GB2 TECHNOLOGY

USER MANUAL

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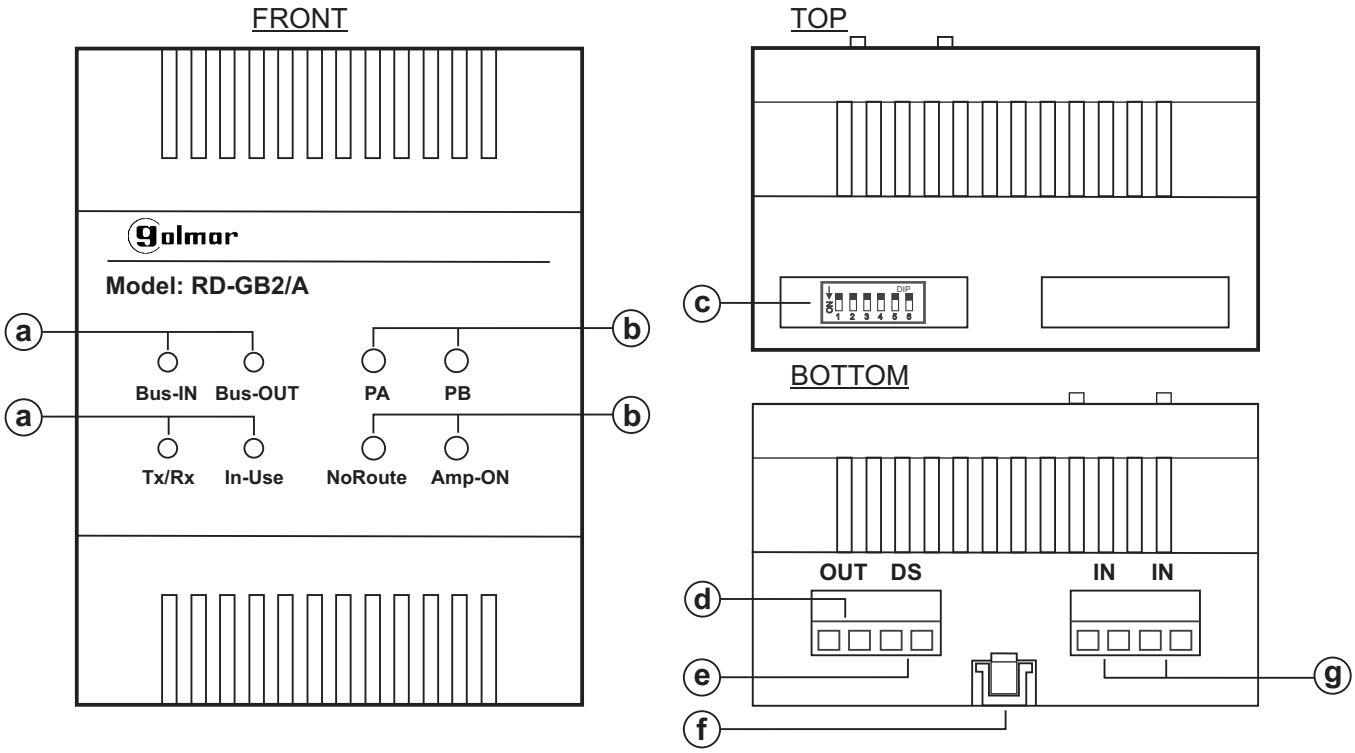
RD-GB2/A

GB2 Bus Amplifier/ Repeater

AWD260 REV. 12/2017

DESCRIPTION OF THE RD-GB2A BUS AMPLIFIER MODULE

Description:

