USER'S MANUAL

ETI

bedroom

Mo ✓	Daily overview	
Tu ✓	Weekly overview	
We ✓	06:30 ↑	07:30 ↑ ↓
Th ✓	On	
Fr ✓		
Sa ✗	🌡	25.50 °C
Su ✗		
✗	OK	←

**WIRELESS TOUCH
CONTROL UNIT**

BU-TS user manual

We want to thank you for your purchase of the BU-TS control unit, which is an element of wireless RF Control system.

BU-TS allows:

- *you to control many devices trough touch screen*
  - *heating control*
  - *dimming lights*
  - *switching of electrical appliances and equipment*
  - *blinds*
  - *a combination of detectors*
  - *function timers*
  - *Group control of electrical equipment*
- *everything with clear visualization*
- *wireless communication without the need for cabling*

ETI device name	ELKO device name
BU-SU	RFSA-11B
BU-DU	RFDA-11B
BU-SU Multi	RFSA-61B
BU-DU Multi	RFDA-71B
BU-WS2	RFWB-20
BU-WS4	RFWB-40
BU-KC4	RFK-40
BU-UT2	RFIM-20B
BU-SHU	RFJA-12B/230
BU-TCU	RFSTI-11B
BU-DAU	RFDAC-71B
BU-DEU	RFDEL-71B
BU-UT4	RFIM-40B
BU-TSD	RFTB-AWH-BWH
BU-TSW	RFTW-AWH-BWH-CWH
BU Pilot with LCD - black	RF Pilot / gray
BU Pilot with LCD - white	RF Pilot / white
BU keychain - black	RF KEY (black)
BU keychain - white	RF KEY (white)

Contents:

Before you start

The instruction manual is intended for installation and use of the equipment. Instructions are always included in the product packaging. Installation and connection can only make personnel with appropriate qualifications, in compliance with all applicable laws, who are perfectly familiar with this instructions and functions. Trouble free function is also dependent on transportation, storage and handling. In case of any signs of damage, deformation, malfunction or missing parts, do not install this product and return it to the seller. Product and its parts must be at the end of its lifetime handled as electronic waste. Before installation, make sure that all wires, connected parts or terminals are not live. During the installation and maintenance is necessary to follow safety regulations, standards, guidelines and special provisions for working with electrical equipment.

Overview of wireless RF Control devices

RF Control system

All actuators of the RF Control System can be controlled by wireless central unit and all transmitters of the system simultaneously.

CENTRAL WIRELESS UNIT

BU-TS-W
for surface mounting
100 - 230V AC or
adapter (external)
12 V DC

BU-TS-B
for mounting
in the installation
box
100 - 230V AC

CONTROLLER

BU Pilot with LCD
remote controller,
colours: white,
anthracite

TRANSMITTERS

BU keychain
4-channel remote
controller - key pendant

BU-WS2 /G
2-channel wireless
switch in the design
LOGUS⁹⁰

BU-WS4/G
4-channel Wireless
switch in the design
LOGUS⁹⁰

BU-UT2
universal transmitter module
under the switch or button
wall box installation

BU-UT4
universal transmitter module
under the switch or button
wall box installation

BLIND ACTUATORS

BU-SHUV
blind actuator
2 x 8A switching
relay protection
230V AC

TEMPERATURE ACTUATOR

BU-TCU
wireless switching actuator
with temperature sensor
in design to installation box,
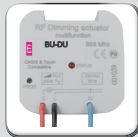230V AC

SWITCHING ACTUATORS

BU-SU
single channel
single function
switching actuator
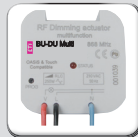1 x switching
contact 16 A
230V AC

BU-SU Multi
single channel
multifunction
switching actuator
1 x switching
contact 16A
230V AC

DIMMING ACTUATORS

BU-DU
single function
dimming actuator
1 light scene,
function OFF, 230V AC

BU-DU Multi
multifunctional dimming actuator
7 functions,
AC 230V / 250V

BU-DEU
multifunction dimming
actuator
7 functions, 230 V AC / 250VA
Dimmed load: R, L, C, LED, ESL

ANALOGUE ACTUATOR

BU-DAU
actuator with analog
output 0 (1) - 10 V
1 x switch contact 16 A
7 functions, 230V AC

Dimmable ballast
for dimming of fluorescent
lamps
supplied on request
with the product BU-DAU

Thermo-control
of heating valves
supplied on request
with the product BU-DAU

DETECTORS

JA-80P
JA-81M
JA-82M

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N

Characteristics of BU-TS

Control Unit of the wireless system RF Control - BU-TS provides intelligent control of the BU units.

It can be used for:
- *Central control of all units from one place*
- *Complete overview (visualization) of the current status of units (appliances / equipment)*

Features:
- *sends command to temperature, switching, dimming and shutter actuators*
- *accepts commands from the transmitters, actuators, temperature sensors and detectors*
- *processing programs for heating and regulation*

Design:
- *BU-TSD fits in the round installation box with a supply voltage of 100 - 230 V AC*
- *BU-TSW for surface mounting with power supply from the back side: 100 - 230 V AC or from the side (via jack): 12 V DC*
- *3.5 inch color touch screen - no mechanical buttons*
- *BU-TS frames in the base plastic (white, black) or luxurious design Logus^{90} (glass, metal)*
- *Color of the interframes - white, ivory, ice, mother of pearl, aluminum, silver*
- *Colors of the boxes (only for BU-TSW) - white, ivory, dark gray, light gray*

- *Backup time in case of power failure is 48 hours*
- *40 actuators and 30 OASIS detectors can be assigned to each BU-TS unit*
- *BU-TS can be combined with units of RF Control marked as Oasis & Touch Compatible*

OASiS & Touch Compatible
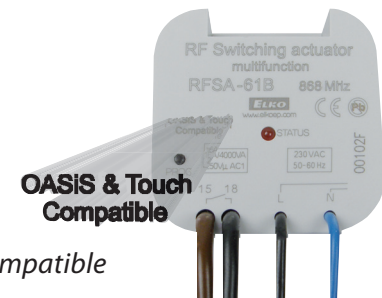
Technical parameters	BU-TSD	BU-TSW
Display		
Type:	color TFT LCD	
Resolution:	320 x 240 pixels / 262,144 colors	
Aspect ratio:	3 : 4	
Visible area:	52.5 x 70 mm	
Backlight:	active (white LED)	
Touch screen:	resistive 4-wire	
Display:	3.5″	
Control:	Touch sensitive	
Power supply		
Voltage / specific current:	100 - 230 V AC	from the back side 100 - 230 V AC from the side 12 DC *
Power consumption:	max. 5 W	
Power supply connector:	A1 - A2	
Control		
Range up to:	100 m	
Minimal range BU-TS – actuator:	1 m	
Frequency:	868 MHz	

