

Dust-tight and waterproof housing IP66

GH-Fast Series

INSTRUCTION MANUAL
MANUALE D'ISTRUZIONI
XXXXXXXXXXXXXXXXXXXX

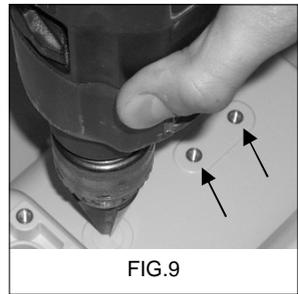
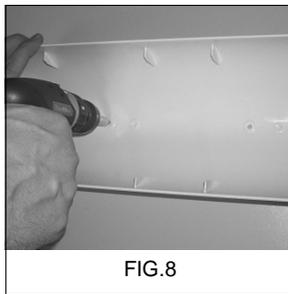
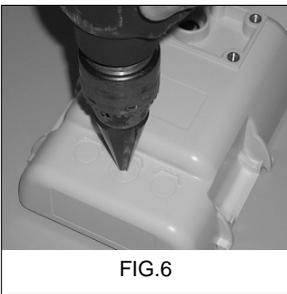
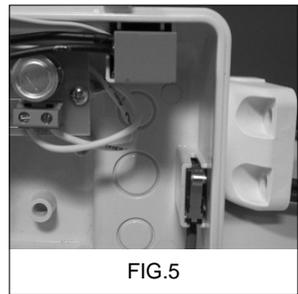
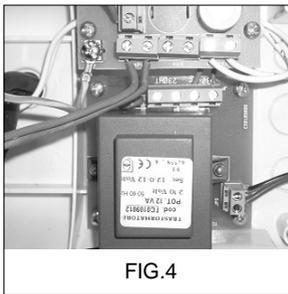
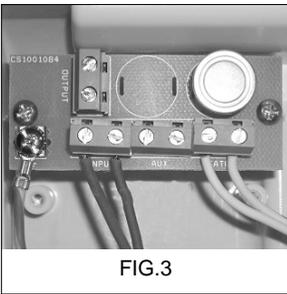
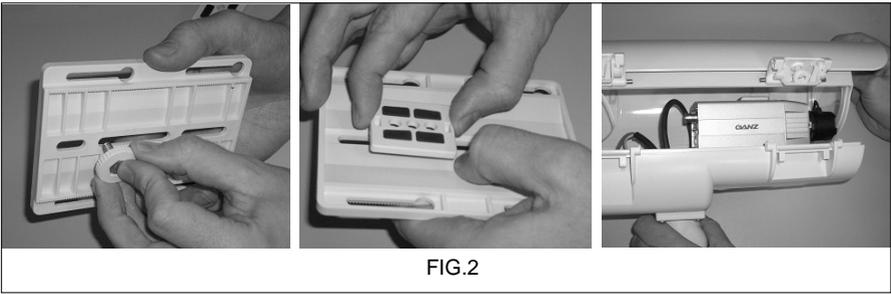
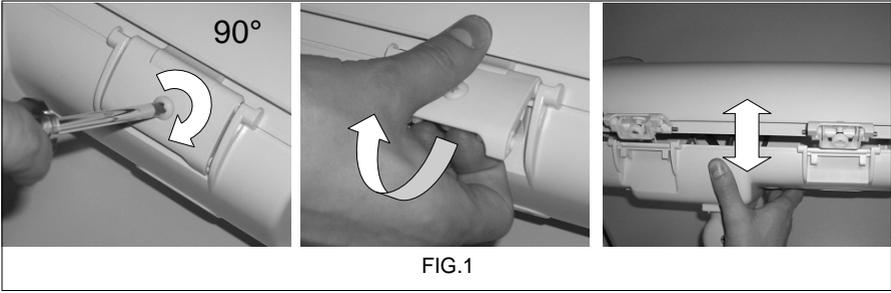
- GH-F12** outdoor housing 12Vdc
custodia da esterno 12Vcc
XXX
- GH-F24** outdoor housing 24V~
custodia da esterno 24V~
XXX
- GH-F230** outdoor housing 230V~
custodia da esterno 230V~
XXX
- GH-FWM** bracket and adjustable head for GH-F housing
staffa e snodo per GH-F
XXX
- GH-FW12** GH-F12, GH-FWM included
custodia da esterno 12Vcc con staffa GH-FWM inclusa
XXX
- GH-FW24** GH-F24, GH-FWM included
custodia da esterno 24V~ con staffa GH-FWM inclusa
XXX
- GH-F230** GH-F230, GH-FWM included
custodia da esterno 230V~ con staffa GH-FWM inclusa
XXX
- GH-FI** indoor housing without sunshield, GH-FWM included (no sunshield)
custodia da interno con staffa GH-FWM inclusa (no tettuccio)
XXX
- GH-FWC12** GH-FW12 preassembled with hidden cables protection
GH-FW12 con cavi a passaggio interno preassemblati
XXX
- GH-FWC24** GH-FW24 preassembled with hidden cables protection
GH-FW24 con cavi a passaggio interno preassemblati
XXX
- GH-FWC230** GH-FW230 preassembled with hidden cables protection
GH-FW230 con cavi a passaggio interno preassemblati
XXX
- GH-FG12** outdoor housing 12Vdc with glass window option
custodia da esterno 12Vcc con finestra in vetro e resistenza a vetro
XXX
- GH-FGW12** GH-FG12 including GH-FWM
GH-FG12 con staffa GH-FWM inclusa
XXX

