm is not activated properly.

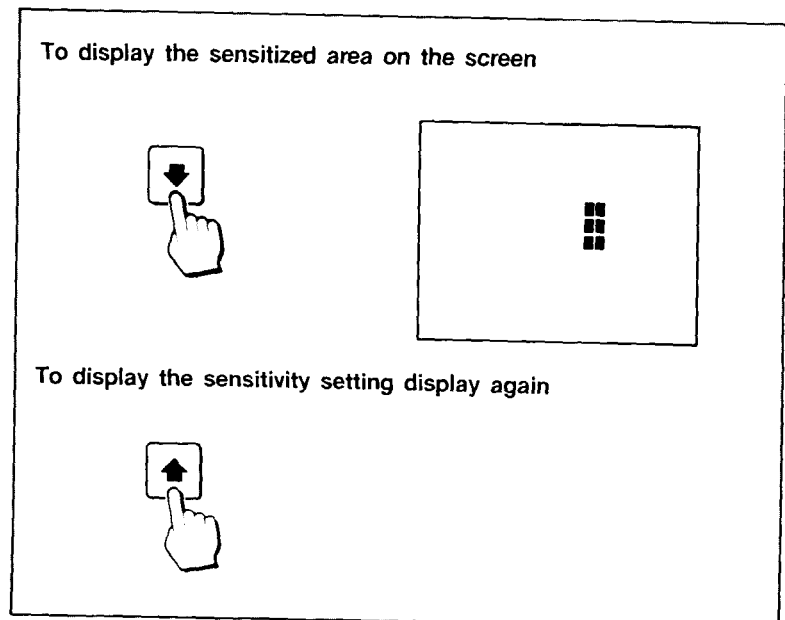
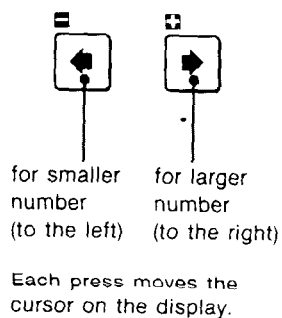


1 Press LEVEL ADJUST.



The screen processed in black and white (binary image screen) will appear.

2 While watching the monitor, move the cursor to different levels. Select the level at which the scene superimposed on the sensitized area becomes white from black.



3 Press LEVEL ADJUST.



The superimposed display will disappear and the unit starts to operate.

4 Check to be certain that the entire system functions properly.

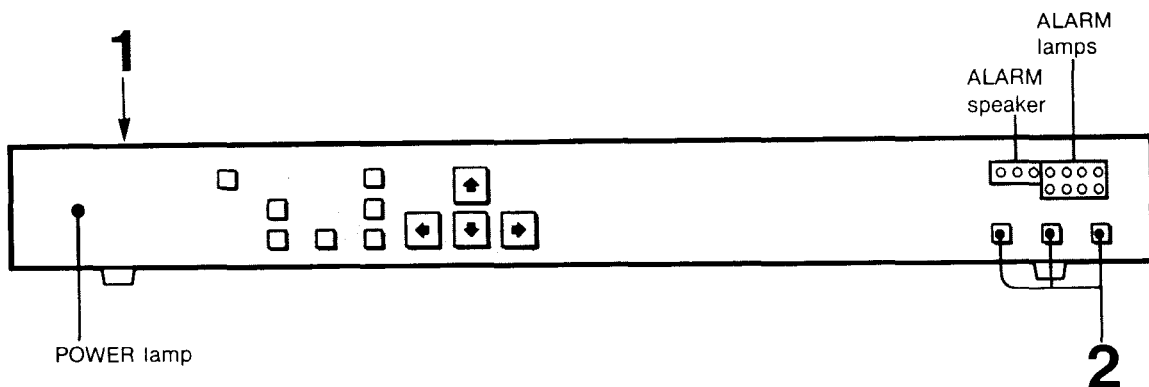
Wave your hand, for example, in front of the camera. If an alarm is not raised (an alarm does not sound), repeat steps 1 to 4.

