

ABB-Welcome

83327-500 Camera interface



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1 Safety



Warning

Electric voltage!

Risk of death and fire due to electrical voltage of 100-240 V.

- Work on the 100-240V supply system may only be performed by authorised electricians!
- Disconnect the mains power supply prior to installation and/or disassembly!

2 Intended use

The camera interface integrates common analog camera into the ABB-Welcome door entry system and up to 4 analog cameras can be connected with it. Each external camera is powered by itself.

3 Environment



Consider the protection of the environment!

Used electric and electronic devices must not be disposed of with domestic waste.

- The device contains valuable raw materials which can be recycled. Therefore, dispose of the device at the appropriate collecting depot.

3.1 ABB devices

All packaging materials and devices from ABB bear the markings and test seals for proper disposal. Always dispose of the packaging material and electric devices and their components via the authorized collecting depots and disposal companies.

ABB products meet the legal requirements, in particular the laws governing electronic and electrical devices and the REACH ordinance.

(EU-Directive 2002/96/EG WEEE and 2002/95/EG RoHS)

(EU-REACH ordinance and law for the implementation of the ordinance (EG)

No.1907/2006)

4 Operation

4.1 Control elements

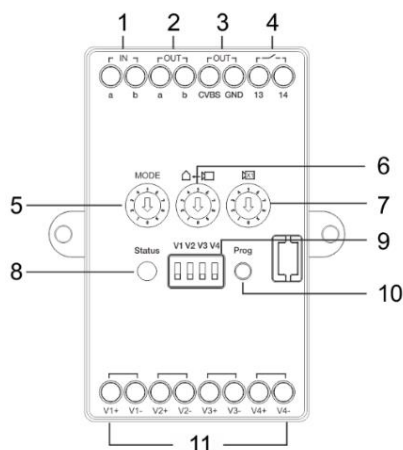


Fig. 1: Overview of control buttons

No.	Functions
1	Bus in
2	Bus out
3	CVBS out
4	Switch the power supply of the cameras For details, please find in the chapter 4.4 With & Without permanent power supply
5	Working mode There are 4 modes for camera interface, for details, please find the chapter 4.3 Operation mode
6	Set the address of the associated devices
7	Set the address of the camera interface
8	Operating status notification LED -Green: ready for operation -Orange: in setting mode -Red: fault
9	Dip-switch to switch on/off the video channel
10	Program button, to enter the programming mode.
11	4 video in (support CVBS signal input)

4.2 Operating modes

4.2.1 Mode=1, work as an independent Outdoor station

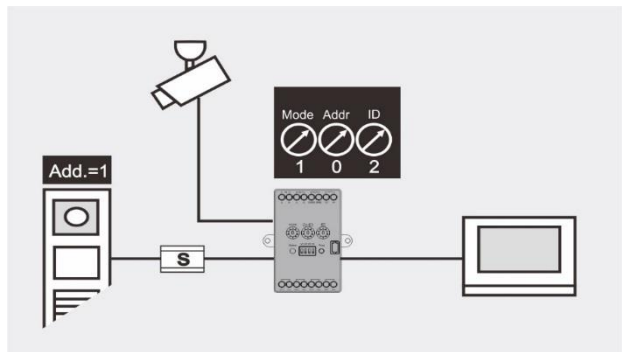



Fig. 2: Mode=1, work as an independent Outdoor station

Rotary	Value	Note
Mode	1	Camera interface works as an independent Camera interface
Addr	null	—
ID	2	ID starts from 1 to 9 sequently and should not equal to the address of Camera interface or other Camera interface

Dip Switch 1~4	Turn to ON when a camera is connected.
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Capacity
Each Camera interface support 4 analog cameras
Total 9 Camera interface (mode=1) in one system

Operation
Press  to view the cameras one by one only during surveillance.