READ CAREFULLY ALL INSTRUCTION AND WARNINGS REPORTED INTO THIS MANUAL
BEFORE PROCEED ON HANDLING AND USING OF THIS ITEM

LEGGERE ATTENTAMENTE QUESTO MANUALE PRIMA DI PROCEDERE
ALL'INSTALLAZIONE DELLA CUSTODIA

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX





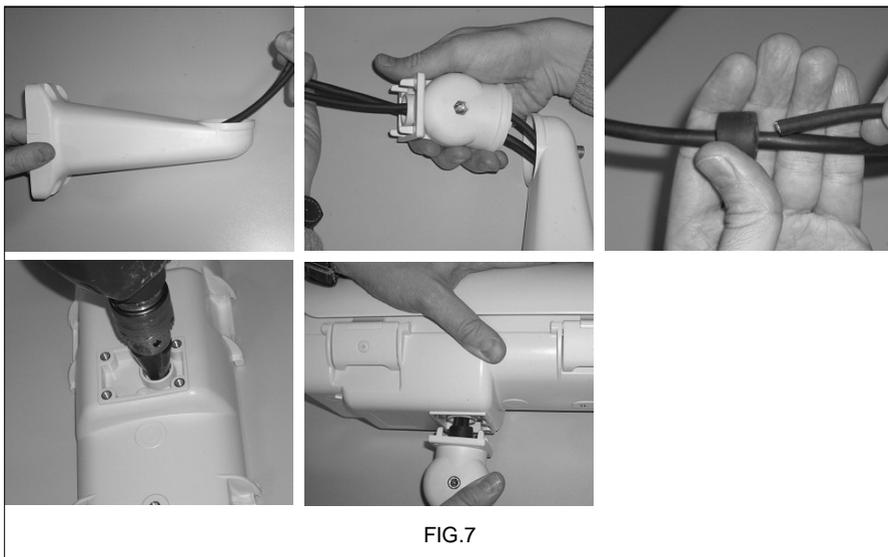


FIG.7

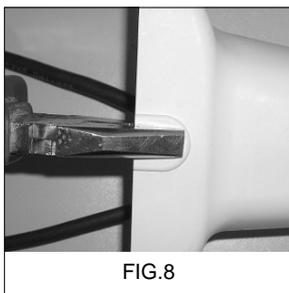


FIG.8

CBC (EUROPE) Ltd.
 Ufficio di Milano
 via E. Majorana,2
 20054 - Nova Milanese (MI)
 Italia
 Tel. +39-0362-365079
 Fax +039-0362-40012
 e-mail tech_support@cbc-europe.it

CBC (EUROPE) Ltd.
 7/8 Garrick Industrial Centre
 Irwing Way
 GB London NW9, 6AQ
 Tel. +44-(0)208-732-3312
 Fax +44-(0)208-202-3387
www.cbceurope.com