Technical parameters	BU-TSD	BU-TSW
Connection	push-in	screwless terminal push-in or jack ⌀ 2.1 mm
Max. cross section of wires:	max. 2.5 mm^2 / 1.5 mm^2 with socket	
Operating conditions		
Operating temperature:	0 ... +50℃	
Storage temperature:	- 20 ... +70℃	
Protection:	IP 20	
Overvoltage category:	III.	
Pollution degree:	2	
Operating position:	arbitrary	
Installation:	installatin a box	wall box installation
Dimensions:	94 x 94 x 12 mm	94 x 94 x 24 mm
Weight **:	127 g	175 g
Standards:	EN 60730-1	

* adapter is included for BU-TSW

** weight with plastic frame
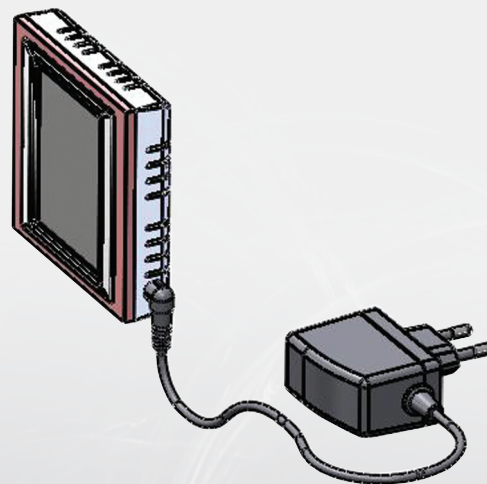
EN

BU-TSW

POWER SUPPLY OVER TERMINALS

A1
100 - 230V AC
A2
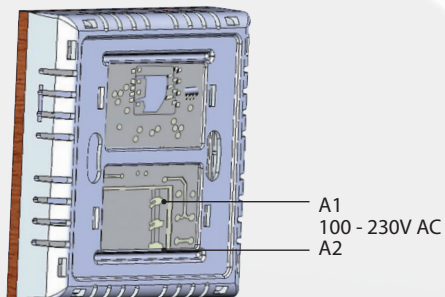
FITTING ON THE SURFACE
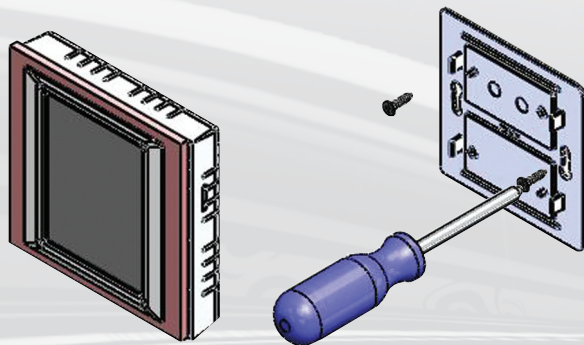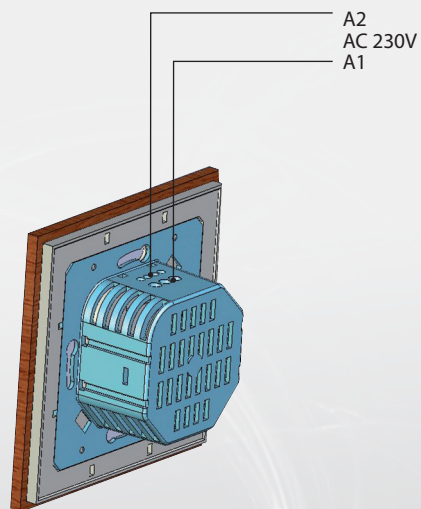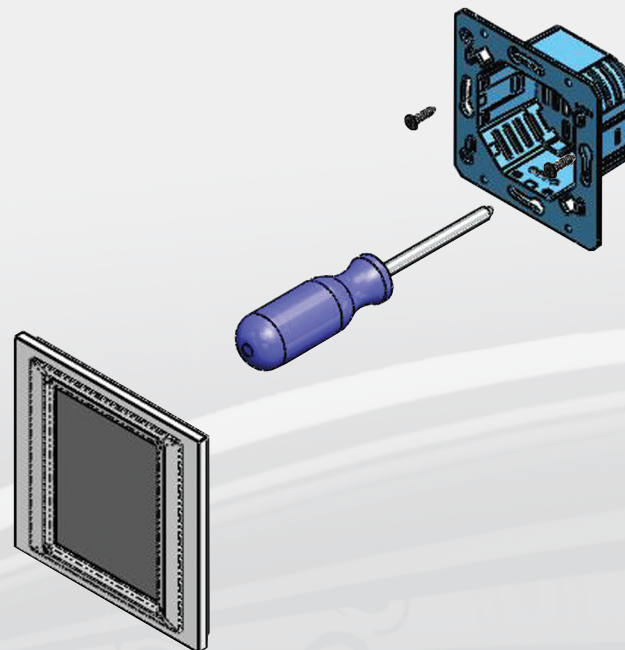
POWER SUPPLY OVER ADAPTER

☐ *adapter included with BU-TSW*

POWER SUPPLY OVER TERMINALS

A2
AC 230V
A1

FITTING TO THE INSTALLATION BOX

Description of Control Icons

Basic

i — BU-TS version Information and number of assigned units

settings

back to the home screen

step back

Setup Menu

scroll up

scroll down

OK confirm

yes/selected

no/not selected

+ add

— edit/remove

name/adressof the actor(s)

delete

Main menu

Temperature regulation

Switching

Dimming

Blinds

Detectors

Quick kontrol

Keyboard

. dot

abc letters

A/a small/capital letters

_ space

a/1 switch - the letters / numbers

OK confirm

c erase previous

Heating

temperature

Switching

switch ON

switch OFF

impuls

button

time function
- delayed switch on
- delayed switch off

0-10V regulation

Dimming

switch ON

switch OFF

dimming

light inclination

light declination

OK confirm
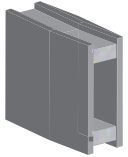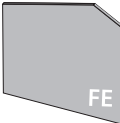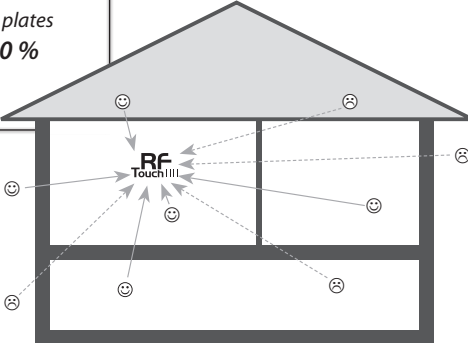
Blinds

rise blinds

lower blinds

1st Step – Placing of the BU-TS and BU units

Keep in mind that the radio signal range of RF installation depends ON building construction, materials and placing of all units.