Note

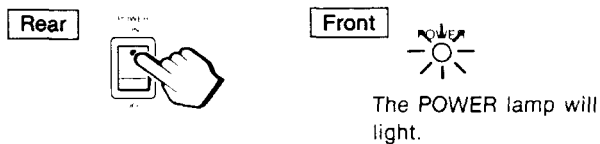
Try to define the sensitized area on the white part of the setting display if the level setting is difficult or alarm is not raised.

How to Use

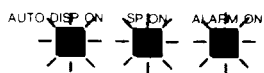
Once connections (pages 15 and 16) and preparations (pages 6 to 11) are completed, operation is simple.



1 Set the POWER switch to ON.

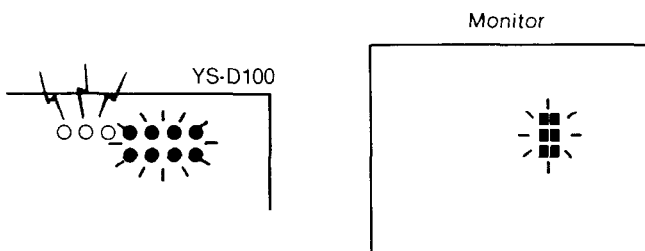


2 Check that the ALARM ON, SP ON and AUTO DISP ON buttons are lit in red.








If the button(s) are not lit, press to light them.

When a disturbance is sensed



The ALARM lamps of the unit will blink, alarm will sound and the blocks indicating where the disturbance occurred will blink on the monitor screen. These actions occur simultaneously and continue for the period of preset alarm duration.

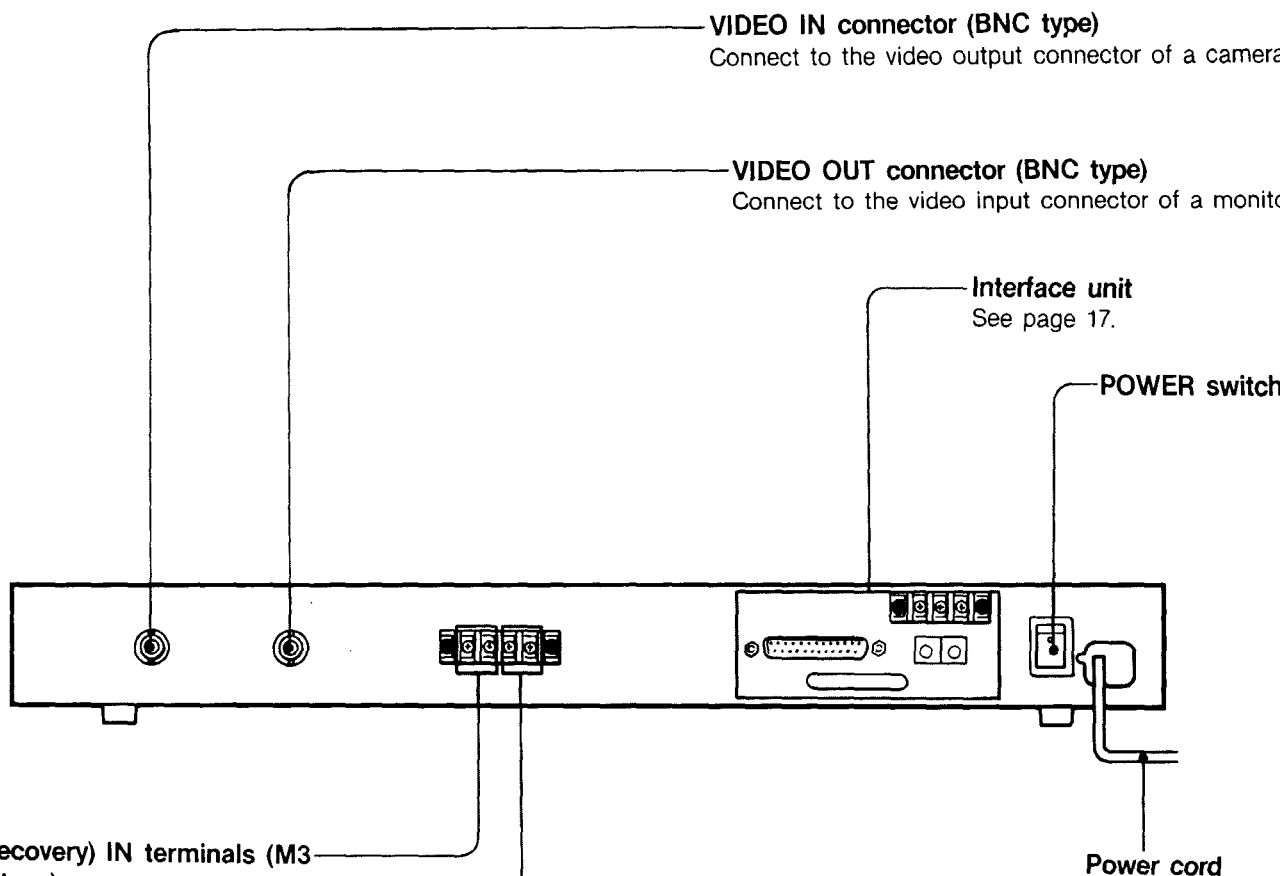
<p>To stop alarm sooner</p>	<p>ALARM ON</p>  <p>Illumination goes out.</p>
<p>To stop alarm sound sooner</p>	<p>SP ON</p>  <p>Illumination goes out.</p>
<p>Not to display sensitized location on the screen even if a disturbance occurs</p>	<p>AUTO DISP ON</p>  <p>Illumination goes out.</p>
<p>To prevent alarm from activating even if a disturbance occurs</p>	<p>ALARM ON</p>  <p>Illumination goes out.</p>
<p>To prevent alarm from sounding even if a disturbance occurs</p>	<p>SP ON</p>  <p>Illumination goes out.</p>
<p>To restore each function, press to light the corresponding button again.</p>	