CBC (Deutschland) GmbH.
 Hansaallee, 191
 40549 - Dusseldorf
 Germany
 Tel. +49-(0)211-530670
 Fax +49-(0)211-53067180
www.cbc.de

CBC (Poland) Sp.zo.o
 Ul G. Morcinka,5 Paw6
 01-496 Warszawa
 Poland
 Tel. +48-(0)22-638-4440
 Fax +48-(0)22-638-4

THIS PRODUCT IS FULLY COMPLIANT WITH THE FOLLOWING STANDARDS

- EN 60529:1991 (IP rate)
- EN 60065 (CE certification for EMC and safety)
- EN 55022(1998)
- EN 61000-3-2(1995)
- EN 61000-3-2/A1(1998)
- EN 61000-3-2/A2(1998)
- EN 61000-3-3(1995)
- EN 50130-4(1995)
- EN 50130-4/A1(1998)

IMPORTANT SAFEGUARDS AND WARNINGS



This symbol indicates that dangerous voltage constituting a risk of electric shock is present inside of this unit.



This symbol indicates that there are important instructions that have to be followed reported in the manual to avoid risk to damage the products or avoid hazardous risk to maintenance and service personnel.

Prior to proceed on installation and operation of the product, please read and understand carefully all the indication and instruction reported on this manual.

Please take note and observe the following warnings:

1. Installation and servicing have to be done only by qualified personnel and in compliant with local law.
2. Use only parts or subassembly indicated in this manual and original by CBC. wrong choice of cables can affect to IP66 rating.
3. Installation must follow all local safety normative.
4. Use a thermo-magnetic all-pole switches with a minimum contact gap of 3 mm, Install this device only where qualified technical people could access it.
5. After maintenance or repair/replacement of parts, please proceed in a check where should be assured that none of the exposed parts have not been connected to main power or line circuitry.
6. The installation method and materials have to be safe and should be able to support minimum 4 times the weight of camera/lens and housing and bracket weight combined
7. After reading the manual, please preserve it for future needs and use for servicing and maintenance operation

PRODUCT DESCRIPTION

This GH-F housing series is a dust-tight and waterproof enclosures designed to protect a CCTV camera/lens combination for indoor and outdoor application.

The GH-F housing series includes hidden pre-cabled protected versions to provide an easy and faster installation operation as here under reported:

Model	Power Input accepted
GH-FWC12:	12 Vdc
GH-FWC24:	24 V-
GH-FWC230:	230 V-

The GH housings are also available without hidden pre-cabled protected assembly. The models available are the following:

Model	Power input accepted
GH-F12:	12 Vdc
GH-F24:	24 V-
GH-F230:	230 V-
GH-FW12:	12 Vdc
GH-FW24:	24 V-
GH-FW230:	230 V-
GH-FG12:	12 Vdc
GH-FGW12:	12 Vdc
GH-F:	-

Available accessories:

- GH-FWM: Adjustable head and wall-mount bracket
- GH-CM2: ceiling mount bracket
- GH-SM: Spacer/wall- mount adapter for side running of cables
- GH-PT: P/T plate adapter
- GH-PAR: Pole mount adapter
- GH-PS 230/24: Internal transformer 230 V- / 24 V-
- GH-PS 230/12: Internal power supply 230 V- / 12 Vdc
- GH-PS 230/12H: Internal power supply 230 V- / 12 Vdc, 1,5A
- GH-PS 24/12: Internal power supply 24 V- / 12 Vdc
- GH-BW24: 24V- fun
- GH-BW12: 12Vdc fun, use only regulated power sources to not impug fun MTBF
- GH-VTA: alarm tamper system over coax cable
- GH-TK1: tamper
- GH-VSA: antishock system over coax cable

INSTALLATION AND OPERATION

Housing opening



WARNING! The GH-F230, GH-FW230 and GH-FWC230 need a power supply at 230Vac. For safety reason, this model must be locked with apposite polycarbonate screws also for indoor application. This is requested to avoid any accidental removal operation of the front body part without the use of any tool that proof the understanding of operation in progress and the safety counter measures needed.

To achieve and open the housing body, the first operation are related to the four polycarbonate screws locking the four swivel spindles.

The top part of the housing can be pivoted on both sides alternatively or completely removed operating by the special swivel spindles; please unlock and open all swivel spindle to completely remove the top housing part. (see FIG.1).