Transmission of radio-frequency signals through various materials.

	Wooden structures with plasterboard plates **80-95 %**		standard glass **80-90 %**
	brick wall **60-90 %**		reinforced concrete **20-60 %**
FE	metal plates **0-10 %**		

2nd Step - Fill Installation Form

- device name that you want to manage (to create a menu)
- the names of units (for the correct classification of the group, for example: BU-SU Multi)- addresses of units (to identify the actuator, for example: 577515)

Installation form can be found at the end of this manual.

Name
E.g. BU-SU Multi

RF Switching actuator
multifunction
RFSA-61B 868 MHz
ELKO
www.elkoep.com
OASiS & Touch Compatible
STATUS
16A/4000VA 250V~ AC1
230 VAC 50-60 Hz
PROG
15 18 L N
00102F
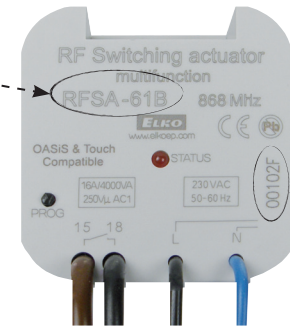
Adress
E.g. 577515

3nd Step - Set menus (create names)

Create a list of names of the controlled device in the **Settings / Menu (create name)**.

4rd Step – Programming

Programming of the RF units with BU-TS is carried out in the **Settings / Programming** menu.

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N

SETUP

Initial setup

☐ When the BU-TS is switched on for the first time, you will be automatically redirected to the display calibration screen. Touch screen can be controlled by the light touch (of about 0.5-1s) in the desired location. On the screen (Fig. 1) then appears cross in each corner of the screen, which need to be pressed twice. This will calibrate the device. The display then shows the icon ⧗ and then touch icon signalizing scanning of the actuators.

fig. 1
Display calibration
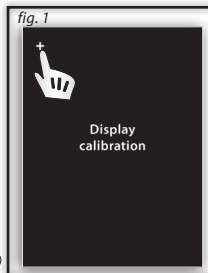
Content of the main screen

☐ date
☐ time (touch in the upper right corner of the display will switch between analog
   - digital clocks (Figure 2 - Figure 3)
☐ display at the bottom of the screen is customable, eg: heating mode, a often used device ...
Touch the clock area to enter the Main menu. If you want to get to the main menu from sleep mode, you need to touch the screen anywhere.

fig. 2
21. 3. 2010 15:00
Sunday

fig. 3
21. 3. 2010 15:00
Sunday
15:00
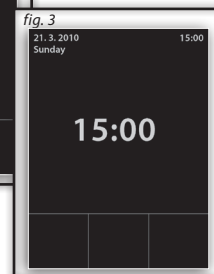
Main Menu / Settings

The settings menu can be opened by touch in the upper right corner screen on the symbol ⚙, and insertion of password (it´s setting from production – 1111) (fig. 4-6), which you can change everywhen.

Language ⚙

Selection of required Language - Figure 6. Save setting by pressing **OK** *.*

Date and time ⚙

Settings (Fig.7-8):
☐ *Date and Time*
☐ *automatic transition between winter / summer time (for time Zone GTM +01:00)*
☐ *Format settings hours (12h / 24h mode)*
To save Settings press **OK** *.*

fig. 4
Main menu
- Temperature regulation
- Switching
- Dimming
- Blinds
- Detectors
- Quick control

fig. 2
Setting
Insert password
☐ ☐ ☐
1 2 3
4 5 6
OK C

fig. 5
Setting
Language
Date and time
Menu (create menu)
Programming
Display
Others

fig. 6
Language
✗ Český jazyk
  English
✗ Slovenčina
✗ Język polski
✗ Magyar nyelv
✗ Limba romana
OK

fig. 7
Date
Su
Day 13
Month 1
Year 201
Set-u

fig. 8
Time
Hour 18
Minute 25
✓ Translation winter/summer time
✓ 24 hours mode
OK

Menu (create name)

Menu (create name) is used to add, edit or remove the names of the controlled device. In this menu (Figure 1) you need to first create your own device names for the sections you want to control.

Creating names is important for successful programming of the BU-TS. For each actuator, which is involved in the installation you have to create unique name.

The content of this menu is not set at the factory.

Menu (create name) / Add

Press the ✚ *Add* icon (Fig. 2) to show a selection of sections (Fig. 3):

☐ **Temperature regulation**   ☐ **Dimming**   ☐ **Blinds**   ☐ **Switching**   ☐ **Control**   ☐ **Speed**   ☐ **Detectors**

Choose the section where you want to add the device name and type your own text (max. 20 characters).

Example 1: If you want to control the blinds - Place the name to the section of the blinds (Fig.3-5).

Example 2: If you want to control a group of blinds together, first create all the blinds names in the blinds section and then create new name for group control in Quick control section.

E N

fig. 1

Setting
Language
Date and time
Menu (create menu)
Programming
Display
Others

fig. 2

Menu
✚ Add
— Edit
— Remove

fig. 3

Add
Temperature regulation
Switching
Dimming
Blinds
Detectors
Quick control

fig. 4

Add
↑
↓
Add next

fig. 5

Add next
window 1 room 1

.	abc	def
ghi	jkl	mno
pqrs	tuv	wxyz
A/a	_	a/1

OK   c
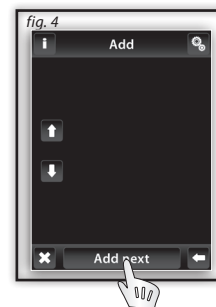
Menu (create name) / Edit

Edit button is used to change or modify the name in the created menu.

*Press the **Edit** icon ▬ (Fig.1), a menu appears, select the section in which you want to edit created name (Fig. 2). Mark selected name by touching it (Fig. 3) and then edit with displayed keyboard.*

Press **OK** *to confirm (Fig. 4). The modified name is stored.*

Menu (create name) / Remove

Remove button can delete unit name.