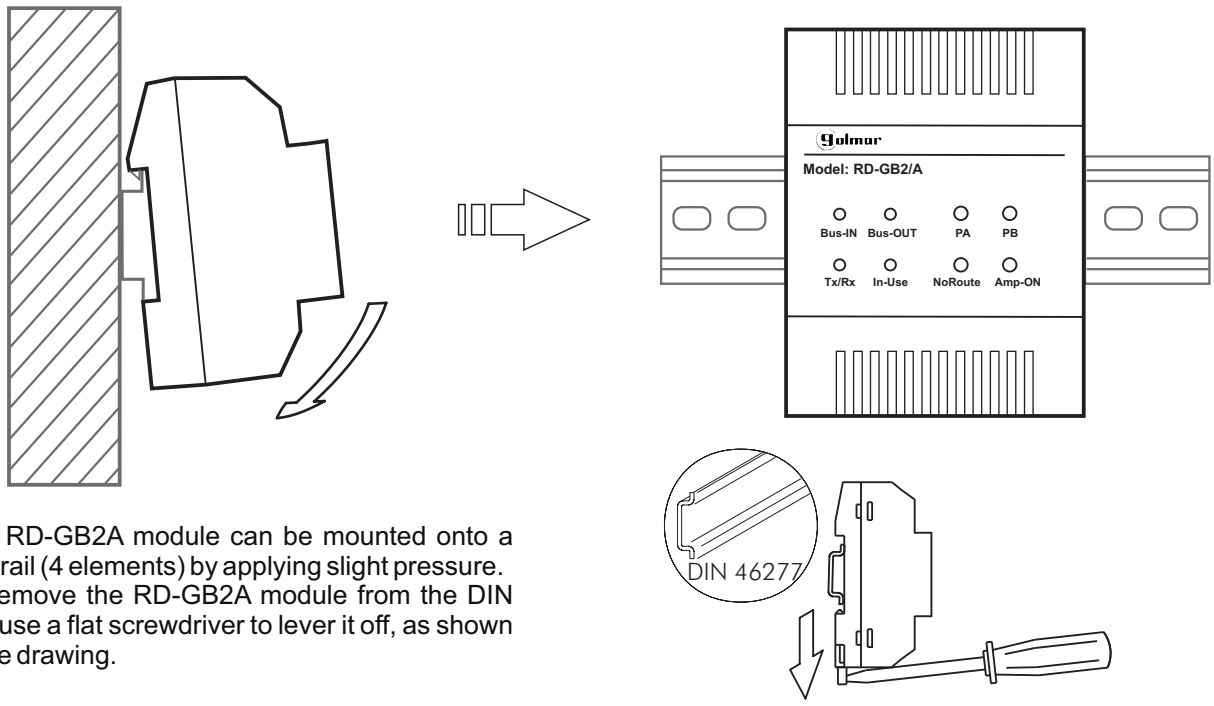


a. Status LEDs.
b. Configuration buttons
c. Configuration DIP switch.
d. Output terminals from the amplifier to the bus.
e. Interior door panel connection terminals (general entrance door panel system).
f. DIN rail latch release.
g. Bus input terminals.

INSTALLATION

Illustration of RD-GB2A Bus amplifier module installation:

Install the RD-GB2A module in a dry protected location free from the risk of dripping or splashing water.
Install the RD-GB2A module with an FA-GB2A power supply.



The RD-GB2A module can be mounted onto a DIN rail (4 elements) by applying slight pressure. To remove the RD-GB2A module from the DIN rail, use a flat screwdriver to lever it off, as shown in the drawing.

INSTALLATION

Description of the DIP switches:

The DIP switches of the RD-GB2A module enable configuration of one of the 3 operating modes, module address number and end of line.

- Repeater mode enables door panel bus or monitor bus distance to be increased when it exceeds 80 m.
- Router mode enables the installation to have up to 8 risers/columns.
- Gateway mode, enables an installation with one general entrance door panel and 7 buildings with interior door panels.

Configuring the operating mode:

Repeater mode:
DIP switches: 1 and 2 set to OFF.

(*) 

Router mode:
DIP switches: 1 set to ON and 2 set to OFF.

Gateway mode:
DIP switches: 1 set to OFF and 2 set to ON.

No function.

Configuring the address number on the RD-GB2A module installed:

(*) 

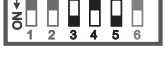
To configure the RD-GB2A module as No. 1: DIP switches 3, 4 and 5 set to OFF.
(1) -Button panel call addresses (0 to 31) for monitor address (0 to 31) respectively.
-Coded panel call addresses (1 to 32) for monitor address (0 to 31).
Note: Call address '32' on the coded panel calls the monitor with address '0'.

