

COOPERATION WITH SEVERAL CONTROLLERS EFC-02

- Application EFC-02 is prepared to work with a greater number of controllers working in the local network. Such situation is possible in the case of large objects.
- The application automatically searches the start controllers working in a local network. If the number is bigger than > 1 it shows a list of active controllers. Controllers are differentiated known by their names. User by pressing the "Connect" selects the controller to which he wants to be logged.
- After selecting appears login window and then you need to enter your user name and password. If you already saved your login in the application it automatically goes to the main window.

SWITCHING BETWEEN THE CONTROLLERS

- For easy switching between several controllers working in the same local network server bookmark "Switch Controller" available below the icon "Configuration". Switching between controllers is available to users in the "admin" and "user".
- The procedure is analogous to this as described in the "Collaboration with several controllers."

SOFTWARE UPDATE OF CONTROLLER

Software updates in the EFC-02 is made from a PC.

In order to update the software you need:

1. Download the current version of the software from the www.zamel.com or www.extafree.pl.
2. Connect the controller EFC-02 into a PC's USB port.
3. Controller will report to the system as external memory by ZAMEL UPGRADE DISC
4. In order to update the software, remove the file *.bin directory located on the ZAMEL UPGRADE DISC and then copy a new file.
5. After finishing copy process you need disconnect the controller from the PC.
6. The software is updated.

ACTIVE TABS IN THE PROGRAM FOR EFC-02

- TRANSMITTERS**
Collection of all virtual transmitters used to control receivers of EXTA FREE system what was installed in your house. The appearance of transmitters alludes to physical transmitters system.
- HOUSE**
Allows you to split the whole house system level - living room - the device. Tab allows for simple and clear management of all the devices in the house to associated with the receivers EXTA FREE.
- SCENES**
Allows you to define the specific sequence of events that you want to performing simultaneously or set delays. Scenes can be launched from the application or physical transmitter EXTA FREE..
- TIMED OPERATION**
Allows you to define the specific sequence of events that you want to perform at a specific time, day of week, month, or sequentially. Timed operations bring on automatically level of controller.
- DETECTORS**
Tab enables to preview status or values derived from the registered application of the radio detectors: temperature, illuminance, flooding, motion, etc.
- CONFIGURATION**
Tab allows you to enter basic settings configuration associated with users, network parameters, the remote access, language settings, etc.

LIMITATIONS

Limitations of the tabs: TRANSMITTERS / HOUSE/SCENES / TIMED OPERATIONS / DETECTORS

The maximum number of transmitters to define the tab without limitation TRANSMITTERS	Unlimited
Maximum number of devices to define tab HOME	Unlimited
Maximum time for waiting key code	during the cloning operation press "END"
Maximum events (codes) creating a single stage	10
Maximum number of scenes can be defined in the tab without limitation SCENE	Unlimited
Maximum number of scenes in progress	20
Maximum events (codes) creating single TIMED OPERATIONS	10
Maximum number of functions can be defined in the tab TIMED OPERATION – globally for all users	40
Setting delay time	0 to 99 sec
Settings until you press	0 to 99 sec
Maximum number of detectors to define the tab DETECTORS	50
Maximum waiting time for sensor code during operation of adding detectors	press "END"

WARRANTY CARD

There is 24 months guarantee on the product

1. ZAMEL Sp. z o.o. assures 24 months guarantee for the product.
2. The manufacturer's guarantee does not cover any of the following actions:
 - a) mechanical damage during transport, loading / unloading or under other circumstances,
 - b) damage caused by incorrect product mounting or misuse,
 - c) damage caused by unauthorised modifications made by the PURCHASER or any third parties to the product or any other devices needed for the product functioning,
 - d) damage caused by Act of God or any other incidents independent of the manufacturer - ZAMEL Sp z o.o.
 - e) supply sources (batteries) included in the device during selling (if they are included).
3. The PURCHASER shall lay any claims in writing to the dealer or ZAMEL Sp. z o.o.
4. ZAMEL Sp. z o.o. is liable for processing any claim according to current Polish legislation.
5. ZAMEL Sp. z o.o. shall process the claim at its own discretion: product repair, replacement or money return.
6. The manufacturer's guarantee is valid in the Republic of Poland.
7. The PURCHASER's statutory rights in any applicable legislation whether against the retailer arising from the purchase contract or otherwise are not affected by this warranty.