*Press the **Remove** icon ▬ (Fig. 5) following menu appears, select the section from which you want to remove the name (Fig. 6). Pick the device you want to delete by touching it.(Fig. 7) . Press* ✓ *to confirm the selection (Fig. 8). Selected name will be deleted from menu.*

fig. 1 — Menu: Add, Edit, Remove

fig. 2 — Edit: Temperature regulation, Switching, Dimming, Blinds, Detectors, Quick control

fig. 3 — Edit: entrance light, hall light, hall lamp, chandelier, room lamp, room ventilator

fig. 4 — Edit: entrance light / keyboard (. abc def ghi jkl mno pqrs tuv wxyz A/a _ a/1)

fig. 5 — Menu: Add, Edit, Remove

fig. 6 — Remove: Temperature regulation, Switching, Dimming, Blinds, Detectors, Quick control

fig. 7 — Remove: room 1 heater, room 2 heater, room 3 heater, kitchen heater, bedroom heater, dressing room

fig. 8 — Remove: Do you really want to remove? room 2 heater / YES NO

Programming ⚙

Programming is used to assign or remove the actuators / detectors to menu you created.
The **Programming** Menu can be entered by entering a password (default - **1111**).
Actuators are divided into sections for which they are intended. According to the actuator's type you have to select appropriate section - see table (eg programming actuator BU-TCU - find it in the Temperature regulation section).

RF Control actuators divisions				
Temperature regulation	**Switching**	**Dimming**	**Blinds**	**Detectors**
BU-TCU/G	BU-SU BU-DAU	BU-DU BU-DU Multi BU-DAU BU-DEU	BU-SHUV	JA-81M / 82M JA-80P

fig. 1

ℹ Setting ⚙

Language
Date and time
Menu (create menu)
Programming
Display
Others

fig. 3

ℹ Programming ⚙

Temperature regulation
Switching
Dimming
Blinds
Detectors
Quick control
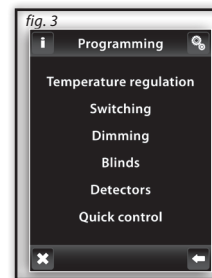
ˣ internal sensor
ˣˣ external sensor
* BU-SU Multi

15

SETUP

Programming / Assign new ⚙

It is used to assign a name to the actuator in the menu. In the required section (heating, dimming ...) select Assign new (Fig. 1). A list of selected sections actuators will be shown. (Fig. 2). Select the name of the actuator which you want to associate with the BU-TS. Enter the address of actuator you want to assign(Figure 3) as indicated on the actuator. Confirm with OK. From the menu you created, select the name to which the actuator will be assigned (Fig. 4).

- Only one name can be assigned for each actuator.

- When programming, actuator must be connected with the installation.

***Communication test** (Fig. 6) is used to detect and display the current status of the RF signal between the BU-TS and programmed actuator.*

*- Press **Start** (Fig. 7) to initiate the test, the current status of the signal is displayed in percentage.*

*- Press **Return** to Programming to get back to **main menu** of programming.*

fig. 1 — Temperature regulation — Assigned receivers / Assign new

fig. 2 — Assing new — BU-TCU

fig. 3 — BU-TCU — Insert address — 1 2 3 4 5 6 7 8 9 0 A B C D E F — OK C

fig. 4 — Location — room 1 heater / room 2 heater / room 3 heater / kitchen heater / bedroom heater / dressing room

fig. 5

fig. 6 — Programming — Do you want to make test of communication? — NO

fig. 7 — BU-TCU — Status of test 0/10 — Status of signal 0% — Start C
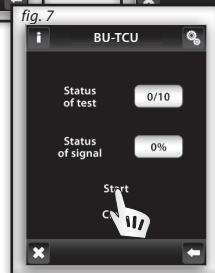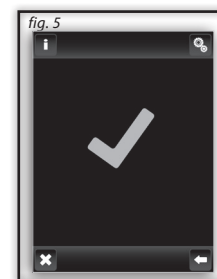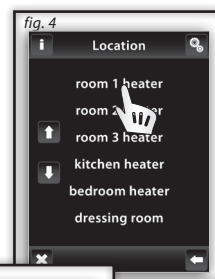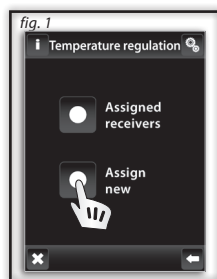
Programming / Associated Receivers

It serves to control or remove the actuator from the name of the menu you created.

*In the selected section (Figure 1 - Temperature regulation, dimming ...) select **Assigned receivers** (Fig. 2) a list of names specified in this section will be shown(Fig. 3). Touching on the name you will assign it to the actuator (Fig. 4).*

By pressing ⬛ *arrows you can check the name and address assigned to the actuator (Fig. 4, 5).*

By touching the name or address of the actuator, you can Remove the actuator (Image 7), Change the address (Image 8), or perform a Communications test (Image 9) and Pair with ....switching actuators, or internal relays (Image 10).

E N

fig. 7
Remove
Do you really
want to remove?
BU-TCU

obr. 8
BU-TCU
Insert address
1 2 3 4
5 6 7 8

fig. 9
BU-TCU
Status of test   0/10
Status of signal   0%

obr. 10
Pair with ...
room 1 heater
bedroom heater

obr. 11
Paired with ...
room 1 heater
bedroom heater
Int. relay

fig. 1
Programming
Temperature regulation
Switching
Dimming
Blinds
Detectors
Quick control

fig. 2
Temperature regulation
Assigned receivers
Assign new

fig. 3
Assigned
room 1 heater
room 2 heater
room 3 heater
kitchen heater
bedroom heater
dressing room

fig. 4
Assigned
RFSTI-11B/G

fig. 5
Assigned
12345A

fig. 6
RFSTI-11G IN
Remove
Change of address
Communication test
Pair with ...
Paired with ...

fig. 1

Programming

Temperature regulation
Switching
Dimming
Blinds
Detectors
Quick control

fig. 2

Detectors

Assigned detectors

Assign detector

fig. 3

Assing new

JA-81M / 82M
JA-

fig. 4

Searching ...

fig. 5

Searching

Detector found
JA-81M / 82M

fig. 6

Location

front door
rear door
terrace
kitchen window
bedroom window
room 1 window

fig. 7

Assigned

JA-81M / 82M

fig. 8

Assigned

12345A

fig. 9

JA-81M / 82M

Remove
Pair with ...
Paired with ...

Note: Two state JA-81M and JA-82M can be used in two ways:
- ☐ information about the status (open / close) - eg window is open(without pairing with a switching actuator)
- ☐ pairing with the multifunction switching actuator, which responds to the detector status (open / close)
  - eg light is switched on when you open the door.

