



# INSTRUCTION MANUAL

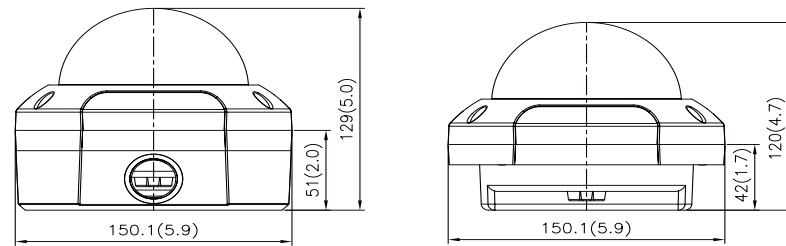
VDC-D1785IRVP

## Vandal-resistant IR Dome Camera

### About this manual

- Before installing and using the camera, please read this manual carefully. Before to keep it handy for later reference.

### Dimension:mm (inches)



Depending on the conditions of use, installation and environment, please be sure to make the appropriate settings and adjustments. If you need help with installation and or settings, please consult your dealer or authorized Sanyo Service Center.

## TROUBLESHOOTING

Before sending the camera out for repair, check the items below. If the problem persists after checking these items, consult your dealer or authorized Sanyo Service Center.

### ■ If no image appears

- Is the coaxial cable attached securely?
- Are the power and voltage normal?
- Has the iris of the lens been adjusted correctly (with level volume)?
- Is there adequate illumination?

### ■ If the image is unclear

- Is the monitor adjusted correctly?
- Is the lens in focus?
- Is the lens clean?

Dirt or fingerprints on the lens can adversely affect the image. Gently wipe and dirt of fingerprints off the lens a soft cloth or lens cleaning paper and cleaning fluid (commercially available).

## SERVICE

The camera is precision instrument. Handle it carefully and always follow the safety precautions. If the camera requires service, never try to repair it yourself or open the casing. For servicing, maintenance, or repairs, consult your dealer or authorized Sanyo Service Center.

## For EU Users



### Please note:

Your SANYO product is designed and manufactured with high quality materials and componets which can be recycled and reused. This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste. Please dispose of this equipment at your local community waste collection/ recycling centre.

In the European Union there are separate collection systems for used electrical and electronic product. Please help us to conserve the environment we live in!

This symbol mark and recycles system are applied only to EU countries and not applied to countries in other areas of the world.

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## For Russian Users



This product certified by offical certification company which is authorized by Russian Federation.  
ДЛЯ ПОЛЬЗОВАТЕЛЕЙ РОССИИ  
Данная продукция сертифицирована официальным органом по сертификации Российской Федерации.

## SPECIFICATIONS

Model Number	VDC-D1785IRVP
Scanning system	PAL standard 625 lines, 50fields/sec.
Image sensor	1/3" Interlace CCD sensor
Number of effective pixels	752(H) x 582(V)
Horizontal resolution	540 TV lines (Typical)
Lens	f=3.7 to 12mm, F1.4, IR lens
Minimum illumination (50IRE)	0.7lx LED-Off, 0.0lx LED-ON
Video/ Monitor output	1.0Vp-p (75ohms, composite)
Video S/N ratio	More than 48dB
Day & Night	True Day/ Night
Backlight compensation	ON/ OFF
White balance	Auto
Auto iris drive	DC
AGC gain	ON/ OFF
Flickerless	ON/ OFF
Gamma correction	0.45
Sync system	Internal
Unshielded Twisted Pair	Passive type
IR LED	18 pcs
IR distance	20m
IR wavelength	850nm
Operating temperature	-10°C to +50°C (14°F to 122°F)
Operating humidity	Less than 90% (no condensation)
Power supply	12VDC+/-10%, 24VAC+/-10%, 50Hz
Power consumption	7.0w
Weather Protection class	IP67
Dimensions (Φ x H)	150.1 x 129mm (5.9" x 5.1)
Weight	Approx. 0.95kg(33.5oz) In-ceiling mount 1.20kg(43.7oz) Surface mount
Accessories	1.Wall Mounting template.....1 2.Inceiling Mounting template.....1 3.Installation Manual.....1 4.Conduit cap.....1 5.Fixing screw (P4*31TP).....4 6.Wall plugs.....4 7.Fixing screw (M4x0.7P x15mm)..3 8.Monitor out cable.....1 9.Hexagonal wrench.....1 10.Surface-mount adaptor.....1

Appearance and specifications are subject to change without prior notice.

## PRECAUTIONS

### ■ In case of a problem

Do not use the unit if smoke or a strange odor comes from the unit, or if it seems not to function correctly. Turn off the power immediately and disconnect the power cord, and then consult your dealer or an Authorized Sanyo Service Center.

### ■ Do not modify

Do not modify the cabinet and camera, as it maybe dangerous and cause of damage to the unit. For repairs, consult your dealer or an Authorized Sanyo Service Center.