Salesman stamp and signature, date of sale

EXTA FREE CONTROLLER EFC-02 MINI

MANUAL INSTRUCTION

exta free

ZAMEL Sp. z o.o.

zameL

ul. Zielona 27, 43-200 Pszczyna, Poland
Tel. +48 (32) 210 46 65, Fax +48 (32) 210 80 04
www.zamel.com, e-mail: marketing@zamel.pl

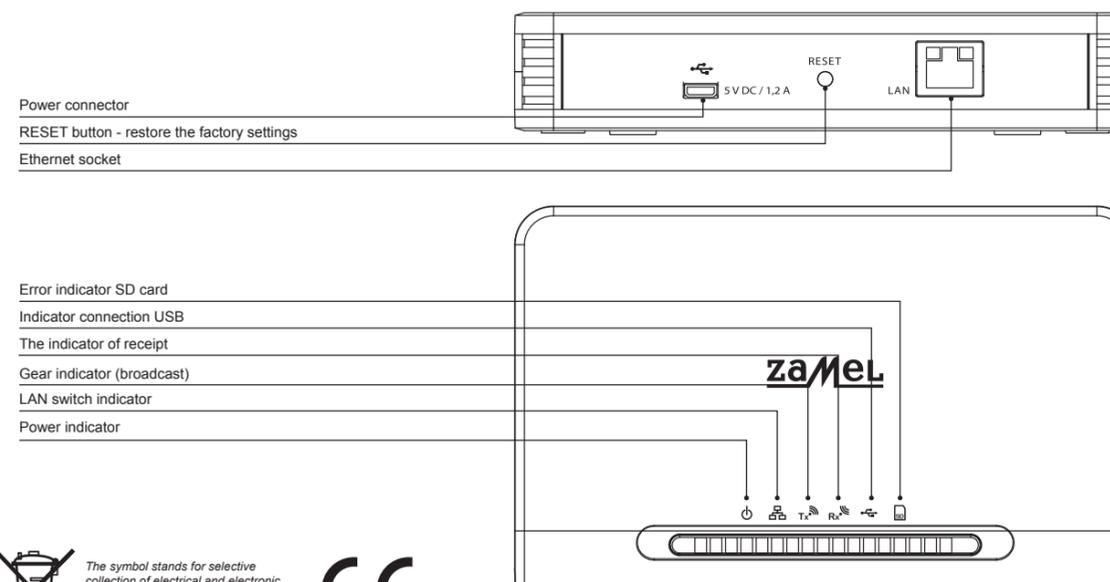
THE DESCRIPTION

Controller EFC-02 Mini after connection with the Wi-Fi router gives you the opportunity to control all of the receivers of EXTA FREE system from the level of the mobile device. Apart from the function of "virtual" transmitters controller EFC-02 Mini has the possibility of realization SCENES, THE TIME FUNCTIONS and the preview state of sensors. All functionality of controller is included in the plastic case with leaded atop the LED panel with signalizations. A communication system carried out with a receiver through a radio frequency of 868.32 MHz. The controller is connected to the Wi-Fi router using a LAN cable by completed RJ45 plug. Setting and operation via the free application installed on your mobile device. EFC-02 is designed for control within the local network. Remote access is available only to users who have constant access to an IP address and has appropriate redirections on the router.