Single state detectors (JA-80P) must always be paired with multi-function actuator.

Programming / Detectors / Pair with ...

Paired detector can be paired with the multifunction switching actuator from switching menu, (eg, motion detector with entrance light, Fig. 2-3).
One detector can be paired with up to 30 multifunction switching actuators.
*If the detector is paired with a switching actuator function of **delayed off** feature is automatically activated. When detector switch on, actuator switches connected device for preset time (2s - 60min). Time delay can be set in the main **Menu / Control** of the paired actuators (see page 26).*
The above method can be used to assign additional detectors. The BU-TS can be programmed with up to 30 detectors.

Note: The minimum distance between the detector and BU-TS is 1.5 meters.

fig. 1

Remove

Do you really
want to remove?

JA-81M / 82M

YES   NO

fig. 2

Pair with ...

entrance light
hall l
WC light
WC ventilator
alarm

fig. 3

fig. 4

Paired with ...

entrance light
hall

fig. 5

Remove

Do you really
want to remove?

entrance light

Y   NO
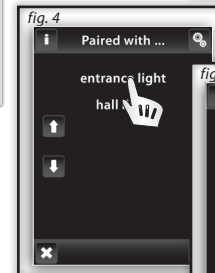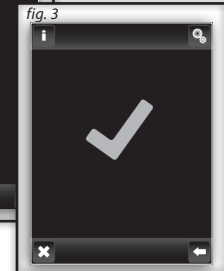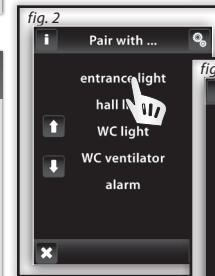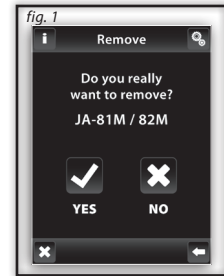
Programming / Quick Control

Quick control is used for creating a group command, where one-touch control multiple actuators.

For each name of group command you can assign a combination of up to 20 different actors.

Note: Quick control can be set only when all actuators are programmed in different sections of switching, dimming and blind control.

In the **Quick Menu** control(Fig. 1)choose name from list for the group command (Fig.2).

Select **Assign new** (Fig. 3) it will show group of units (switching, dimming and blind control). Select the section you want to assign for desired command name (Fig. 4). You can create a menu for your device names created in the desired section.

Select the name (Fig. 5) and further define the function (Fig. 6).

The unit will returns to display groups of units (switching, dimming and blind - fig.7), where you can continue with programming. When you select assigned receiver (Fig. 8) you can go to the menu to remove (Fig. 10) or change the device name

fig. 1 — Programming: Temperature regulation, Switching, Dimming, Blinds, Detectors, Quick control

fig. 2 — Quick control: dreem light, cinema scene, kitc, first floor heater, exterior light, garage

fig. 3 — Quick control: Assigned receivers, Assign new

fig. 4 — Quick control: Select the group of units for quick control — cinema scene: Switching, Dimming, Blinds

fig. 5 — Quick control: room lamp 1, room lamp 2, chandelier, kitchen light, kitchen fan, kitchen table lamp

fig. 6 — chandelier: Switch on, Switch off, Next functions

fig. 7 — Quick control: Select the group of units for quick control — cinema scene: Switching, Dimming, Blinds

fig. 8 — Quick control: Assigned receivers, Assign new

fig. 9 — Assigned: room 1 heater, room 2 heater, room 3 heater, kitchen heater, bedroom heater, dressing room

fig. 10 — room 2 heater: Remove, Setting

Note: The Remove function removes a group command name from the BU-TS unit memory. The actuators will remain in the memory.

Setup / Display (fig. 1-2)

- **Background:** *select the type of screen background color (black, blue, green, purple).*
- **Screensaver:** *the desired brightness (25%, 50%, 75%, 100%) will be activated after preset time since the last touch (15s, 30s, 1min, 3min).*
- **Sleep mode:** *set the time after which BU-TS screen unit goes to sleep - the screen goes dark (0min, 10min, 15min, 20min).*
- **Calibrating the display:** *cross appear in every corner of the screen, which need to be pressed twice. Calibration will be performed. Display calibration can also be started by resetting the unit or disconnecting the supply voltage from the unit; after connecting again, the BU-TS logo will appear on the display - hold the logo for more than 3s to activate calibration – touch logo longer than 3 seconds and calibration will be activated. After calibration, the display shows Home screen.*

fig. 1

fig. 2
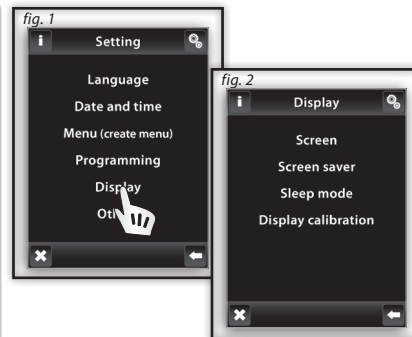
Setup / Others (fig. 3-4)

- **Change Password:** *Changes the password for **Setup** menu. Enter password - Figure 5 (default password 1111) will start the the screen to select a **new password** - where you type and confirm new password. Touch* OK *to save the new password (Fig. 6).*
- **Reset the device:** *To reset the password use 1234 (Fig. 7). This password cannot be changed. Password, and confirmation YES (Fig. 8) to return the BU-TS unit to the factory settings. BU-TS restarts without entering the password confirmation **OK**. (Settings remain unchanged)*

fig. 3

fig. 4

fig. 5

fig. 6

fig. 7

fig. 8

fig. 1

Others

Change password

Reset device

Block keyboard

View of menu

Temperature regulation

Main screen

fig. 9

Main screen

kitchen heater

1. choice

chandelier

2. choice

3. choice

fig. 2

Block keyboard

Aktivation

Lock and U...
is performed b...
click on th...
of lock in mai...

