

External camera

1220 00

# GIRA

10865273 28/17



## General safety instructions

Electrical devices may only be installed and connected by a qualified electrician.

These instructions are part of the product and must remain with the end customer.

## Functional description

External camera with wide-range lens, integrated IR lighting, and automatic white balance for wall or ceiling mounting. The external camera can be installed anywhere in the entrance area and integrated into the Gira door communication system via the DCS camera gateway.

Key functions at a glance:

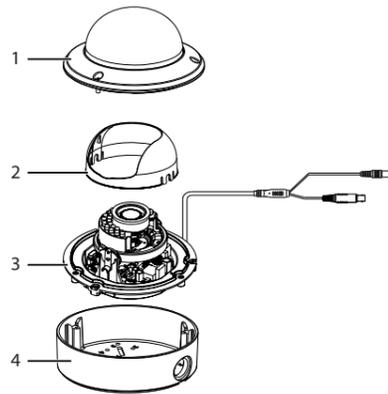
- Light-sensitive chip set for clear imaging in low-light conditions.
- Switchable IR LEDs for video monitoring in complete darkness.
- Camera module and housing for quick and easy installation.
- Camera module adjustable on three axes.

## Items delivered

- 1x external camera
- 1x drilling jig
- 1x set of screws/wall plugs, S6
- 1x installation tool (angle screwdriver, TX 20, with centring pin)
- 1x adapter for test image
- 1x operating instructions

Verify that the package contents are complete and undamaged. Please see "Warranty" in case of any defects.

## Device description



- 1 Camera dome
- 2 Cover for camera dome
- 3 Camera module incl. lens and connection cable
- 4 Housing

## Installation



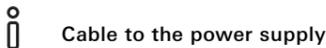
**ESD warning**  
Caution: Electrostatic charge! Before opening the housing or performing any work on the wiring:

To prevent damage to the device, dissipate any electrostatic charge in your body by touching grounded metal parts.

**Install in voltage-free condition only!**



**Cable feed**  
The cable can be routed on the surface of the wall or concealed. There is an opening provided at the installation adapter for lateral cable routing (use off-the-shelf M25 x 1.5 cable gland; not included).



**Cable to the power supply**  
Consider the connection ratings of the external camera when selecting the type and length of the cable to the power supply (see "technical data").

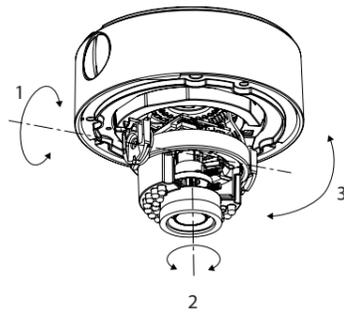
The power supply must not use any free wires of the bus cable. The cable must be routed separately.

1. Place the included drilling jig at the desired location and mark the mounting holes.
2. Drill holes and insert wall plugs. Use wall plugs and screws suitable for the wall material. (The included set of screws and wall plugs is suitable for brick walls. Use other (suitable) screws and wall plugs for installation on heat insulation compound materials.)
3. Remove camera dome from the camera module using the included tools. For easier mounting, there is a cord with a loop to attach the camera module inside the housing.

4. Mount the housing according to the selected mounting type.
5. Insert the connection cable.
6. Insert the camera module into the housing.
7. Tighten the fastening screws of the camera module.
8. Align the camera module as described below.



**IR range**  
The IR range highly depends on the ambient conditions. Non-reflective background in the camera's field of vision, as well objects outside the maximum lighting range have a negative impact on the brightness of the camera image at night. This results in less useful camera images. Objects (e.g. eaves or a wall) in the immediate vicinity of the camera's field of vision have a negative impact on the camera image (e.g. ring-shaped glare in the camera image due to IR reflections from these objects).

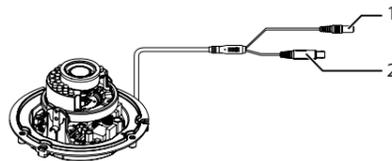


- 1 Angle: max. 75°
- 2 Rotation: max. 340°
- 3 Swivel: max. 330°

9. Install camera cap and dome; fasten camera dome.

## Connect the video cable

Coaxial cables of types RG59 or RG6 can be connected to the analogue video output ("CVBS" imprint). The maximum cable length from the plug of the analogue video output to the next device is 30 m.