Note

Alarm will not be raised for approximately 5 seconds (The "*" indication will be shown on the lower right of the display) after the power is turned on or the setting item is set.

Location and Function of Connectors

Rear



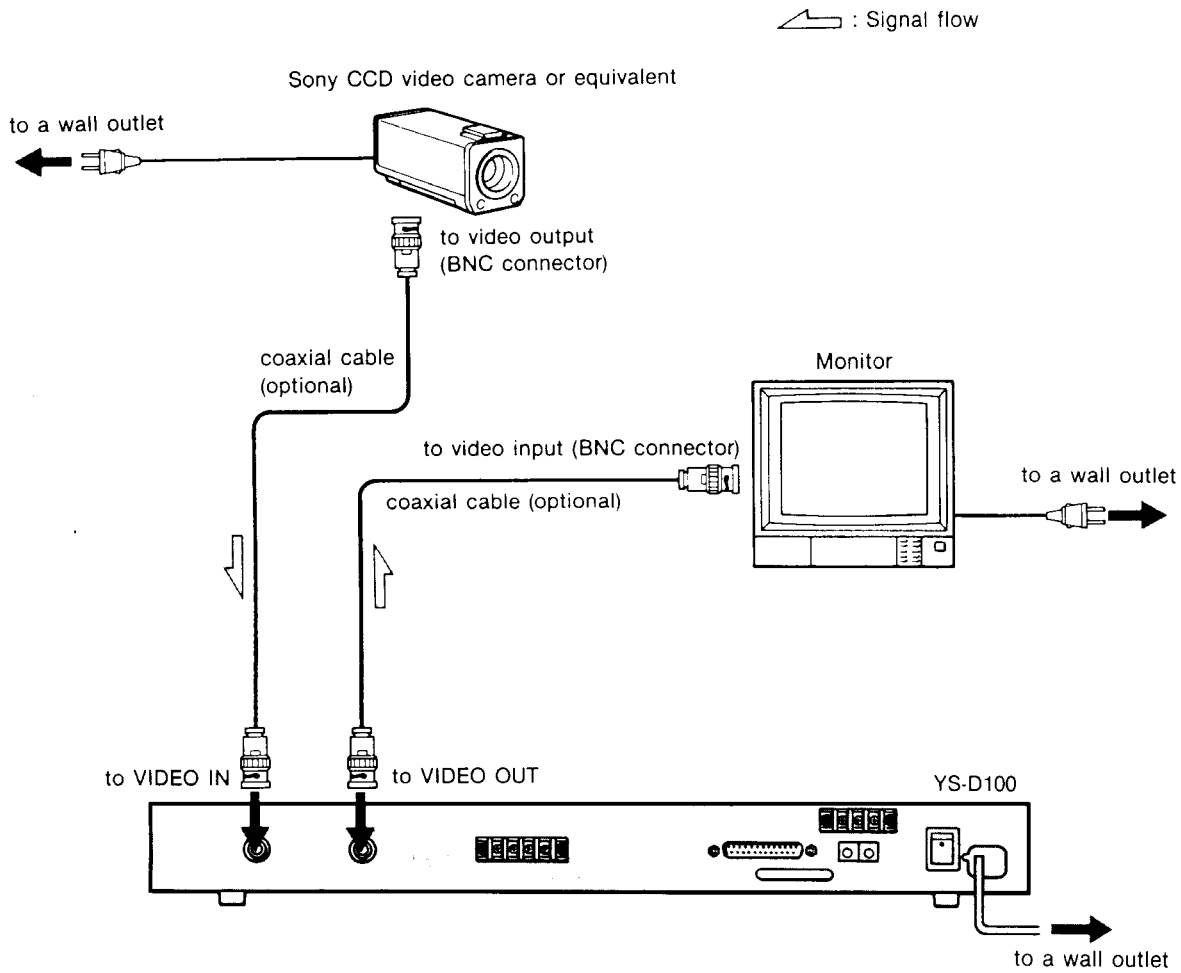
REV (recovery) IN terminals (M3 screw type)
 In case alarm duration is set to "EXT", the YS-D100 can be reset (the alarm stops) by reset signal input from the equipment* connected to the terminals.