OK

fig. 3

21. 3. 2010   15:00
Sunday

fig. 4

View of menu

✖ Temperature regulation
✔ Switching
✔ Dimming
✖ Blinds
✔ Detectors
✖ Quick control

OK

fig. 5

Main menu

Switching

Dimming

Detectors

fig. 6

Main menu

exterior light

kitchen

childrens room

bedroom

hall

garage

fig. 7

Temperature regulation

Temperature units

Hysteresis of heating

Offset

Functions

fig. 8

Hysteresis of heating

Upper limit

0.50 °C

Lower limit

1.00 °C

0.50 - 5.00

OK

fig. 10

21. 3. 2010   15:00
Sunday

°C

23

fig. 1

Main menu

Temperature regulation
Sw...
Dimming
Blinds
Detector
Quick co...

fig. 2

Temperature regulation

kitchen
bedroom
livingroom

Control / Temperature regulation

Temperature regulation *Menu (Fig.1) is designed for setting controls over heating equipment. Touch the **heating** ⌇ you enter the menu of additional circuits (image 2).*
☀ *Standard mode* ☾ *Economic mode* ⊻ *Party mode* ❄ *Anti-freezing mode*
These modes offer a preset temperature, which you can adjust as you need for individual heated rooms (circuits). By activation of Standard, Economic, Party or Anti-freezing mode, the Temperature Regulation adjusts the set temperature. By touching one of the icons, you activate the chosen mode for the selected room (heating circuit).
❄ *The Anti-freeze mode is designed to maintain the minimum required temperature in a range of 5 - 15°C.*
⊘ *Heating program can be used to set the heating regime for the whole week.*
🧳 *Holiday mode is used for temporary interruption of the heating program or other heating mode.*
Note: Setting Units ° C / ° F and hysteresis for heating is done in the Settings / Other / Heating

Temperature regulation / Changing heating modes to Economy,Normal and Party modes

To edit the mode, first select the settings button 🔧 (image 3), then the relevant mode to modify (Fig. 4) - Standard, Economic, Party or Anti-freezing mode. The current temperature and the set temperature for Switching on the selected mode is displayed at the 🌡 icon. Touch Settings icon (Fig. 5) for adjusting the temperature. Arrows ⬆ / ⬇ can set the desired temperature (longer pressed arrow will accelerate changing of numbers) Touch **OK** *to save the set temperature (Fig. 6).*

fig. 3

Temperature regulation

kitchen
bedroom
livingroom

fig. 4

Temperature regulation

kitchen
...room
livingroom

fig. 5

Saving mode

Actual
25.00 °C

Set
13.00 °C

Setting

fig. 6

Saving mode

Set temperature
13.00 °C

21.00 °C

fig. 1

Temperature regulation

kitchen

bedroom

livingroom

fig. 2

Temperature regulation

kitchen

bedroom

livingroom

fig. 3

kitchen heater

Mo ✓	Daily overview
Tu ✓	Weekly overview
We ✓	06:30 — 07:30
Th ✓	On — Off
Fr ✓	
Sa ✓	25.50 °C
Su ✓	

OK

fig. 4

kitchen heater

Mo ✓	Daily overview
Tu ✓	Weekly overview
We ✓	06:30
Th ✓	
Fr ✓	On
Sa ✗	
Su ✗	

O...

fig. 5

kitchen heater

Mo ✓	00:00 - 06:29
Tu ✗	06:30 - 07:30
We ✗	07:31 - 15:10
Th ✗	15:11 - 20:30
Fr ✗	20:31 - 24:00
Sa ✗	
Su ✗	

fig. 6

kitchen heater

Mo ✓	18.00 °C
Tu ✗	25.50 °C
We ✗	20.00 °C
Th ✗	
Fr ✗	25.00 °C
Sa ✗	20.00 °C
Su ✗	

fig. 7

kitchen heater

Mo ✓	Daily overview
Tu ✓	Weekly overview
We ✓	06:30
Th ✓	
Fr ✓	On
Sa ✗	
Su ✗	

O...

fig. 8

kitchen heater

Mo
Tu
We
Th
Fr
Sa
Su

Temperature regulation / holiday mode

Holiday mode is used for temporary interruption of the heating program.

Touch **holiday mode** (Fig. 1) to open **Switch ON** screen where you set the date, month and year when your holiday mode should start. Confirm with OK (Fig. 2). **Switch Off** screen appears where you set the day month and year for the end of holiday mode. Confirm with OK.

If you touch Overview icon(Fig. 3) you can check list of holiday programs.

Note: Up to 5 Holiday modes can be assigned up to 5 time intervals. Times of programs may not overlap. During the holiday Economy mode is active.

Individual deletion of **Holiday Mode** is selected by touching bar belonging to the program(Fig. 4), then touch the bin icon 🗑 and program will be erased. If you do not mark any bar you can touch the bin icon 🗑 to remove all **holiday** arrangements.

fig. 1

fig. 2

fig. 3

fig. 4

CONTROL / SWITCHING
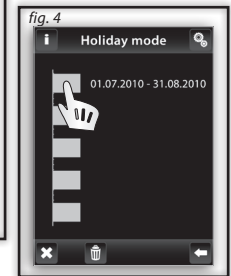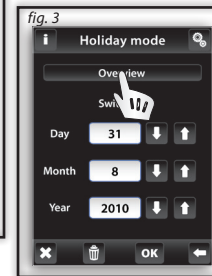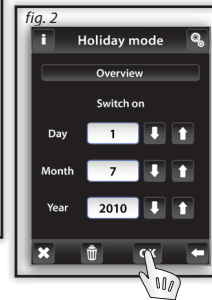
Main menu / Switching

Switching menu is for all the devices you want to switch. Touch Switching 👆 (Fig. 1) displays the names of your choice created in menu. Red / Green LED indicates contact status: ☐ *green -ON,* ☐ *red switched - off.*
Touch the desired name (Fig. 2) to show basic functions: ☐ *switch on* ☐ *switch off.*

Switching / Function

Press the Next functions button (Fig. 3) will show a selection of switching functions (Fig. 4). Other functions can be used only in combination with multifunction switch actuators - BU-SU Multi

☐ *Impulse –first touch ⊓ switch on, second one to switch off.*

☐ *Button – It is on as long as long you are holding button ⊓.*

☐ *Delayed switch on - touch 🕐 will begin to count preset time, after which the actuator switch on.*

☐ *Delayed switch off -touch 🕐 will start to count preset time after which the actuator will switch off.*

In the section Time settings all times for Delay on and Delay off can be set.

Time delay can be set in the range from 2 to 60 minutes. Touch-hour time interval (or minutes) to ⌃ indicate the information you want then change it (Fig. 5) with Arrows ⬆ / ⬇ .

Note: longer press of arrows will accelerate shifting of figures. Confirm time setting by pressing **OK**.

fig. 1

fig. 2

fig. 3

fig. 4

fig. 5

Main menu / Switch on / BU-DAU

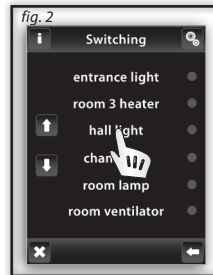Upon selecting the Switching on menu to which the BU-DAU actuator is assigned, the basic function are displayed:

☐ *Switch on*   ☐ *Switch off* .