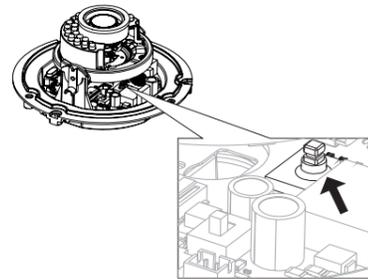
- 1 Port: Power supply
- 2 Port: Analogue video output



**Transmission quality**  
Optimal signal transmission quality can only be ensured as long as the cable is not kinked or squeezed in any place. A damaged cable, or one that has become porous with age, can also have a negative impact on the signal or image quality (e.g. shades along edges).

## Screen menu

### Open OSD menu



Open the OSD (On-Screen Display) menu by pressing the joystick (see arrow). Navigation is performed by operating the joystick.

- SETUP → VIDEO STANDARD
- LANGUAGE → AE
- MAIN MENU → WB
- DAY&NIGHT
- VIDEO SETTING
- FUNCTION
- RESET
- SAVE&EXIT

### Setup

Function	Description
VIDEO STANDARD	Set video standard. <b>PAL:</b> The video and service screen output are set to a 50 Hz standard (e.g. 720p50, 1080p50 or PAL) <b>NTSC:</b> The video and service screen output are set to a 60 Hz standard (e.g. 720p60, 1080p60 or NTSC)
LANGUAGE	Set the language of the screen menu. Available options are English and Chinese.
MAIN MENU	Advanced camera settings. Press [ENTER] to open the main menu with the advanced camera settings.

## MAIN MENU

**AE**  
This is for setting the general automatic exposure (AE) parameters, e.g. processing of higher contrast or special settings at night. The SENSE UP function is activated automatically, i.e. if it is bright enough at night from the built-in infrared LEDs or ambient lighting, then the function remains deactivated and a fluid video is recorded with a frame rate of 25 fps.

Function	Description
BRIGHTNESS	(1~10): Brightness setting
AE MODE	<b>GLOBAL AE:</b> General automatic exposure setting without the DWDR function <b>DWDR:</b> Automatic exposure setting with DWDR function (for better representation of high-contrast images). Dark areas in the video image are brightened while bright areas are kept constant.
AGC	Automatic gain control. The higher the setting, the brighter the video image at low light. <b>OFF:</b> Deactivated <b>LOW:</b> Low <b>MIDDLE:</b> Middle <b>HIGH:</b> High
SENSE UP	Setting for the duration of exposure. The longer the exposure for each image, the brighter the image. Conversely, the longer the exposure, the lower the frame rate (frames per second). 0: 25 fps 2: 12 fps 4: 6 fps 8: 3 fps 16: 1 fps
RETURN	Back to the previous menu page

**WB**  
The white balance (WB) is adjusted here

Function	Description
AUTO	Automatic white balance
MANUAL	Manual white balance <b>RGAIN:</b> Gain factor for the red content in the image <b>BGAIN:</b> Gain factor for the blue content in the image <b>RETURN:</b> Back to the previous menu page

**DAY&NIGHT**  
These are the settings for switching between the day and night mode.

Function	Description
SMART	Automatic switching between day/night mode. The integrated light sensor controls the switch-over depending on lighting conditions. <b>INFRARED-LAMP ON:</b> IR LEDs active in night mode <b>OFF:</b> IR LEDs inactive in night mode <b>SMART-IR:</b> The higher the value (0 to 5), the darker the IR LEDs (reduction of IR light intensity) for objects very close to the camera. <b>RETURN:</b> Back to the previous menu page
COLOR	The camera remains in colour mode at all times. The IR swivel filter remains in front of the lens at all times, and the IR LEDs are always off.
B/W	The camera remains in B/W mode at all times. The IR swivel filter is off the lens at all times. The IR LEDs are switched on/off automatically by the light sensor.

**VIDEO SETTING**  
These are general image settings, e.g. contrast or flipping the video image.

Function	Description
CONTRAST	(1 to 10): Contrast setting.
SHARPNESS	Electronic enhancement of the impression of image sharpness. <b>EDGE (1 to 10):</b> Change edge representation in bright areas <b>DETAIL (1 to 10):</b> Change image sharpness setting <b>RETURN:</b> Back to the previous menu page
COLOR GAIN	(1 to 10): Saturation of video image.
3DNR	Noise reduction setting. The higher the value, the more noise is eliminated from the video image by the software. <b>OFF:</b> Deactivated <b>LOW:</b> Low <b>MIDDLE:</b> Middle <b>HIGH:</b> High
MIRROR	Flipping (mirroring) the video image <b>OFF:</b> Deactivated <b>HV:</b> Horizontal and vertical image flip <b>V:</b> Vertical image flip <b>H:</b> Horizontal image flip
RETURN	Back to the previous menu page.

