

Transmitters operate
on frequency
868 MHz



Specification :

Operating frequency:	868 MHz
Transmission power:	ERP<25 mW
Operating temperature:	from -10 °C to +50 °C
Operating range:	Determined by architectural and regulatory factors



1. THE DEVICE DESCRIPTION

The EX-BIDI shutter controller is designed to control shutters driven by 230 V AC single-phase motors. The control can be wireless with the EXALUS HOME control system or the TR7 control unit and wired with the shutter buttons. The IN1 and IN2 inputs are used for wired control. The inputs can operate in local or central control mode. In both cases, double and single shutter buttons can be used.

Thanks to the two-way communication between the EX-BIDI and the TR7 control unit, the current status of the shutter is indicated in the mobile application with the proper icon and the "closing level" parameter. The two-way communication also allows parameterisation of the controller and remote addition of transmitters (without physical access to the receivers). Beyond the control unit the EX-BIDI controller can be concurrently controlled with the EXALUS HOME and EXTA LIFE system transmitters.

More transmitters can be added to the receivers, which gives the possibility of independent control from several places at the same time. The EX-BIDI controller can be paired with only one TR7 control unit (it is not visible to other control units after pairing).

The receiver has the implemented function of remote software update from the TR7 control unit level - it is required to connect the control unit to the Internet network. An additional advantage of the controller is the ability to define up to three favourites.

IN1 - terminal for connecting the shutter button (shutter moves downwards by default)

IN2 - terminal for connecting the shutter button (shutter moves upwards by default)

Terminal to connect the shutter motor (downwards)

Terminal to connect the shutter motor (upwards)

Power terminals L, N

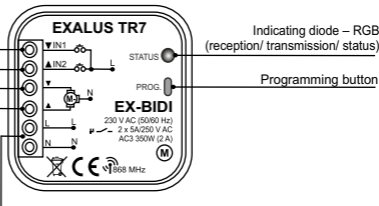


Fig.1

2. INSTALLATION

The EX-BIDI shutter controller is designed for installation in installation boxes. The housing dimensions enable installation both in flush-mounted boxes (minimum $\varnothing 60$) and surface-mounted boxes. In the case of flush-mounted installation, it is recommended to use deep or pocket boxes.

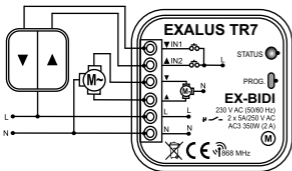
The device should be connected to the single-phase mains in accordance with the applicable standards. Activities related to installation, connection and adjustment should be performed by qualified electricians who are acquainted with the operating instructions and the functions of the device. For safety reasons, do not mount the device without a housing or with a damaged housing because this creates a risk of electric shock.

ATTENTION: Before starting the installation, make sure that there is no voltage on the connection cables. For installation, use a cross screwdriver with a diameter of up to 3.5 mm.

1. Disconnect the power supply circuit with a fuse, an overload miniature circuit breaker or a switch disconnecter connected to the appropriate circuit.
2. Use a suitable device to check the no-voltage state on the power supply cables.
3. Connect the cables to the terminals according to the connection diagram.
4. Install the EX-BIDI device in the installation box.
5. Switch on the power supply circuit and check that it is working properly.

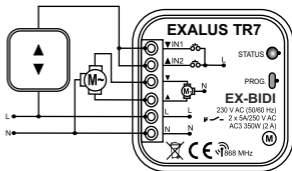
INSTALLATION NOTES

1. The controller cooperates with single-phase 230 V AC motors with mechanical or electronic limit switches. Do not connect more than one motor to a single EX-BIDI controller. The maximum load capacity of 350 W (2 A) for loads in AC3 class must be unconditionally observed.
2. In cable control, shutter reflective switches can be connected to the IN1 and IN2 inputs of the EX-BIDI controller. By default, the controller cooperates with double shutter reflective switches. In order to connect a single switch, the IN1 and IN2 inputs must be short-circuited.