ALARM OUT terminals (M3 screw type)
 Connect to the ALARM IN terminals of the Sony YS-S100 sequential switcher. The YS-D100 can activate alarm of the switcher in synchronization. These terminals can also be connected to an external alarm device to control it.

* For details contact a Sony dealer.

Connections

To connect a Monitor and a Camera (Basic Connection)

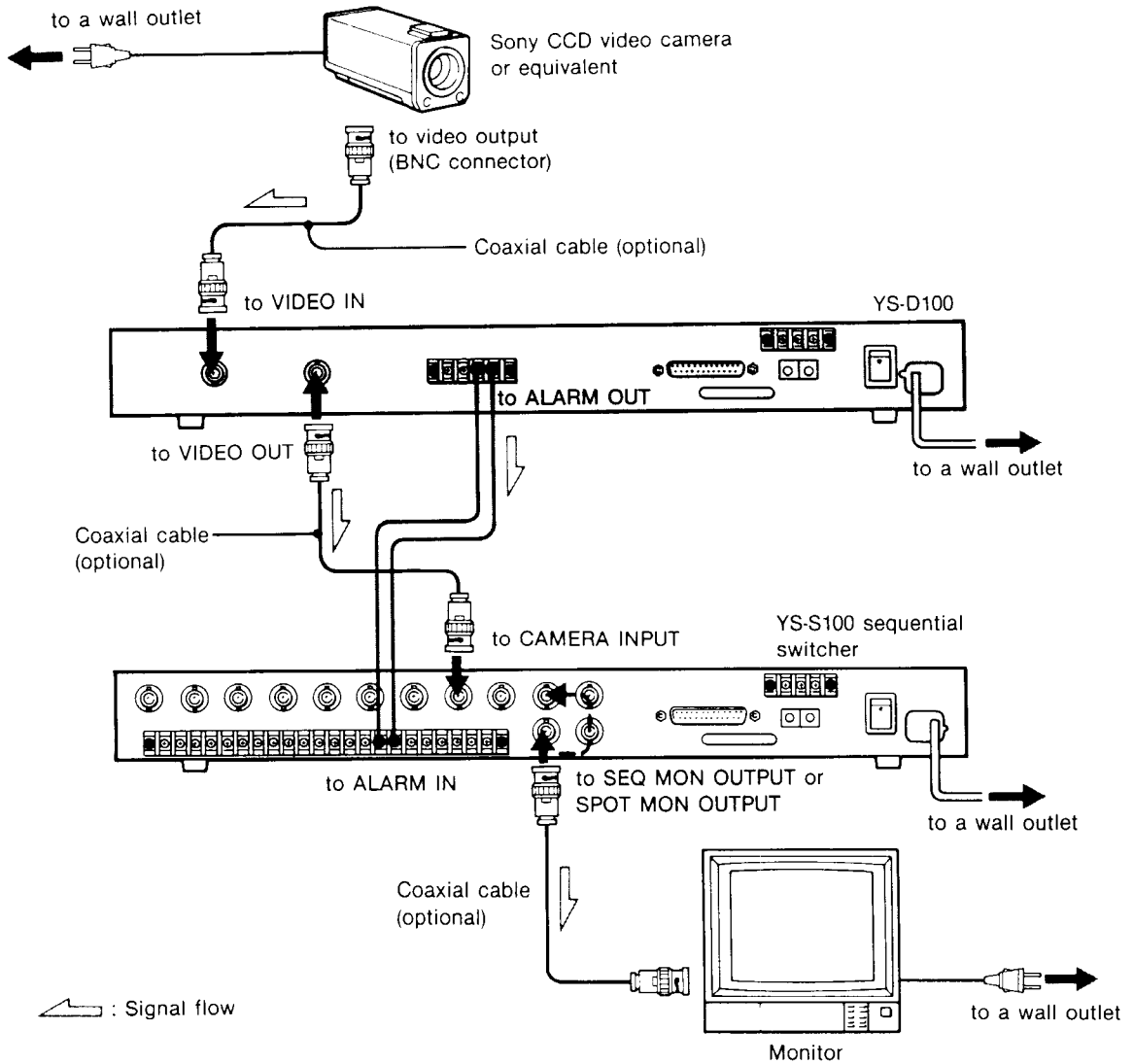


Notes on connection

- Before connections, turn off all equipment.
- Securely insert all plugs.
- Be sure to make correct \oplus \ominus connection for the M3 terminals.
- When disconnecting the plugs, grasp the plugs. Never pull by the cord.
- To avoid interference, turn off the power of equipment not in use.
- Connecting methods may vary for individual equipment. Refer to all relevant instruction manuals to ensure correct connection.

Connections

To Connect the Sony YS-S100 Sequential Switcher



Specifications

Inputs	VIDEO IN: BNC type 1 Vp-p, 75 ohms, unbalanced, sync negative REV IN: M3 screw type DC 2–5 V, impedance less than 1 kilohm
Outputs	VIDEO OUT: BNC type 1 Vp-p, 75 ohms, unbalanced, sync negative ALARM OUT: M3 screw type Open collector output, Contact rating 5 V DC/100 mA Resistive load
	Interface unit The RS-232C and the RS-485 connectors are designed to widen the YS-D100's application range for use with a computer system. For details contact a Sony dealer.