To configure the RD-GB2A module as No. 2: DIP switch 3 set to ON, 4 and 5 set to OFF.
(1) -Button panel call addresses (32 to 63) for monitor address (0 to 31) respectively.
-Coded panel call addresses (33 to 64) for monitor address (0 to 31).
Note: Call address '64' on the coded panel calls the monitor with address '0'.

To configure the RD-GB2A module as No. 3: DIP switch 3 set to OFF, 4 set to ON and 5 set to OFF.
(1) -Button panel call addresses (64 to 95) for monitor address (0 to 31) respectively.
-Coded panel call addresses (65 to 96) for monitor address (0 to 31).
Note: Call address '96' on the coded panel calls the monitor with address '0'.

To configure the RD-GB2A module as No. 4: DIP switches 3 and 4 set to ON and 5 set to OFF.
(1) -Button panel call addresses (96 to 127) for monitor address (0 to 31) respectively.
-Coded panel call addresses (97 to 128) for monitor address (0 to 31).
Note: Call address '128' on the coded panel calls the monitor with address '0'.

To configure the RD-GB2A module as No. 5: DIP switches 3 and 4 set to OFF and 5 set to ON.
(1) -Coded panel call addresses (129 to 160) for monitor address (0 to 31).
Note: Call address '160' on the coded panel calls the monitor with address '0'.



To configure the RD-GB2A module as No. 6: DIP switch 3 set to ON, 4 set to OFF and 5 set to ON.
(1) -Coded panel call addresses (161 to 192) for monitor address (0 to 31).
Note: Call address '192' on the coded panel calls the monitor with address '0'.

To configure the RD-GB2A module as No. 7: DIP switch 3 set to OFF, 4 and 5 set to ON.
(1) -Coded panel call addresses (193 to 224) for monitor address (0 to 31).
Note: Call address '224' on the coded panel calls the monitor with address '0'.

To configure the RD-GB2A module as No. 8: DIP switches: 3, 4 and 5 set to ON.
(1) -Coded panel call addresses (225 to 256) for monitor address (0 to 31).
Note: Call address '256' on the coded panel calls the monitor with address '0'.

IMPORTANT:

- Select a different address number for each RD-GB2A module.

(1) - Each address number of the RD-GB2A has 32 different door panel call addresses assigned for each RD-GB2A module addressed. For further details see pages 11-16.

(*) **Factory setting.**

Continued overleaf

INSTALLATION

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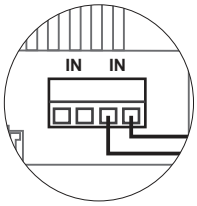
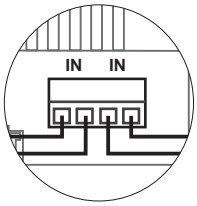
Configuring the end of line on the RD-GB2A module:

To configure the end of line of the RD-GB2A module:
DIP switch 6: Set the RD-GB2A module where the Bus cable ends (marked as 'IN' on the terminals) to ON.



(*) 

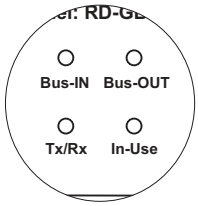
To configure the end of line of the RD-GB2A module:
DIP switch 6: Leave the intermediate modules in the OFF position.



(*) **Factory setting.**

Description of the status LEDs:

The RD-GB2A module has the following status LEDs:



Bus In:
LED on: When the bus cable is connected to the 'IN' terminal.

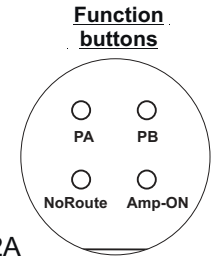
Bus-Out:
LED on: When the monitor bus of the RD-GB2A module is connected.

TX/RX:
LED blinking: When the door panel is in communication with an RD-GB2A module monitor.

In-Use:
LED off: When the RD-GB2A module is in standby.

Description of the function buttons:

Displaying video gain:



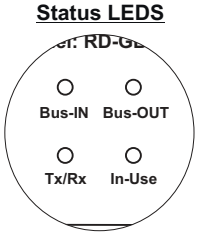
To see the level of gain of the RD-GB2A module, press button on one of the monitors connected to the RD-GB2A module to be displayed (the image of the door panel will be displayed on the monitor). Note: The image should be displayed throughout the process.