TECHNICAL SPECIFICATIONS

EFC-02 Mini	
Nominal supply voltage:	5V DC / 1.2 A - standard of Micro USB
Nominal power consumption:	1.6 W
The type of battery to sustain the clock operation:	CR2032
Durability of battery:	5 years
Communication system components of EXTA FREE:	Radio f = 868 MHz, unidirectional
Total radio modules:	1
Range:	Up to 250m in open area
Possibility to increase the range:	Yes - via retransmitter RTN-01
Possibility to connecting an external antenna:	No
Communication with mobile devices:	802.11 a / b / g / n - pursued through the connection with the Wi-Fi router
Connectors:	1 x RJ45 Ethernet port, 1 x Micro USB B 2.0
Firmware upgradeable:	Yes - via USB port
Remote access service:	Only for users with fixed external IP address
LEDs:	6 x LED
Operating temperature:	-10 to + 55 ° C
Position:	free
Protection degree:	IP20 (EN 60529)
Protection class:	III
Dimensions:	160 x 100 x 32 mm
Compliance with the standards:	PN-ETSI EN 300 220-1, ETSI EN 300 220-2

THE APPEARANCE

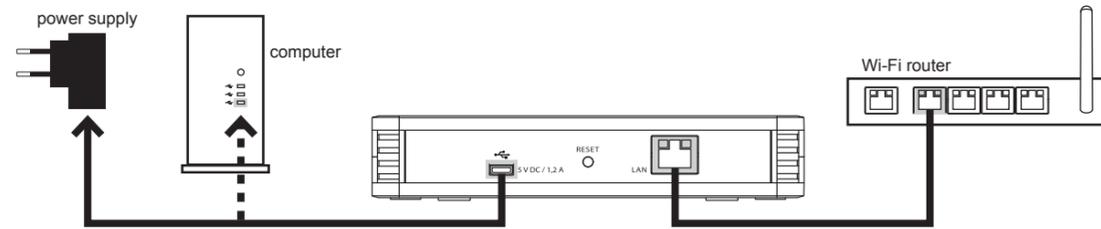


The symbol stands for selective collection of electrical and electronic devices. Placing used devices with other waste is not allowed



INSTALLATION

- Before installation controller you need carefully read the manual instruction.
- In order to ensure of proper communication with many elements of system EXTA FREE controller EFC-02 Mini must be installed in the central part of the house. Radius of controller in the open air is up to 250 m, however in objects such as apartments / houses may be limited. This follows directly from the existing obstacles: walls, furniture, ceilings, etc.
- EFC-02 controller do not put in metal enclosures / switchgears and in close vicinity devices which emiteing large electromagnetic distrubrance.
- EFC-02 controller must be necessarily connected to the Wi-Fi router. Router must be automatically assign IP addresses (DHCP unlocked). For connection should be use free LAN port on the router.
- **To launch and use the EFC-02 is not required for access to the Internet.**



Wiring scheme of controller EFC-02

1. EFC-02 controller connect into free LAN socket on the router using a standard UTP / FTP (cable is located in set with controller)
2. Plug in the plug USB Micro B adapter into the appropriate slot "5 V DC" EFC-02 controller (the appropriate USB cable and power adapter are in set with controller).
3. Insert the AC adapter into a 230 VAC.
4. Wait a minimum 30 sec for successful implementation of the controller and assign IP-address of Wi-Fi router. Specified readiness for operation LED lighting.
5. If any problems with assignment IP-address of the router via port is set to "Auto-negotiation" (some of routers CISCO) switch the port to 10 Mbps speed.

* ATTENTION! Considering open air range concerns, ideal condition without any obstacles. When between controller and transmitter / receive are obstacles, then there must be reduction of radius depending of: brick 10 to 40%, wood and plaster from 5 to 20% of the ferroconcrete 40 to 80% of a metal from 90 to 100% glass of 10 to 20%. Negative impacts on different activities are also ground and underground high electrical power lines and mobile phones arranged in the immediate proximity to the equipment.

APPLICATION EXTA FREE

Configuration and control system EXTA FREE using EFC-02 Mini is achieved through the free app EXTA FREE.

The application can be downloaded directly from the www.zamel.com or www.extafree.pl

- from the Google Play shop (for Android devices),
- from the App Store (for iOS devices).

The application is compatible with Android from the beginning of 2.3 version and iOS from the beginning of 6.0 version.

Graphical appearance of apps maybe be different of model system depending.



FIRST START-UP OF APPLICATION

1. The application must be successfully installed on your mobile device.
2. Check correct connection of controller (inspector) EFC -02 with router Wi-Fi.
3. Check whether your mobile device is connected with Wi-Fi router cooperating with controller EFC-02.
4. Check whether controller EFC-02 Mini is ready to work (illuminated controls)
5. Start up application EXTA FREE on mobile device.
6. After starting the application starts to search controllers EFC-02 connected to the router Wi-Fi.