Power requirements	120 V AC, 60 Hz
Power consumption	80 mA
Operating temperature	0°C–40°C (32°F – 104°F)
Storage temperature	–20°C – +60°C (–4°F – +140°F)
Dimensions	424 × 44 × 355 mm (w/h/d) (16 ³ / ₄ × 1 ³ / ₄ × 13 inches) (incl. projecting parts and controls) Not incl. rubber feet and rack mounting bracket
Weight	Approx. 3.8 kg (8 lb 6 oz)
Supplied accessory	Rack mounting bracket (for EIA standard racks) (1 set)

Design and specifications subject to change without notice.

Troubleshooting

If you think you have a problem, double-check before calling the serviceman.
You may have overlooked something relatively simple!

First check:

- Are all connections correct?
- Is the power cord plugged in?
- Is the power turned on?

Symptom	Solution
The alarm is not raised.	<ul style="list-style-type: none">• Press ALARM ON so that the button illumination lights in red.• Check the location and size of sensitized areas. (page 8)• Readjust the sensitivity level. (page 10)• Check the alarm duration setting display. (page 6) If it is set to "EXT" with no equipment connected to REV IN at the rear of the unit, select other setting.• Set the sensing interval to shorter one.
The alarm does not sound.	<ul style="list-style-type: none">• Press SP ON so that the button illumination lights in red.