WARNING: the back side of the housing body is destined to host power supply circuits and terminal strip connection with presence of high voltage. Before opening the housing, please, switch off the line source.

For safety regulation, the part of the body hosting power circuits must be accessed by tool.

Camera/lens assembling on housing

Coupling the camera and lens following respectively the indication of their instruction manuals.

Due to the kind of lens used, camera or lens itself must be fixed on housing plate. (see FIG.2).

We suggest to mount the camera/lens assembly as much close as you can to the front window area (coincident with the camera/lens mounting plate front borderline) considering the lens excursion in case of zoom lens used.

Use the spacers provided for best axis front window view, if needed. Please note that spacer with rubber insertions must be installed in contact with the camera tripod in the way to reduce possible camera vibrations.

Camera power supply

Connect the camera power input conductors to the "OUTPUT" terminals of the power distribution board situated on the back side of the housing (see FIG.3). Use "INPUT" terminals to connect main power supply line. Please note that housing heater must be connected only to appropriate power supply sources as previously indicated in this manual



Warning: to avoid electrical hazardous, please, check all the time the power supply source voltage and camera requirements: in case of discrepancies, use appropriate optional Ganz power supply board to provide correct voltage to camera unit.

In case of 12Vdc models, use pin n°1 as positive(+12V) and pin n°2 as negative (0V).

Power supply board installation

Please note that housing heater must be connected only to appropriate power supply sources as previously indicated in this manual; do not use GH-PS JP3 connector to power heater.

All outdoor GH-F housings are provided with a power distribution board; always use this board to connect cameras and accessories. Follow these steps:

1. Open the housing like above indicated.
2. Connect the camera power conductors to the appropriate terminals "JP3" of power supply board.
3. Connect the main power supply input conductors to appropriate "INPUT" terminals of distribution power board.
4. Connect "OUTPUT" terminals of distribution power board to JP1 terminal of power supply board.
5. Fix the power supply board on spacers (see FIG.4).

In case you have not bought a pre-cabled version of GH-F housing, the power supply line have to be provided by a three conductors cable running through the central PG11 gland inside of the housing or by the appropriate rubber provided for hidden cabling running (see Hidden cable protection connection): the main power supply conductors have to be connected to the appropriate terminal strips in the following way:

Meaning	Conductors color	Terminal strip
Main/Power IN	Blue/Brown	INPUT
Out Heater	White	HEATER
Out Camera		OUTPUT

In addition, crimp the ground conductor to a ring terminal and fix it to the point identified by Ground symbol by the M4 screw provided on standard distribution board.



In case of 12Vdc models, use pin n°1 as positive(+12V) and pin n°2 as negative (0V).



FUN installation

Please note that housing heater must be connected only to appropriate power supply sources as previously indicated in this manual.

All outdoor GH-F housings are provided with a power distribution board; if you need to install a GH-BW12 fun, you need to substitute this board with the one coming with the fun and you must provide a stabilized (12Vdc $\pm 5\%$) power supply source.

Follow these steps:

1. Open the housing like above indicated.
2. Connect fun "JP1" terminal to AUX terminals of distribution power supply board
3. connect the camera power conductors to "OUTPUT" terminals of distribution power supply board.
4. Connect the main power supply input conductors to appropriate "INPUT" terminals of distribution power board.
5. Connect "HEATER" terminals of distribution power board to heater power supply conductors.
6. Fix the fun board on spacers located on upper part of the housing.

In case you have not bought a pre-cabled version of GH-F housing, the power supply line have to be provided by a three conductors cable running through the central PG11 gland inside of the housing or by the appropriate rubber provided for hidden cabling running (see Hidden cable protection connection): the main power supply conductors have to be connected to the appropriate terminal strips in the following way:

Meaning	Conductors color	Terminal strip
MainPower IN	Blue/Brown	INPUT
Out Heater	White	HEATER
Out Camera		OUTPUT
Out Fun		AUX

In addition, crimp the ground conductor to a ring terminal and fix it to the point identified by Ground symbol by the M4 screw provided on standard distribution board.



In case of 12Vdc models, use pin n°1 as positive(+12V) and pin n°2 as negative (0V).