In the case of single controller after finding will appear:

- default name of the controller (DEFAULT No. - entered on the controller housing)
- IP adress of controller.
- Data field for entering user name and password: default user name: admin, default password: admin.

After pressing the "Sign In" will be redirected to the main window. When login process is completed successfully this is the signaled by message "Logged in". The icons in the main window representing functions available for the EFC-02 are active. Can then be accede to configure and control system.

- When you log in, you can save data entered by checking options " Remember Me".
- In this case after restarting application will be automatically redirected to the main window.
- To the logoff from the application serves button "Sign out " in the application " Configuration". If during the application time comes loss of communication with the controller then this message signals the "Offline Mode". All icons in the app will be "grayed out". Its necessary to closed this app and then kick-start again.
- If data entered during logging to the controller they are incorrect then this is indicated by a corresponding in the login window.
- Entry to the application is possible only after entering the correct data.

SET UP DATE AND TIME

For correct usage of time functions necessary is corections data and time of application. To do that use the tab "Date and Time" available under the icon "Configuration". Tab is visible only for users of the admin group.

For saving settings you need press the button . After saving appears in messages:

- "Was changed date and time" record setting completed successfully
- "Error recording" - record setting completed error

When record completed with error then repeat please record test.

CREATING USERS

The application serves for creating users tab "Users" available under the icon "Configuration". Tab are visible only for users from admin group.

Maximum number of users possible for creations:	10
Maximum number of users logged to the EFC-02 controller:	5
Minimum usernames leight:	5 characters
Maximum username length:	20 characters
Minimum password length:	5 characters
Maximum password length:	20 characters

Special characters in usernames and passwords are not allowed.

For creation a new user, log in to the application as admin, enter to the tabs "USERS" and click . Following the introduction of username and password, assign it to the appropriate group: user or admin.

- **admin group** – the user has access to all application resources (configuration and control system).
- **user group** – the users can only control. When that is necessary then editing options for user can be activated from the tab "Enter to the edit mode". Switches on the option editing is possible only after signed in into user account from user groups.

When using an application, you can assign a user to another group or change its password. This can be done only by user with

admin group. For switching between users serves tab "Log out". Used symbols:

	"Signed in" user assigned to the admin group		"Signed in" user assigned to the user group
	"Signed off" user assigned to the admin group		"Signed off" user assigned to the user group

Acceptance configuration by the user from "user" group

- User from the group "user" during the first sign for application can benefit from configuration created by the user from "Admin" group or configuration saved previously to SD card.
- New user after entering the correct username and password and press "Sign In" will be asked whether you want to take the settings of user from admin group or the SD card.
- Confirm your selection by clicking "OK". If you do not select any option then the application will start with empty configuration.
- If you select "Accept administrator settings" when you click "OK" will be displayed a list of users in the "admin". Select the user whose settings you want to take. Select confirm "OK".
- If you select "Accept settings from SD card" then you need click "OK" and will be displayed a list of users whose configuration is saved on the memory card.
- Select a user whose settings you want to take. Select confirm "OK".
- In the case acquisition of configuration from SD card, save the configuration previously created on the SD card and install the card with device to which we hold configuration.
- Copy configuration from the user admin group or SD-card is possible at any time of filing. Then select "Copy Settings" icon under "Configuration". When using this option, you must also copy the configuration confirmed by the password of the sign in user.

Acceptance configuration by the user from "admin" group

- The procedure similar as during taking over configuration by the user from "user" group. In this case, there is only ability to copy configuration from the memory card.