### ■ Do not put objects inside the unit

Make sure that no metal objects or flammable substance get inside the unit. If used with a foreign object inside, it could cause a fire, a short-circuit or damage. Be careful to protect the unit from rain, sea water, etc. If water or liquid gets inside the unit, turn off the power immediately and disconnect the power cord, and then consult your dealer or an Authorized Sanyo Service Center.

### ■ Be careful when handling the unit

To prevent damage, do not drop the unit or subject it to strong shock or vibration.

### ■ Do not install this unit close to magnetic fields

The magnetic fields may result in unstable operation.

### ■ Protect from humidity and dust

To prevent damage, do not install the unit where there is greasy smoke or steam, where the humidity may get too high, or where there is a lot of dust.

### ■ Protect from high temperatures

Do not install close to stoves, or other heat sources, such as spotlights, etc., or where it could be subject to direct sunlight, as this could cause deformation, discoloration or damage.

### ■ Cleaning

\* Dirt can be removed from the cabinet by wiping it with a soft cloth. To remove stains, wipe with a soft cloth moistered with a soft detergent solution and wrung dry, then dry by wiping with a soft cloth.

\* Do not use benzine, thinner or other chemical products on cabinet, as this may cause deformation and paint peeling. Before using a chemical cloth, make sure to read all accompany instructions. Make sure that no plastic or rubber material comes into contact with the cabinet for a long period of time, as this may cause damage or paint peeling.

### ■ Degree of protection: IP67

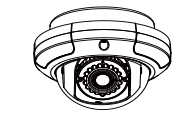
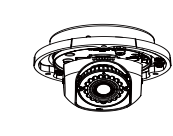
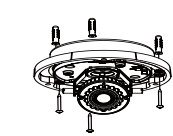
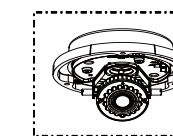
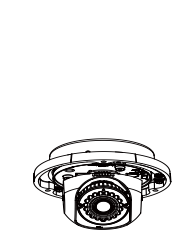
This unit has been certified to IP67 standards when properly installed. Use only an IP67 certified enclosure or an electrica box. Ensure all openings in enclosure are sealed as per manufacture's instructions.



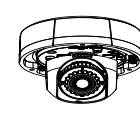
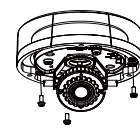
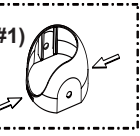
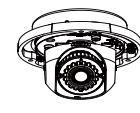
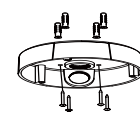
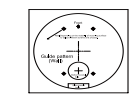
Sanyo Electric Co., Ltd  
Printed in Taiwan

## INSTALLATION

### For Inceiling Mount installation -Inceiling type-



### For Surface Mount installation -Surface type-



### ⚠ CAUTION

- Since the conduit hole cover is not waterproof-finished, always be sure to seal the cover entirely by caulking, for example, upon completion of installation.
- Make sure to perform waterproofing properly to the ceiling or wall where you are installing the unit.
- When setting up this camera, make sure that it is installed securely. Check that the installation location is strong enough to bear the camera unevenness. In addition, do not touch the camera unit except when settings and adjustment are necessary.

1. Loosen the 3 fixing screws using the supplied hexagonal wrench and remove the dome cover.
2. Inceiling : Place the supplied "Mounting template for inceiling" on the mounting surface, and mark 3 positions shown in.
- or  
Surface : Place the supplied "Mounting template for surface" on the mounting surface, and mark 4 positions shown in.
3. Drill holes at positions as marked and insert the supplied screw holes in the holes.
4. Cut a hole in the ceiling or the wall for routing the cables.
5. Pass the power cable, video cable and UTP cable from the camera unit through the cable hole in the ceiling or the wall.
6. Align the unit mounting holes of the camera unit with the holes in the ceiling or the wall.
7. Secure with the supplied mounting screws.
8. Carry out the settings and adjustments for the camera. Refer to "CONNECTIONS AND SETTINGS" for camera settings and lens adjustments.8.

\* When routing the cables on ceiling or wall surface: Loosen the conduit hole cover fixing screw on the back of the camera unit base with the hexagonal wrench, open the cover, and pass the connection cables through the conduit hole.

HINT  
(#1) Press the grip portion to remove the mask before adjustment.

# CONNECTIONS AND SETTINGS

**■ CONNECTIONS**

12VDC/24VAC connection

Connect Black Red

UTP Passive type White: + Black: -

Supported coaxial cables  
You can use any of the following coaxial cables:

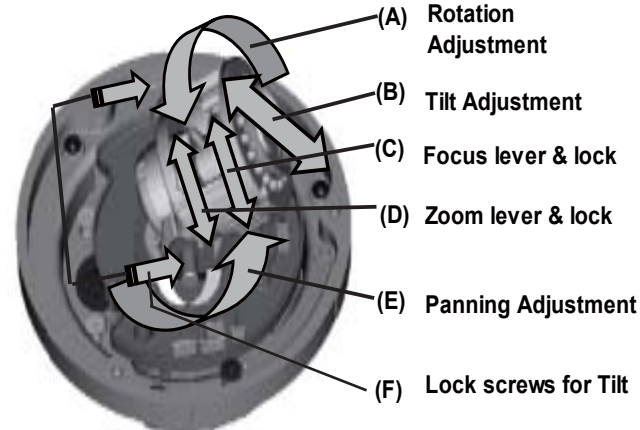
- RG-59U (3C-2V) Length: 250m (273.4 yds) max.
- RG-8U (5C-2V) Length: 500m (546.8 yds) max.
- RG-11U (7C-2V) Length: 600m (656.2 yds) max.