## FUNCTION

The image settings for private area masking and zoom are made here.



### Masking

Up to eight areas in the image can be pixellated or coloured.

This obscures the video image in these areas (e.g. the neighbour's driveway). Masks are drawn by setting a starting point in the top left corner, then entering a horizontal and vertical size for the mask. The largest possible mask starts at 0.0, is 1280 pixels wide and 720 pixels in height. This mask would obscure the entire video image.

The mask setting is LIVE, i.e. the mask size and position can be seen during the setting process.



Function	Description
DETECTION	Not used.
MASKING	Private zone mask settings. Up to 8 private zones can be assigned with freely selectable size and position. <b>COLOR:</b> Colour setting and + pixellation for all masks <b>AREA NO.:</b> Setting of selected mask (0 to 7). <b>STATUS ON:</b> Mask active <b>STATUS OFF:</b> Mask inactive <b>HORIZON. SIZE:</b> Width of mask <b>VERTICAL SIZE:</b> Height of mask <b>HORIZON. MOVE:</b> Move mask horizontally <b>VERTICAL MOVE:</b> Move mask vertically
ZOOM IN	Digital zoom function (50 / 60 / 70 / 80 / 90 / 100). Value 100 = no digital zoom set. Value 50 = 50% of the image, seen from the image centre, is displayed as the camera image.
RETURN	Back to the previous menu page.

## RESET

Function	Description
RESET	Restore all camera settings in the main menu to factory default

## SAVE&EXIT

Function	Description
SAVE	Save all settings and exit the OSD menu.
EXIT	Exit the OSD menu.

## Maintenance and cleaning

### Maintenance



#### Maintenance-free device

The external camera itself is maintenance-free for you. It does not contain any components that you need to check or service.

Regularly check the technical integrity of the product, e.g. check for damage to the housing.

Stop using the external camera if it is visibly damaged or has stopped functioning.

### Cleaning



#### Use of improper cleaning agents may damage the device

Make sure that no liquids enter the device. Do not use chemical cleaners as they might damage the housing surface or the camera lens (discolouration).

Clean the product using a clean, dry cloth. For removing heavier dirt, the cloth can be wetted slightly with lukewarm water.

## Disposal



The Gira external camera is an electric or electronic device in the sense of EU Directive 2011/65/EU.

High-quality materials and components were used in developing and manufacturing the device. These materials and components can be reused and recycled. Please consult the regulations governing the separate collection of electric/electronic waste applicable for your country. These devices may not be disposed of with household waste. The correct disposal of waste can prevent possible negative consequences to the environment and humans.

## Warranty

The warranty is provided in accordance with statutory requirements via the retailer. Please submit or send faulty devices postage paid and with an error description to your sales representative (retailer / installation company / electrical contractor). The salesperson will forward the devices to the Gira Service Centre.

## Technical data

Rated voltage:	DC 12 V + 10% AC 24 V +10%
Current draw	max. 375 mA (max. 4.5 W)
<b>Camera</b>	
Image sensor:	1/3" CMOS progressive scan
Type:	Vario Dome
Lens:	2.8 to 12 mm; varifocal lens
Resolution:	PAL (576i)
Horizontal angle of vision:	28° to 78°
Day/night switching:	Electromechanical IR cut filter
Noise suppression:	3D DNR
Electronic shutter control:	1/25 to 1/50 000 s
Camera control:	On-screen display (OSD)
Background lighting compensation:	DWDR
Privacy zone masking:	8 zones, freely configurable
Digital zoom:	Yes
<b>Minimal lighting</b>	
Colour:	0.1 lx
B/W:	0.001 lx (image integration on)
IR mode:	0 lx
<b>IR</b>	
Range:	20 m
Number of LEDs:	24
Smart IR	Yes
<b>Device – general</b>	
Connections:	1 x video (FBAS, BNC) 1 x power supply
Ambient temperature:	-20 to +60 °C
Humidity:	max. 90%
Protection type:	IP66
Dimensions (H x D):	125 x 143 mm
Weight:	950 g