THE NETWORK SETTINGS

- Network settings entered in the „Network Settings" option under the icon „Configuration". Tab are visible only for users from admin group.
- Default in controller EFC-02 is active, DHCP Server service (the controller expects to assign him IP address through the router Wi-Fi). In connection with necessary to release DHCP service on Wi-Fi router that is connected to the controller.
- The controller has its own unique name under which is seen in the local network.
- Default controller name: EFC02-XXXX, where XXXX - attributed at the factory by the manufacturer serial number
- The name of the controller can be freely modified depending on your preference within the minimum and maximum number of characters:

Minimum length controller name	1 character
Maximum length controller name	20 characters

- In order to record the modified name of the controller, press the button .
- In justified cases controller can be given fixed, individual network settings. To do this deselect service „DHCP server" and make the necessary settings: - IP address - Mask - Gateway
- To save modified network settings, press the button .

REMOTE ACCESS

ATTENTION: If controller EFC-02 remote access from outside local network is possible only for users which have an external fixed IP address.

- To launch remote access services first of all you need make an appropriate forwarding IP address / port on the router (in this purpose best contact is your network administrator) Then you need to log into the application as a user with admin group. In the tab „Network Settings" select the option „Remote access" and enter the external IP address and Port for which is set to redirect. The introduced settings apply globally to all resources of controller EFC-02 (all users associated with the controller).

Default application operates on the port 2013.

- In order record modified network settings press the button .
- In case of remote access application immediately after starting begin to search controllers EFC-02 in the local network. If it will be not found automatically forced attempt to connect for remote IP and Port of specified.

For remote connection with controller EFC-02 need to be accessed to the Internet.

SCENES TAB



User of this tab is able to create unlimited number of scenes, understood as certain sequences of events. These sequences can be performed simultaneously or sequentially with the declared delays. System events EXTA FREE understood as sending code, pressing particular button. This code must realize specific task, for example, attach the lamp.

In a single scene, you can declare maximum 10 events (buttons).

CAUTION: Before you begin to create scenes best of all make the initial configurations from the whole system via menu Transmitters / HOUSE (you need to create transmitters/devices and give them the functionality by assigning to the receivers of the system). For easy organization of work by the time of creating scenes is recommended first of all calling all transmitters, buttons and devices.

ADDING SCENES

To create a story you need:

- Go to bookmarks "SCENES"
- Create a new scene by pressing
- Created scene is visible below the symbol

While holding the symbol of created scenes we have the opportunity:

- Amendment titles created scene
- Create a shortcut scene on the desktop of mobile phone or in an additional window
- Scene removing
- Editing scene (add / remove events, delay editing and pressing time)

In order to adding events to the scene should be created:

- Click the symbol to create scene, and then click to change scene
- Press the button
- Choose the first button (event) forming scene.

The button can be selected directly from the visible list of all declared in the buttons application or by moving tab TRANSMITTERS / HOME. You can also directly transfer the physical transmitter to the scene through function cloning (Clone button).

- In a similar manner add another events forming scene (maximum of 10 events).
- In order playing of created scenes from the application level, you need press shortly on the symbol of the scene you want to play. Start playing the scene displayed in the message: "New scene has been launched".

DELAY BETWEEN EVENTS IN SCENE

If the delay between events in the scene are set by default to 0 s is the event executing one after the other with distance of about 0.5 s.

In order to change delay between events in the scene needs:

- Press the symbol of created scene and select edition button of scene
- Select event (button), for which we want to introduce delay and hold it.
- Select option "Change the delay"
- Enter the delay in the range 0 .. 99 s and confirm with "OK".

The delay is understood like as counted time between the event, for which they edit a preceding event.

CHANGING THE TIME OF PRESSING THE BUTTON IN THE SCENE

The system EXTA FREE selected functions receivers are invoked by long pressing the button. To call up these functions from the scene is necessary to regulate until you press a button.

In order time changes press the button on the scene needs:

- Press the symbol of created scene and select edition button of scene
- Select event (button), for which we want to change the time press and hold it.
- Select option "Change the time of pressing"
- Enter the time pressing in the range 0 .. 99s and confirm with "OK".