Step 1: Press button on one of the monitors connected to the RD-GB2A module that requires video gain adjustment; the 'In-Use' LED will illuminate.

Step 2: Press the 'NoRoute' button to show, through the status LEDs, the level of gain of the RD-GB2A module; see table:

Video gain

	Bus-IN LED	Bus-OUT LED	Tx/Rx LED
(*) Gain 1	ON	OFF	OFF
Gain 2	OFF	ON	OFF
Gain 3	ON	ON	OFF
Gain 4	OFF	OFF	ON
Gain 5	ON	OFF	ON
Gain 6	OFF	ON	ON



Note: Gain level from 1 to 6, with 1 the minimum value and 6 the maximum.

(*) **Factory setting.**

Continued overleaf

INSTALLATION

Continued from previous page.

Adjusting video gain:

To adjust the gain of the RD-GB2A module, press button on one of the monitors connected to the RD-GB2A module to be displayed (the image of the door panel will be displayed on the monitor). Note: The image should be displayed throughout the process.

Step 1: Press button on one of the monitors connected to the RD-GB2A module that requires video gain adjustment; the 'In-Use' LED will illuminate. (Note: RD-GB2A in gateway mode, establish communication with the general entrance door panel).

Step 2: Press button PA or PB to reduce or increase the gain level of the RD-GB2A module respectively. The status LEDs will indicate the modified gain level; see table:

Video gain

	Bus-IN LED	Bus-OUT LED	Tx/Rx LED
(*) Gain 1	ON	OFF	OFF
Gain 2	OFF	ON	OFF
Gain 3	ON	ON	OFF
Gain 4	OFF	OFF	ON
Gain 5	ON	OFF	ON
Gain 6	OFF	ON	ON

Note: Gain level from 1 to 6, with 1 the minimum value and 6 the maximum.

(*) **Factory setting.**

Step 3: Then, to save the selected gain value, press the 'NoRoute' button for 3 seconds; the 'In-Use' LED will blink.

Step 4: Press the 'NoRoute' button again for 3 seconds until the LED illuminates. This indicates that the RD-GB2A module is operating with the gain value set in the previous steps in 'fixed mode' (always).

Step 5: Check that the new gain value is correct. With the monitor video activated, press the 'NoRoute' button and check that the status LEDs indicate the required gain value (see video gain table in step 2).

Note: Repeat the procedure (steps 1 to 5) until the RD-GB2A module is set to the required video gain

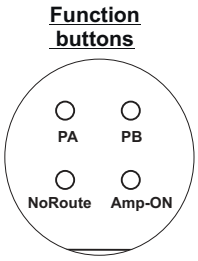
Set the video gain to 'fixed' or 'automatic' mode:

The RD-GB2A module has 2 operating modes for setting gain:

'Fixed' mode: The RD-GB2A module will always use the gain configured in the module.

Step 1: Press button on one of the monitors connected to the RD-GB2A module that requires video gain adjustment; the 'In-Use' LED will illuminate. (Note: RD-GB2A in gateway mode, establish communication with the general entrance door panel).

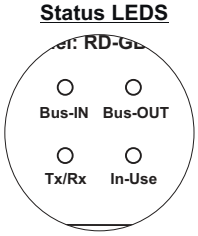
Step 2: Then press the 'NoRoute' button for 3 seconds and repeat this step until the 'In-Use' status LED illuminates.



'Automatic' mode: The RD-GB2A module adjusts the gain automatically when it connects to the system.

Step 1: Press button on one of the monitors connected to the RD-GB2A module that requires adjustment to 'automatic' mode; the 'In-Use' LED will illuminate.

Step 2: Then press the 'NoRoute' button for 3 seconds and repeat this step until the 'In-Use' status LED is blinking.