ZVA-TW100T/GH installation (only 230V- versions)

Please note that housing heater must be connected only to appropriate power supply sources as previously indicated in this manual.

Follow these steps:

1. Open the housing like above indicated.
2. Connect "OUTPUT" terminals of distribution power supply board to the ZVA-TW100T/GH "230V-" terminals
3. connect the camera power conductors to "OUTPUT" terminals of distribution power supply board in parallel.
4. Execute all remaining connections following indications of ZVA-TW100T/GH manual.
5. Connect the main power supply input conductors to appropriate "INPUT" terminals of distribution power board.
6. Fix the board on spacers located on bottom part of the housing.

In case you have not bought a pre-cabled version of GH-F housing, the power supply line have to be provided by a three conductors cable running through the central PG11 gland inside of the housing or by the appropriate rubber provided for hidden cabling running (see Hidden cable protection connection): the main power supply conductors have to be connected to the appropriate terminal strips in the following way:

Meaning	Conductors color	Terminal strip
MainPower IN	Blue/Brown	INPUT
Out Heater	White	HEATER
Out Camera		OUTPUT
Out Fun		AUX

In addition, crimp the ground conductor to a ring terminal and fix it to the point identified by Ground symbol by the M4 screw provided on standard distribution board.

GH-VTA installation

This device does not need any additional power supply; please fit tamper and GH-VTA-T into their appropriate bays located in back part of the housing (see FIG.5).

External connections

In case you have not bought a pre-cabled version of GH-F housing, you will need to run a RG-59/U cable through one of the side glands PG9, crimp it and connect to the camera. Verify the proper water seal of the gland.

In case you need auxiliary connection cabling with camera station (for example motorized zoom, tamper sensors, camera serial port), run a multiconductors cable by one of the PG9 gland inside of the housing.

Note that to open the PG shape, you need to force it using a screw driver from outside part of the housing (see FIG.6)

Hidden cable protection connection

Also easy hidden cable protection is available following four quick steps (see FIG.8):

1. force the hidden cabling shape, in the middle of the housing, with a screw driver from outside part of the housing.
2. properly fix bracket to the wall after having inserted cables run cables inside adjustable head and fix it to the bracket
3. Insert cables in conic rubber, please note that only two halls are opened by default and that you need to open the third one in case you want to use additional cables.
5. fix housing on adjustable head only with provided screws
6. rubber will be automatically pressed on housing body guaranteeing IP66 protection.

ENCLOSURE ASSEMBLY

Housing re-assembly

If this will be the latest operation to complete the housing body closure, insert the desiccant bag (without plastic protection) inside of the body before to proceed.

Close top body of the housing and fix it by the two opened swivel spindles. Please turn the two safety screws for 90° matching locker symbol and taking care that no cables are improperly running out the housing.

Please assure all cables are correctly running inside the housing before to close it and to not force housing to be closed.

Sunshield adjust

Sunshield can be moved to different positions unscrewing it. Please note that you can find two additional shapes in the internal part of the sunshield that you can drill to achieve an additional sunshield excursion (see FIG.8).

Fixing of sunshield

Re-positioning of the sunshield on the holding points. Insert the fixing screws and tie.

NOTES: every time you will open the housing, to avoid any condensation effect, please change the desiccant bag with a new one.

FIXING THE CAMERA STATION

The GH-F housing series is a light and medium/small enclosure for CCTV camera/lens outdoor application. Nevertheless, especially outdoor application can face severe environmental condition like strong wind, heavy snow and ice in addition to a suitable load bearing.

This require to the installer the maximum and careful attention on fixing the camera station in the proper and safety way.

For example, to fix a camera station using GH-F housing series with its own adjustable head and bracket on a wall, we suggest you to use (4) steel fasteners with 12 mm external diameter and M6 bolt with 10mm head.

Use as drilling mask a photocopy 1:1 of the latest page of this manual reporting the bracket and cable running holes layout positioning.

NOTES

1. GH-F housing provides two frontal screw threads for easy and comfortable accessories installation (ex.IR lamps) and an additional round shape that could be used for additional hidden cabling or installation of air-filter (see FIG.9).
2. In case you need lateral bracket cabling, you can operate as indicated in FIG.10.