Special functions in the system EXTA FREE caused by pressing and holding the button (at least 3s):

Function	The receiver
Calling a comfortable settings	<ul style="list-style-type: none"> • SRP-02 Radio blinds control
Brightening / dimming	<ul style="list-style-type: none"> • RDP-01 boxing radio dimmer • RDP-02/SLR-01 Radio LED receiver one color • RDP-11/SLR-11 Radio Controller RGB • LEDIX luminaires with integrated radio receiver • LEDIX luminaires with integrated RGB controller (only in cooperation with the transmitter P-260 and sliders RGB)
Calling mode FLOATING	<ul style="list-style-type: none"> • RDP-11/SLR-11 Radio controller RGB
Calling mode FLOATING / STROBE	<ul style="list-style-type: none"> • LEDIX luminaires with integrated RGB controller (only in cooperation with the transmitter P-260 and sliders RGB)
Switching off	<ul style="list-style-type: none"> • LEDIX luminaires with integrated RGB controller (only in cooperation with the transmitter P-260 and sliders RGB)

TRANSMITTER TAB



User using the tab can:

- Creation of unlimited number of „virtual“ transmitters system EXTA FREE, which can be then assigned to the receives system by giving the specific functionality. Appearance created transmitters alludes to physical transmitters system EXTA FREE. Analogous is also method of assigning transmitters to the receivers and available modes.
- The transfer functionalities of physical transmitters system, to created in the application of transmitters by „virtual“ through function cloning.
- This allows for easy and fast transfer of configuration to the currently running system to the mobile application, without any needs for re-programming receivers. The creatures of remote control, whose size (number of of buttons) is defined by the user.
- The remote control, enables you to operate a plurality of receivers from one location of the application. This may be used for example, for controlling windows blinds throughout the house. Creating shortcuts of the whole transmitters and single-buttons of the transmitter - shortcuts can be located on your desktop of the mobile device or an additional desktop App.
- Freely edition of the names of transmitters and buttons.
- Free governance created of transmitters (edition creation, edition serial number, delete transmitters).

Transmitters are available in the tab "TRANSMITTERS":

1-button transmitter (2 - channels)	2-buttons remote control	8-buttons remote control	RGB remote control P-260 (only with a radio controller RGB SLR-11 and Ledix luminaires with built-in controller RGB)
2-buttons transmitter	4-buttons remote control	Remote control is definition (n- channels)	

ADDING TRANSMITTERS

In order to add a transmitter to the app should be:

- Go to the tab and select the button of transmitters
- Select from a list of transmitter what you want to add to the application.
- After selecting transmitter it will be added to the tab of Transmitters.
- Press to the added transmitter. It will be developed to the full screen of application.
- Give the functionality to the transmitter through the appropriate assignment to the receiver. During programming, consider the advices of the operating instructions for a particular receiver. Transmitter visible in the application, should be treated as a typical transmitter system EXTA FREE.

The added functionality of transmitter can be assigned also through cloning options of the whole transmitter or various buttons.

CLONING

CLONING OF TRANSMITTERS / BUTTONS (function works similar in the tabs TRANSMITTERS / HOUSE / SCENES / TIMED)

- "Cloning" option of transmitters/ buttons enables quick transfer of physical functionalities of transmitters directly to the application on the device mobile. By configuring in this way the system is not necessary access to already installed on the object of receivers EXTA FREE system.
- You can clone all the transmitters while retaining their functionality or one of the buttons.
- All transmitters can be cloned only with appropriate so-called types, to the transmitter RNK-02 you can „clone“ only physical functionality from transmitter RNK-02.
- Cloning between buttons however is so-called any completely, can „clone“ if enter to the functionality of transmitter battery RNK-02 under corresponding transmitter buttons RNK-04 or P-257 / 4 remote control.