Default settings:

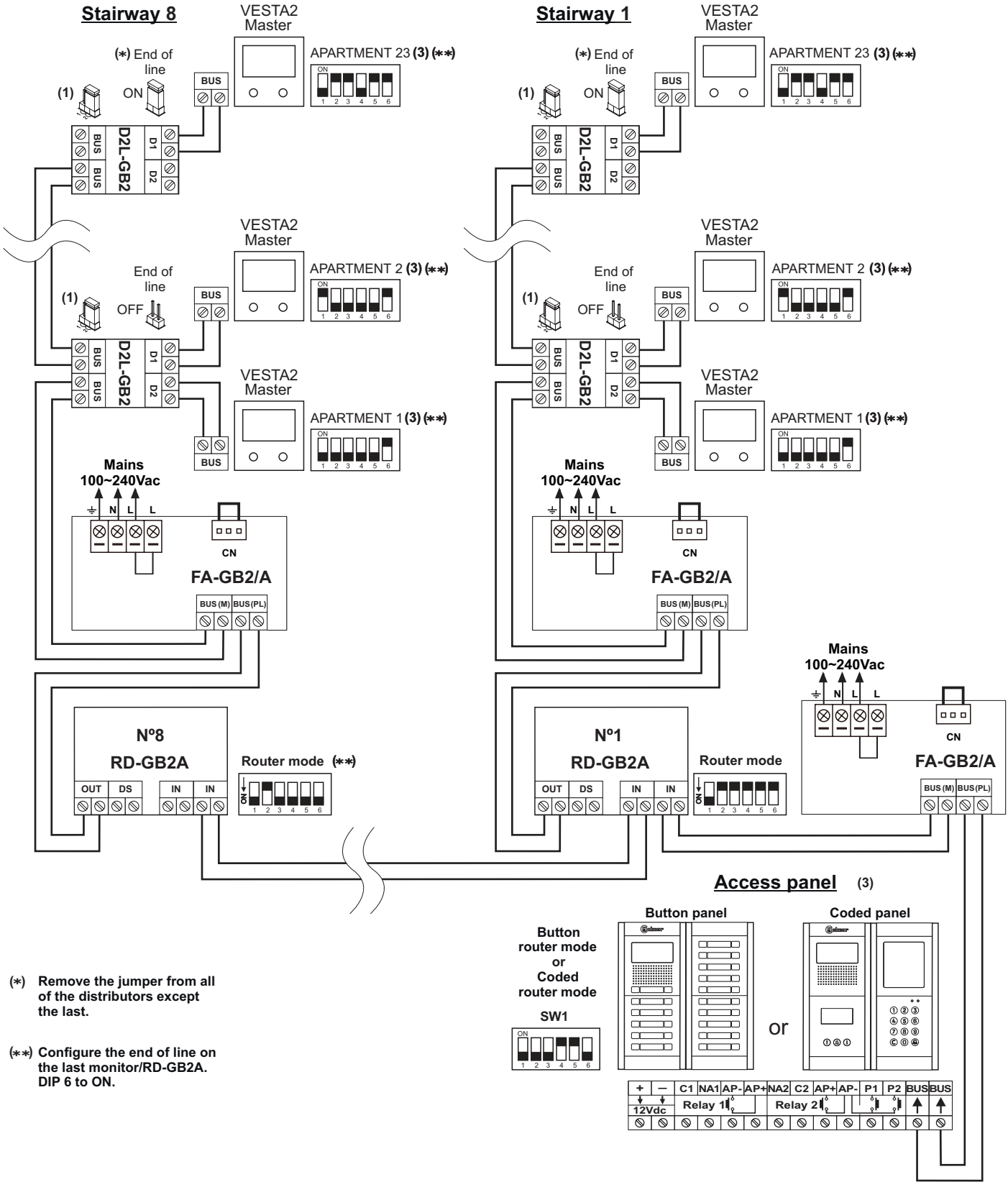
To use the default settings of the RD-GB2A module (level 1 gain and 'fixed' mode):

Step 1: Disconnect the module from the power supply.

Step 2: Reconnect the module to the power supply. Then, during the first 10 seconds, with the RD-GB2A module in standby, press the 'NoRoute' button for 3 seconds; the 'In-Use' status LED will blink once confirming that the module is now using the default settings.

WIRING DIAGRAMS:

Installation of a video door entry system with RD-GB2A 'router' mode (enables up to 8 risers/verticals).



(*) Remove the jumper from all of the distributors except the last.

(**) Configure the end of line on the last monitor/RD-GB2A. DIP 6 to ON.

Important:

(1) Leave the jumper in this position for 4,3" GB2 monitors of all of the D2L-GB2 distributors.

(2) N/A

(3) For description, installation, configuration and programming of the monitor and door panel, see the corresponding manual.