4.2.2 Mode=2, work associated with Outdoor station

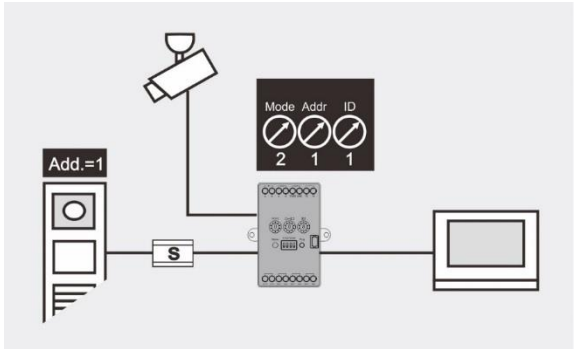


Fig. 3: Mode=2, work associated with Outdoor station

Rotary	Value	Note
Mode	2	Camera interface work associated with Outdoor station
Addr	1	Address of the associated Outdoor station, from 1-9
ID	1	ID can be set from 1 - 9 and should be unique.

Dip Switch 1~4	Turn to ON when a camera is connected.
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Capacity
Each Camera interface support 4 analog cameras
Total 15 cameras can be associated with each Outdoor station (including 2 cameras built in Outdoor station)

Operation
Press [2] to view the cameras one by one only during surveillance.

4.2.3 Mode=3, work associated with Guard unit

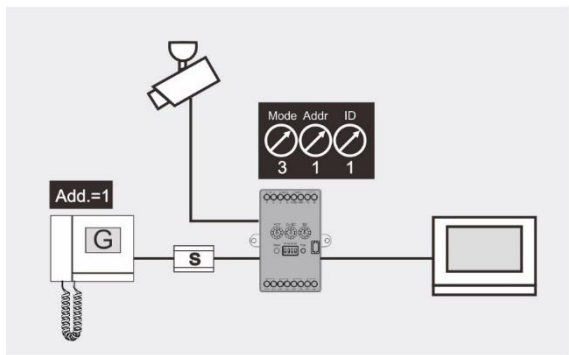


Fig. 4: Mode=3, work associated with Guard unit

Rotary	Value	Note
Mode	3	Camera interface work associated with Guard unit
Addr	1	Address of Guard unit, from 1-9
ID	1	ID can be set from 1 - 9 and should be unique.

Dip Switch 1~4	Turn to ON when a camera is connected.
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Capacity
Each Camera interface support 4 analog cameras
Total 15 cameras can be associated with each Guard unit

Operation
During communication, Guard unit can send the image to Indoor station by pressing the "Enable" button.