Press shortly the arrows ⬆ / ⬇ *at the Regulation icon* ◣ *to set the desired value (Fig. 3). Touch* OK *to perform the command.*

fig. 1

fig. 2

fig. 3

CONTROL / SWITCHING

Switching / Weekly Program

Weekly program provides weekly settings for the automatic mode switching.

*Touch Weekly program icon (Fig. 1), setup menu will appear. Touch-hour time interval (or minutes) to mark information you want to change. Arrows ⬆ / ⬇ will set the time of **switch On** and **switch Off**.*

Note: longer press of arrow is accelerate shift of figures.

Touch the Sun-Sat icon will activate the program on a given day of the week (Fig. 2). ✓ - active for the day, ✕ - disabled for the day.

To confirm of selected programs touch OK. If you want to configure other Switching program continue programming.

Note: For one day you can create up to 5 switching programs. Programs must not overleap. Setting of program until midnight and over midnight - see page 37.

*Daily / Weekly Overview shows the daily / weekly overview of **switching programs**.*

*To delete a program in the **Daily overview** (Fig. 3) indicate bar you want to delete (Fig. 4) at then press the bin icon 🗑 to delete it. If you not select any of programed bars and press bin icon 🗑, you will remove all schedules in the day.*

Weekly overview (Figure 5-6) touch the bin icon 🗑 to clear all programs.

fig. 1a, fig. 1b, fig. 2, fig. 3, fig. 4, fig. 5, fig. 6
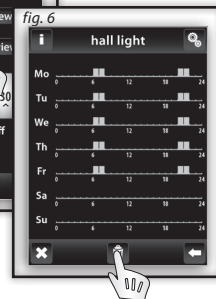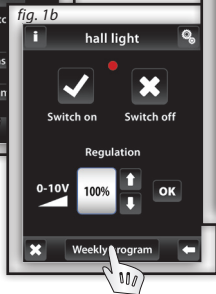
Main menu / Dimming

Dimming Menu is for all the lights where you want to control the brightness (load R L, C - 250V). Touch-Dimming ☀ *(Fig. 1)to display a selection of names you created in menu (Fig. 2).*
Red / Green LED indicates contact status: ▫ **green- On** ▫ **red -Off.**

Dimming/Functions

Touch the desired name to displays basic functions: ▫ **switch on** ▫ **switch off***. A short touch on the arrows* ⬆ */* ⬇ *beside icon Dimming* ☀ *will set the desired brightness (Fig. 3). Touch* OK *to confirm. In the case displayed icon* 🖐 *- level has been set by other controler (Fig. 4).*
***Further functions** (Fig. 5) can be used only in combination with multifunctional dimming actuators - BU-DU Multi and analog actuator BU-DAU.*
　　▫ **Smooth start** *- touch* 🌄 *will start smooth start-up for preset time.*
　　▫ **Smooth stop** *– touch* 🌄 *will start smooth run down for preset time.*
In the **Setting** *you can set time for* **smooth start** *and* **smooth stop***. Time can be set from* **2s to 30 minutes***. Touch the time interval hours (or minutes) to indicate* ⌃ *the information you want to change (Fig. 6). Arrows* ⬆ */* ⬇ *will set time. Confirm setting by pressing* OK *.*
Note: longer press of arrows will accelerate shifting of figures.

fig. 1

fig. 2

fig. 3

fig. 4

fig. 5

fig. 6
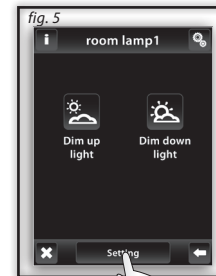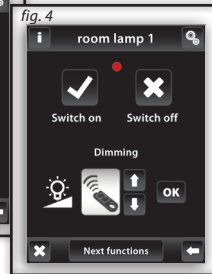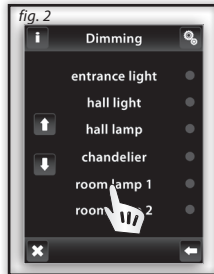
CONTROL / BLINDS

Main Menu / Blinds

Blinds Menu is designed to control all shutters, blinds, awnings, gates and garage doors that have a built-end switch.
*Touch the **Louvre** ▤ (Fig. 1)to display selection of names you created in menu (Fig. 2).*
Red / Green LED indicates device status: ▢ green- closed blinds   ▢ red – open blinds.

fig. 1

fig. 2

fig. 3

fig. 4
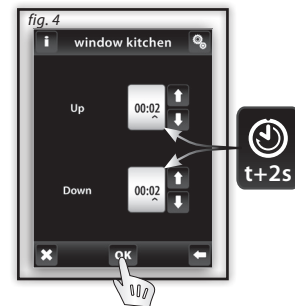
Blinds / Weekly program

Weekly program can adjust automatic weekly mode.

Touch **Weekly program** icon (Fig. 1), setup menu will appear. Touch-hour time interval (or minutes) to mark information you want to change. Arrows ⬆ / ⬇ will set the time of switch On ⬛ and switch Off ▤.

Note: longer press of arrow is accelerate shift of figures.

Touch the Sun-Sat icon will activate the program on a given day of the week (Fig. 2). ✔ - active for the day, ✖ - disabled for the day.

Confirmation of the selected program - OK. If you want to set additional blinds program to continue with programming.

Note: For one day you can create up to 5 blinds programs. Programs must not overleap (Fig. 5). Setting of program until midnight and over midnight - see page 37.

Daily / Weekly Overview shows the daily / weekly overview of switching programs.

To delete a program in the Daily overview (Fig. 3) indicate bar you want to delete 🗑 (Fig. 4) at then press the bin icon to delete it. If you not select any of programed bars and press bin icon , you will remove all schedules in the day.