Connection of a double shutter button

Fig.2



Connection of a single shutter button

Fig.3

3. The EX-BIDI controller is designed for indoor installation. In outdoor installation, the receiver should be placed in an additional hermetic box. During installation, make sure that the receiver is not exposed to direct contact with water and to work in the environment with increased humidity. The temperature in the place of installation should be in the range from -10 to +55°C.
4. After installing the EX-BIDI receiver, the correctness of its operation should be checked. In the case of cooperation with the control unit, it is necessary to pair the receiver with the control unit correctly (see point below).

3. ASSIGNING THE CONTROLLER TO THE EXALA CONTROL UNIT

1. Connect the controller to the power supply - the STATUS diode flashes green for a 10 seconds.
2. Log in to the TR7 application and click the DEVICE CONFIGURATION tab.
3. Select the New tab and press the "Search" button - after a few seconds the available controllers will appear on the list.
4. To add the selected controller to the application, pull down the menu of the given controller (by pressing the button of the bulb the given controller can be identified - the selected shutter will confirm movement in any direction), then press the + button to pair with the TR7 control unit.
5. The paired controllers will appear in the "Added" tab.

4. CONTROLLER AUTOCALIBRATION

ATTENTION: Before the autocalibration procedure starts, the shutter drive must have pre-set end positions. If they have not been adjusted, this should be done immediately. For Plug&Play drives, it is not required to adjust the end positions of the drive.

THE FIRST METHOD - CALIBRATION WITH THE USE OF THE PROG BUTTON:

1. Ensure access to the front panel of the controller.
2. After pressing the PROG button located on the EX-BIDI controller, the STATUS diode will first light up in blue and go off, then will light up in red and go off.
3. The next step is pressing the PROG button again - at this moment the diode starts to flash in blue and the shutter drive starts the calibration process.
4. After the proper calibration, the STATUS diode blinks in several colours and goes off.

At any time, it is possible to stop the calibration process by pressing the PROG button once (the STATUS diode blinks in multi colours) or any button on the local switch connected to the IN1 or IN2 inputs.

THE SECOND METHOD - CALIBRATION WITH THE USE OF THE EXALUS HOME APPLICATION:

1. Log in to the TR7 application and click the DEVICE CONFIGURATION tab.
2. In the "Added" tab, select the controller to be configured from the list.
3. After selecting the controller, pull down the further menu by clicking the ▼ icon and then select the settings icon (⚙).

4. After the window with the device name appears, click the "Next" button, then another configuration window will appear.
5. At the bottom of this window there is the "Automatic shutter calibration" button which should be pressed to perform the calibration procedure.

At any time, it is possible to stop the calibration process by pressing the "Stop the shutter" button. If, after the calibration, the operation directions are reversed, the directions should be changed (section 5 of the instructions) and it is necessary to carry out the calibration procedure again.

5. CHANGE OF DIRECTIONS WITH THE TR7 APPLICATION

1. Log in to the TR7 application and click the DEVICE CONFIGURATION tab.
2. In the "Added" tab, select the controller to be configured from the list.
3. After selecting the controller, pull down the further menu by clicking the ▼ icon and then select the settings icon (⚙️).
4. After the window with the device name appears, click the Next button, then another configuration window will appear.
5. At the bottom of this window there is the "Change directions" button which should be pressed.
6. After changing the directions it is necessary to repeat the procedure of the shutter autocalibration (section 4 of the instructions).

6. INTERMEDIATE POSITIONS

The EX-BIDI controller can induce the shutter movement to 3 available intermediate positions (25%, 50% and 75%) which are made with the use of the EXALUS HOME application.

7. RESETTING THE EX-BIDI CONTROLLER

1. Ensure access to the front panel of the controller.
2. Press the PROG button for a minimum of 3 seconds - the STATUS diode will light up in yellow and then go off.
3. Press the PROG button again, the STATUS diode will flash in yellow and then go off. The controller is reset.