4.2.4 Mode=4, programming mode

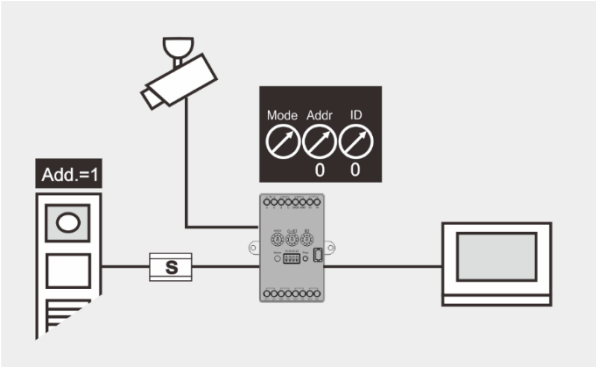


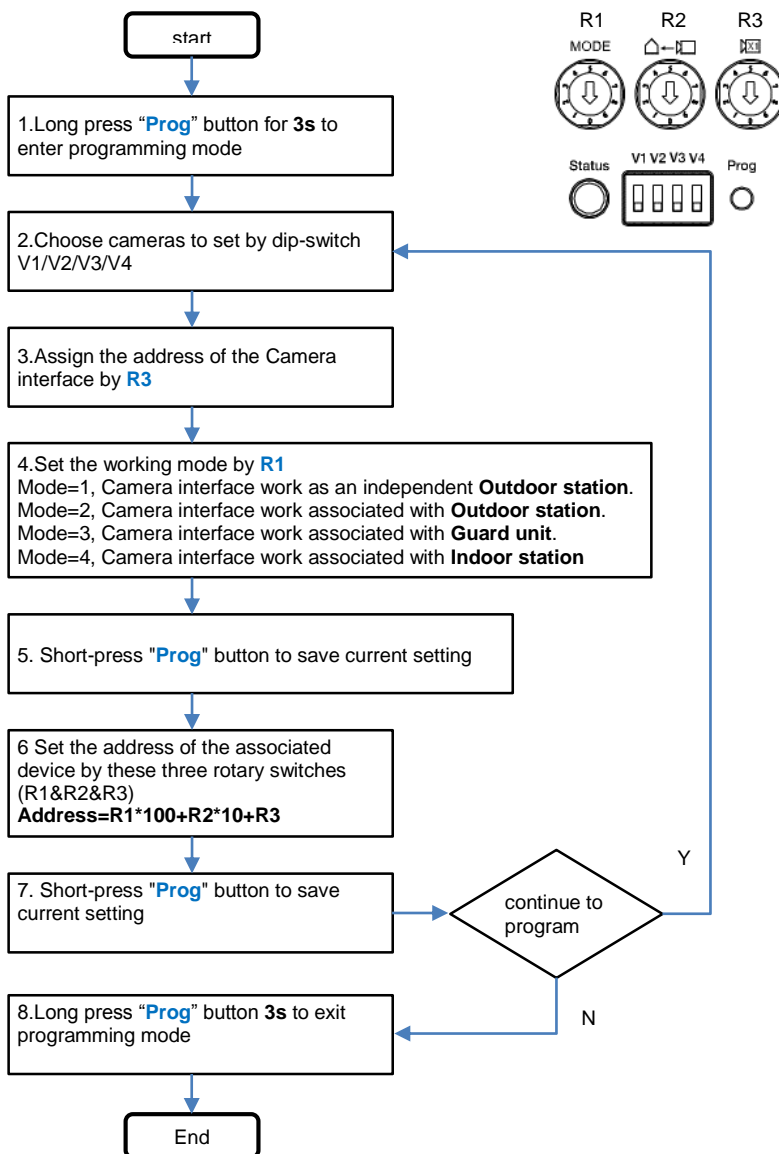
Fig. 5: mode=4, programming mode

Rotary	Value	Note
Mode	4	Camera interface work in programming mode
Addr	null	Camera interface mode, Camera interface address, associated device address can all be programmed by software.
ID	null	In mode=4, besides Camera interface and Guard unit, Camera interface can also be associated with Video indoor station. If Camera interface is associated with Video indoor station, ID should start from 1 to 9 sequently, For details, please find the chapter 4.3 Programming mode

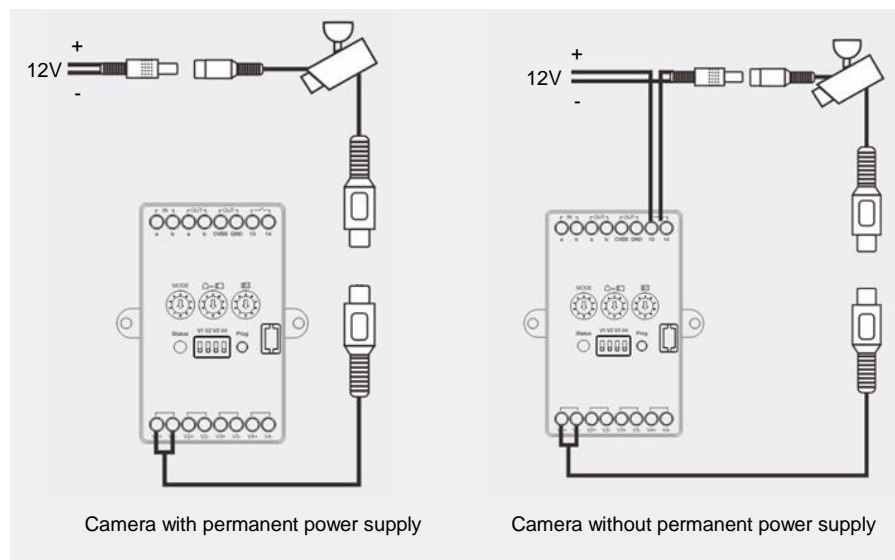
Dip Switch 1~4	Turn to ON when a camera is connected.
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Capacity
Each Camera interface support 4 analog cameras, each camera can be associated with different device (like Outdoor station, Guard unit,Video indoor station) separately
Total 36 cameras can be associated with each Video indoor station, each camera can be associated with 250 Indoor stations.