Weekly overview (Figure 5-6) touch the bin icon 🗑 to clear all programs.
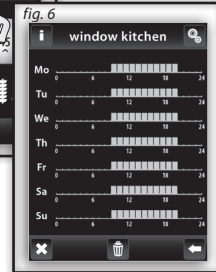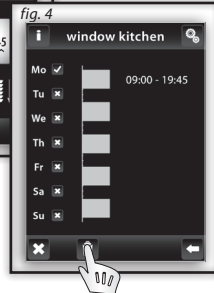
Note: Setting the Inversion function: touch ⬛ / ▤ in the Weekly programme to set the initial movement of the roll-up blinds (Fig. 7).

fig. 1

fig. 2

fig. 3

fig. 4

fig. 5

fig. 6

fig. 7

E
N

Main Menu / Detectors

*The menu **Detectors** is used for the visualisation and switching of devices using detectors.*
*By touching the option **Detectors** (Fig. 1) you will display the list of names on the detector menu that you have created (Fig. 2).*

fig. 1

fig. 2

Double State Detectors

Double state detectors (JA-81M - doors; JA-82M - windows) feature state visualisation:
    ◻ *Green – Off state*   ◻ *Red - On state.*
JA-81M and JA-82M detectors may be used in two ways:
  ◻ *Information regarding the state (On/Off) - e.g. open window (without pairing with the switching actuator)*
  ◻ *Pairing with the multifunctional switching actuator (On/ Off) - e.g. light switched on when door opened. By touching the name of the detector you will display the name of the switching devices with which the detector is paired. By pressing the name of the switching device you will display the selection (Fig. 4):*

On state (neutral):
Off state (alarm):
       ◻ *Switch off - switched off without delay.*
       ◻ *Delayed run out – switches off after the time period set in the switching settings.*
       ◻ *Switch on - switches on without delay.*
       ◻ *Delayed onset – switches on after the time period set in the switching settings.*
Confirm by pressing **OK** *(Fig. 4).*

Note: The time delay is set for the paired actuator.

fig. 3

fig. 4

Single State Detectors

Single state motion detectors JA-80P do not feature state visualization and they are designed for pairing with the multifunctional switching actuator. By touching the name of the detector you will display the name of the switching actuator with which the detector is paired. Note: The function of Delayed Switch Off is automatically allocated to the detector. The time delay is set for the paired actuator.

fig. 1

	Main menu	
	Temperature regulation	
	Switching	
	Dimming	
	Blinds	
	Detectors	
	Quick control	

fig. 2

	Quick control	
	dreem light	
	cinema...me	
	kitchen	
	first floor heater	
	exterior light	
	garage	

fig. 3

	dreem light	
	Activate	Deactivate
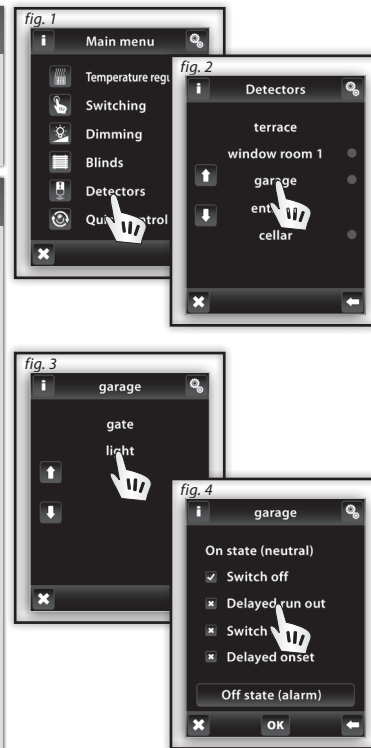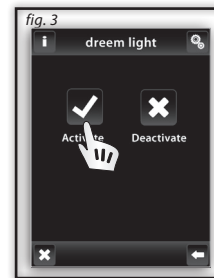
BU-TS Unit Warnings

Warning is displayed in case of incorrect or incomplete entry.

Warning	Procedure
Up to 40 rooms may be defined.	no more than 40 device names may be entered
Saving failed.	repeat entry
Delete failed.	repeat entry
No unit allocated.	allocate the requested actuator
Two time programmes overlap within a single day.	enter new settings
No time programme available within a single day.	no other programme can be entered
No day selected.	enter new settings
Switch on time may not exceed the switch off time.	enter new settings
Unit already allocated to the room. Select another room.	only one actuator can be allocated to one name of device (outside Quick Control)
This room has already been defined in the group.	enter a new name
The address has already been selected in the unit list. Choose another address.	enter correct information
The address information must be complete.	enter correct information
xxx displayed instead of temperature.	actuator not programmed, actuator/sensor defect, communication failure
Up to 40 units may be defined.	no more than 40 units may be entered
The switch on date must be different from the switch off date.	enter new settings
The switch on date must not exceed the switch off date.	enter new settings
All 5 programmes are engaged.	no other programme can be entered

BU-TS Unit Warnings

Warning	Procedure
No unit allocated to the room.	allocate actuator
This group has already been allocated.	enter new settings
Display incomplete - control impossible.	calibrate the device (disconnect the power supply, after reconnecting hold the logo BU-TS, finish the calibration by touching twice the cross signs that appear in each corner of the screen)
EPROM memory error!	contact the manufacturer
RTC circuit error!	contact the manufacturer
AT45 circuit error!	contact the manufacturer
Setting of program until midnight and over midnight - at the time of 00:00 there isn´t any action on the actuator.	- setting of time over midnight : set the required "switch ON" time and set the required "switch OFF" time on 00:00, next day set the switch ON" time on 00:00 and set the required "switch OFF" time.
	- setting of time until midnight: set the required "switch ON" time and set the required "switch OFF" time on 23:59

Have you lost the password?	please ask the manufacturer for information about further steps

General Information

With consideration to the transmission of the RF signal ensure that BU components are suitably located in the building where the device is to be installed. The RF Control system must only be installed in indoor areas. The device has not been designed for outdoor use or use in moist environment, it must not be installed in metal distribution boxes and plastic distribution boxes with metal doors as this would prevent the transmission of the radio frequency signal. RF Control is not recommended for the control of devices providing for vital life functions or for the control of risk devices such as pumps, electrical heaters without heat regulators, lifts, pulleys etc. - radio frequency transmission could be hampered with an obstacle, interfered with, the transmitter battery may become depleted etc. thus disabling the remote control. Not suitable for use in industrial environment.
Do not expose to extreme temperature changes. In case of extreme temperature changes allow approx. 2 hours prior to installation for the BU-TS to adjust to the temperature of the installation location. This will prevent condensation of moisture in the device and the occurrence of a potential short circuit.
Keep flammable materials away from the device.

The graphic indication of the contact / device status (red/green LED) is only for information and may be influenced by the amount of processed information or the combination of more BU-TS and BU Pilot with LCD control units.

Safety functions in BU-TCU actuator: the actuator disconnect the output in case of an accidental communication failure exceeding 25 minutes.

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N

Installation Form

Serial no.:	Description / Name of the controlled device	Actuator name	Actuator address
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			

Serial no.:	Description / Name of the controlled device	Actuator name	Actuator address
21.			
22.			
23.			
24.			
25.			
26.			
27.			
28.			
29.			
30.			
31.			
32.			
33.			
34.			
35.			
36.			
37.			
38.			
39.			
40			

E N

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