CLONING THE WHOLE TRANSMITTER

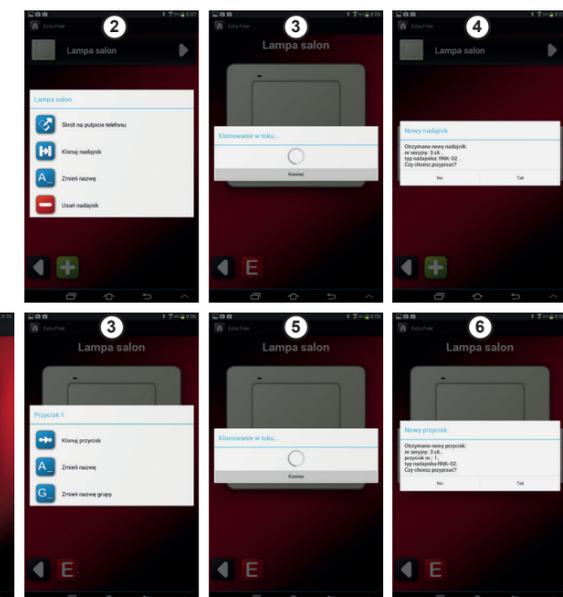
In order to "clone" the physical functionality of the entire of the transmitter to the corresponding virtual transmitter in the application must be:

1. Create a new transmitter from the application.
2. By longer holding the created transmitter inputs in editing options and choose "Clone transmitter".
3. The controller will enter to the standby mode for the signal from the transmitter, whose functionality we intend to move to the application. The controller remains in standby waiting until you receive the signal from the transmitter or press the "END".
4. Press any button on physical transmitter. After its registration from controller assignment must be confirm with pressing "YES".

CLONING OF SINGLE BUTTON

In order to "clone" single button of the transmitter to the appropriate virtual transmitter button in the applications must be:

1. Create a new transmitter from the application.
2. Open the transmitter on the full window of application and select the icon
3. Press the button that you want to "clone" and select the "Clone button."
4. The controller will enter to the standby mode on the button code, whose functionality we intend to the application. The controller remains in standby mode until receiving a signal from the transmitter, or press the "END".
5. Press the select button of physical transmitter. After its registered with the controller assignment must be confirm with pressing button "YES".



HOUSE TAB



User of the tab can:

- The division of the whole house system categories - Devices.
- Create shortcuts „devices” and individual buttons - shortcuts may be located on your desktop or additional desktop applications
- Change the icons representing categories.
- Change the icons representing devices.
- Free edition names of Categories and Devices.
- Free management of created Categories / Devices (Edit pose, Delete categories / devices).

Additional icons in the HOUSE tab:

- Icon used to create new Categories (levels, room, group of devices, for example: Ground Floor, Living room-TV-hall, blinds, lighting the main, Lighting decorations).
- Icon is used to create new devices, for example, the traditional lighting control, blinds control, RGB lighting control).

- Created „device” after adding the application must be assigned to the respective receivers EXTA FREE system in order to give them a specific functionalities.

The programming method is the same as in the case of the physical transmitters of EXTA FREE system.

- In order to render functionalities you can also use the „Clone” buttons. Cloning allows fast and easy transfer of configuration existing system for mobile applications.

Examples of devices available in the HOUSE tab:

Control mode on/off (two buttons) ON OFF	Blinds control in local mode (top - stop - down)	RGB control (3 faders R, G, B)	RGB control (slider fader)
Control of the bistable mode (on / off in one button) ON/OFF	Blinds control in central mode (top - down)	RGB control (round slider)	

TIMED TAB



User of this tab can create a maximum of 40 time functions, understood as certain events or sequences a temporary basis. Sequences similar to the scene may be performed simultaneously or sequentially with the declared delays.

- In a single time function, you can declare a maximum of 10 events (buttons).
- In the tab TIMED you can globally, for all users define up to 40 different time functions (with 5 users for each other can assign up to 8 functions of time).

WARNING: Before creating a function of time is best to pre-configuration the whole system via the menu Transmitters / HOUSE (you must create transmitters / devices and give them the functionality by assigning to the receivers of the system). For easier organization of working, when creating a function of time is advisable to identify all transmitters, buttons and devices.

- Conditions of the exercise of functions of time
- Tab of activation / deactivation of time function
- Creating events of time function
- Tab of selection type of event



- Editing and adding events to the Time functions are very similar to creating a and editing scenes.
- The only difference is that the time function beyond single events (buttons), we can copy the entire created previously scenes which could be gradually to edition.
- Time functions are executed automatically and do not need to launch applications for the purpose of calling.
- The function of time like in scenes can be setting the delay time and the time of pressing.

To edit the created time function should be:

- Hold the name of the created function, and select the „Edit function time” symbol created functions and select „Edit function time”
- A window opens to edit your function of time.