4.3 Programming mode



4.4 With & without permanent power supply



4.5 Video signal from 3rd party DVR

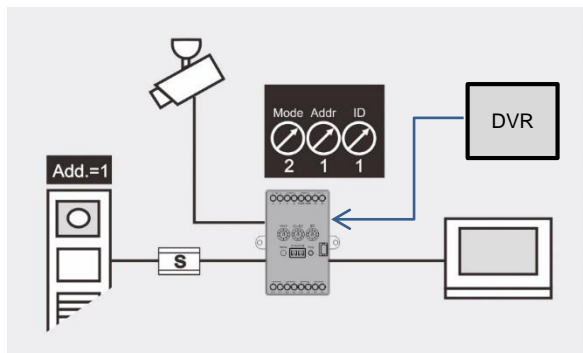


Fig. 6: Video signal from 3rd party DVR

Note:

- 1) DVR output can be one of inputs for Camera interface (when mode=1,2,3,4)
- 2) Each Camera Interface supports 4 DVR signals

4.6 Video signal to be stored to 3rd party DVR

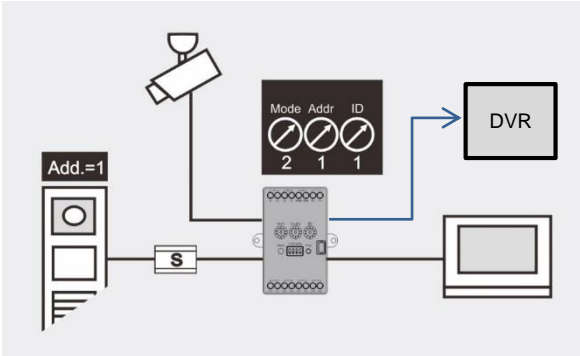


Fig. 7: Video signal to be stored to 3rd party DVR

Note:

- 1) Besides Camera interface sends the video to Video Indoor station, it also can send the video to DVR/TV through CVBS output port.
- 2) Each Camera Interface supports 1 CVBS output
- 3) After connect CVBS output to DRV/TV. There are 2 scenarios Camera interface will send the video to DVR.

When Camera interface mode=2, Video Outdoor station calls Video Indoor station;

When Camera interface mode=3, Guard unit presses 'Enable' button,

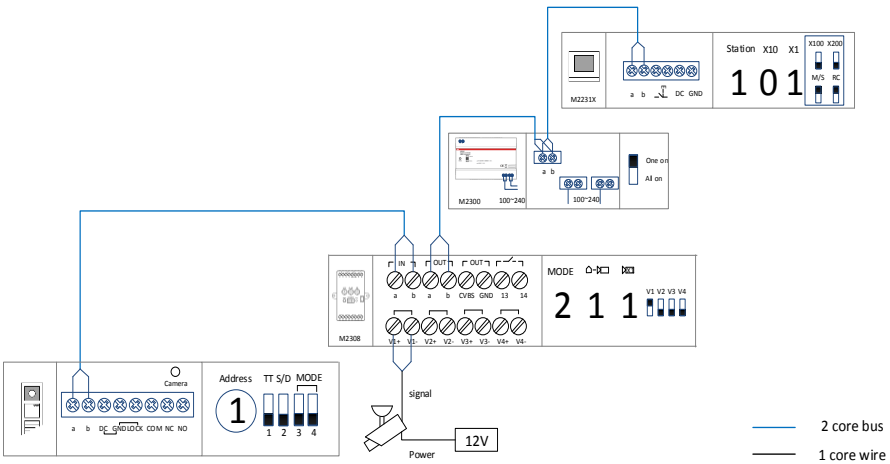
- 4) Camera interface doesn't send the video to DVR/TV during Video Indoor station surveillance.