**⚠ CAUTION**  
Check for polarity when using a 12VDC power supply (Polarity does not matter when using a 24VAC power supply).

**⚠ CAUTION**

- When using an RG-59U (3C-2V) cable, do not attach it to piping or wiring.
- Select the cable according to the distance between the devices you wish to connect.
- If you use a cable other than the type above, the image or sync signal will be attenuated and will not be transmitted correctly.

## ■ LENS ADJUSTMENT



## ■ CHECKING THE CAMERA IMAGE

You can use the monitor checking cable (including) to display an image on a monitor when setting up the camera to check the surveillance angle and range, lens focus, etc. Connect the connector of the monitor checking cable to the monitor checking connector on the circuit board and connect the jack of the monitor checking cable to monitor.

## ■ LENS ADJUSTMENTS

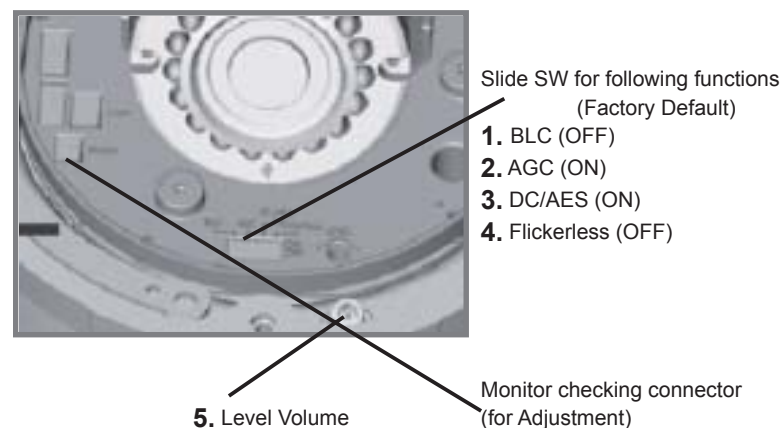
Once the camera has been installed, adjust the lens section.

### ⚠ CAUTION

- Be careful not to touch the lens section when changing the angle of the camera.
- When loosening the drop-prevention cord fixing screw, be careful not to loosen it too much; otherwise the dome cover may drop.

1. Loosen the tilt adjustment screws, then adjust pan position, tilt position and angle position by using adjustment points. Fix the tilt screws after having decided an angle of view.
2. Loosen the zoom lever screw, turn the zoom lever to the right/left to determine the zoom position while viewing the camera images on the monitor, and then re-tighten the screw.
3. Loosen the focus lever screw, turn the focus lever to the right/left to determine the focus position while viewing the camera images on the monitor, and then re-tighten the screw.
4. Tighten the drop-prevention cord fixing screw.

## ■ CAMERA SETTING



## ■ DAY/NIGHT FUNCTION

When connected to power the VDC-D1785IRVP turns on the DAY/NIGHT function for continuous operation. The DAY/NIGHT function automatically switches over between color and black-and-white mode depending on the ambient brightness; for example, choosing color mode during daytime, and black-and-white mode for nighttime monitoring with its increased sensitivity in a darker environment.

### 1 Backlight compensation (BLC) setting

ON ◆	Compensates for backlighting with the center weighted metering mode.
Down ◆	This function is off.

Factory Default: OFF

### 2 Auto Gain Control (AGC) setting

For adjusting the sensitivity of the camera. Use this setting for shooting in dark environments.

ON ◆	Normal setting
Down	Set this when there is excessive noise (AGC off)

Factory Default: ON

### 3 DC/ AES Mode setting

ON ◆	DC/ AES: ON
Down	DC/ AES: OFF

Factory Default: ON

### 4 Flickerless setting

ON	Flickerless: ON
Down ◆	Flickerless: OFF

Factory Default: OFF

### 5 Level Volume

Use to compensate for the iris level. Turn toward L(low) to make the picture darker. Turn toward H(high) to make the picture brighter.

Factory Default: Middle

**Be sure to observe the following**

- Be extremely careful when carrying out work such as drilling holes in order to install this camera. In addition, pull out cables such as the power cable and video cable so that they can easily routed.
- When installing the camera, take proper steps to ensure that the ceiling or wall is waterproof.
- Select a ceiling or wall surface which is flat and durable and which can support the full weight of the camera. If installing to a curved surface or a round pole or similar, use a commercially-available mounting bracket to install the camera.
- Install the camera in a place where the ambient temperature (with power source connected) is within -20 Deg to 50 Deg
- If direct sunlight will shine onto the camera, install the accessory sunshade.