Possible types of events to choose from the function of time:

Only one time	The weekly	The monthly (8 days)	The monthly (intervals)	Intervals of dates
Perform only one time.	Perform the function periodically at a specified time in specified days of the week.	Perform the function periodically at a specified time in specified days of the month (up to 8 days).	Perform the function periodically at a specified time in specified days of the month (intervals from to).	Perform the function periodically at a certain time in a certain of intervals of dates)
conditions: • hour • date.	conditions: • hour • day / days of the week.	conditions: • hour • days of the month (up to 8)	conditions: • time • days of the month (intervals)	conditions: • hour • Start of date, • End of date.

- Any changes associated with the editing function of time are automatically saved when you press a button .

- Record settings can be made manually by pressing a button .

Every time a record is confirmed by message:

- "Edited the time event" - if the attempting of record was successful
- "not saved on the gateway - has not added any items of function" - if the trial record failed

For incorrect recording operation, record must be repeated.

TAB DETECTORS



In the case of the controller EFC-02 user by using the the tabs has the ability to:

- Adding to the maximum 40 different applications of radio detectors cooperating with the controller EFC-02.
- Free edition of names of detectors.
- Free governance added detectors (edition pose, removing detectors).

In the case of the controller EFC-02, there is only possibility to visualize the state of detectors and return values.

EFC-02 controller works only with radio detectors in EXTA FREE standard. Examples of detectors:

- RCL-01 Radio temperature detector and illuminance.
- RCL-01 Junction box radio temperature detector.
- RCK-01 Radio reed switch detector.
- RCZ-01 Wireless flooding detector.
- RCR-01 Radio motion detector.

ADDING DETECTOR

To add a detector to the tab Detectors must be:

- Press the button
- Select from the list the type of detector you want to add - for example:

Temperature detector	Illuminance detector	Door detector	Motion detector	Flooding detector
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- After selecting the type of sensor controller EFC-02 shall enter into standby mode (stays in this mode until the receipt of signal from the detector or pressing the „END”).
- For adding all of chosen detectors into the controller, press the PROG button on the detector, which you want to add to the application.
- If the detector is within range of controller it means that the dial tone will be properly received by controller. As a result, we receive information about the type of the detector and its serial number and will asked whether to save the detector in the application. If the record is confirmed that means that detector was saved.
- For adding another detector, repeat the procedure.

INFORMATION FROM DETECTORS

In the case of the controller EFC-02 refresh time of sensor values is the default time set of the factory detectors. From user application can not change this time. The refresh time is chosen such as to ensure optimal battery life (3 to 5 years).

Part of detectors cooperating with the controller EFC-02 returns a value (temperature detectors, illuminance detector) and part of status (reed switch detector, motion detector, flooding detector).

Status of detectors returned by sensors in applications for the EFC-02:

Motion detector unimpaired	Reed switch detector closed (door closed)	Reed switch detector closed (window closed)	Flooding detector (detector is not flooding)
Motion detector violated	Reed switch detector opened (door opened)	Reed switch detector opened (window opened)	Flooding detector (detector is flooding)

In the tab Detectors all of the added to the application detectors are displayed in a list.

By clicking on selected detector follows his explication of a full-screen on the mobile device. This window also indicates the status of battery in particular detector and time, which has elapsed since the last update of its value.

battery loaded	Low battery - need to replace
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Status of battery changer in the detectors is early signaled, it is for informing user that he has time to change battery.

ABOUT SYSTEM

Tab "About srstem" is available beneath the icon "Configuration". There is information about the current version of the application and software version in the controller. If incompatibility is detected among an application version and software version in the controller, it is explicitly signaled with the message "Necessary software update of controller". The current version of software can be found at www.zamel.com or www.extafree.pl

RESTORE TO FACTORY DEFAULT SETTINGS

In order to restore the factory settings the controller EFC-02, hold the RESET button for time > 10 s. This is indicated of extinguishment LEDs signaling your LAN connection.

After the operation, RESET removed all data stored on the gateway (user accounts defined by the time functions, settings configuration).