5 Technical data

5.1 Overview table

Designation	Value
Single-wire clamps	2 x 0.28 mm ² - 2 x 0.75 mm ²
Fine-wire clamps	2 x 0.28 mm ² - 2 x 0.75 mm ²
Bus voltage	20~30V DC
Protection	IP30
Operating temperature	-25°C - +55°C -13°F - +131°F
Video input	1Vp-p, PAL/NTSC
Video output	1Vp-p@75Ω, PAL/NTSC
Camera interface to camera	Coax cable, Max 100m other cables, 10-50m
Size	77 x 61 x 25 mm

5.2 Device connection diagram



6 Mounting / Installation



Warning

Electric voltage!

Risk of death and fire due to electrical voltage of 100-240 V.

- Low-voltage and 100-240 V cables must not be installed together in a flush-mounted socket!

In case of a short-circuit there is the danger of a 100-240 V load on the low-voltage line.

6.1 Requirements for the electrician



Warning

Electric voltage!

Install the device only if you have the necessary electrical engineering knowledge and experience.

- Incorrect installation endangers your life and that of the user of the electrical system.
- Incorrect installation can cause serious damage to property, e.g. due to fire.

The minimum necessary expert knowledge and requirements for the installation are as follows:

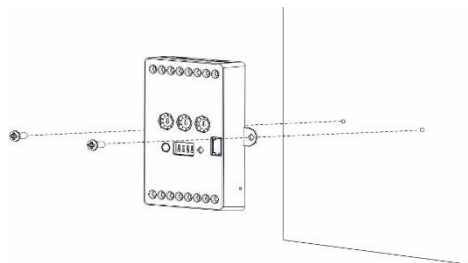
- Apply the "five safety rules" (DIN VDE 0105, EN 50110):
 1. Disconnect from power;
 2. Secure against being re-connected;
 3. Ensure there is no voltage;
 4. Connect to earth;
 5. Cover or barricade adjacent live parts.
- Use suitable personal protective clothing.
- Use only suitable tools and measuring devices.
- Check the type supply network (TN system, IT system, TT system) to secure the following power supply conditions (classic connection to ground, protective earthing, necessary additional measures, etc.).

6.2 General installation instructions

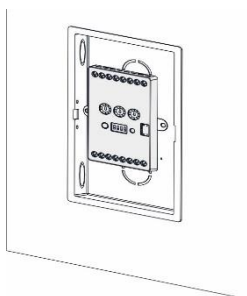
- Terminate all branches of the wiring system via a connected bus device (e.g., indoor station, outdoor station, system device).
- Do not install the system controller directly next to the bell transformer and other power supplies (to avoid interference).
- Do not install the wires of the system bus together with 100-240 V wires.
- Do not use common cables for the connecting wires of the door openers and wires of the system bus.
- Avoid bridges between different cable types.
- Use only two wires for the system bus in a four-core or multi-core cable.
- When looping, never install the incoming and outgoing bus inside the same cable.
- Never install the internal and external bus inside the same cable.

6.3 Mounting

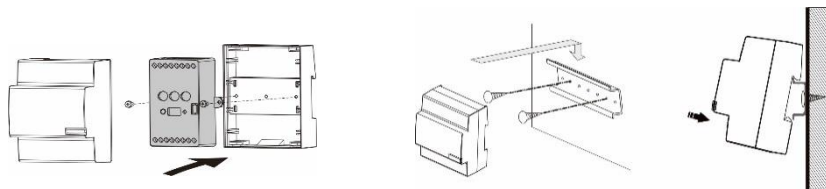
6.3.1 Surface installation



6.3.2 Flush mounted



6.3.3 DIN installation



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