ASC Global



WiFi/BT Controller / WiFi/BT Controller PRO

PROFESSIONAL WIFI/BLUETOOTH CONTROLLER



Table of Contents

Device description 3
Main features 4
Technical data 4
Wiring and installation 4
Wiring guide 4
WiFi/BT Controller 4
WiFi/BT Controller PRO 4
Download the Cloud Manager application 5
Control panel 6
Enable swipe editing 6
Devices 6
Add a device in Cloud Manager 6
Bluetooth device setup 7
Device settings 7
Control button information 8
Connecting to a WiFi network 9
Create cloud control icon 9
WiFi/BT Controller and WiFi/BT Controller PRO in ASCloud Manager 11
Web interface 11
Main Page 11
Add WiFi/BT Controller to ASCloud Manager (Web) 13
Add a registered device 13
- **Device replacement** 13
- **Delete device** 13

Device status 14
Notifications 14
Add notification 14
Adding and managing users 14
Create a URL control icon 15
Settings 17
- **Information** 17
- **Statistics** 17
- **WiFi signal strength** 17
- **Send command** 17
- **WiFi** 18
- **I/O** 18
- **Help** 18

Editing operations 18
Data management policy 19

Device description

The WiFi/BT Controller and WiFi/BT Controller PRO modules are designed to control electric gates and barriers. They can also control or monitor other devices whose inputs or outputs are compatible with the connection configuration of the product.



You can configure the module via Bluetooth in the Cloud Manager mobile application or, when a WiFi connection is available, at www.ascloudmanager.com. After setup, devices can be controlled using Bluetooth or cloud-based control icons. Different colors can be used to group the icons and simplify output control.

The module parameters are displayed in the Cloud Manager application, where you can also customize the control icons.



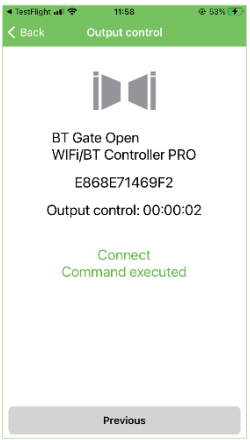
In the Cloud Manager application:

- set a unique module name or location name
- select the connection type (Bluetooth or Cloud)
- create control icons with custom icons and colors
- configure the WiFi network required for the cloud connection
- view status information (basic data, version number and WiFi settings)

When creating a control icon, select the connection type (Bluetooth or Cloud) and the "Timing (monostable)" control type.

Control time: WiFi/BT Controller: 1-240 seconds; WiFi/BT Controller PRO: 1-65,535 seconds.

Press the control icon on the Control Panel to activate the device output. A pop-up message confirms a successful command; an error message appears if the command fails. With an internet connection, the server sends a push notification to the application.



The email address and password used for server access also allow you to manage permissions and log in to the manufacturer-operated website at www.ascloudmanager.com. The following functions are available:

- view device statuses

- set notifications
- create a new Internet user
- change user data
- change user permissions
- delete user
- view the event log
- create a desktop control icon on an internet-connected PC
- view service data (settings, WiFi signal strength and status counters)
- I/O list (individual naming and ordering of outputs and inputs, depending on the device type)

The module is designed primarily for online control and supports up to 15 Bluetooth users.
The number of online users is unlimited.

Main features

- Control of electric gates and barriers
- Unlimited number of online users
- User permissions
- Individual control time and control type settings
- Programming via Bluetooth or the internet
- Status and statistics queries via Bluetooth or the internet
- Control counter

Technical data

- Communication channels: WiFi and Bluetooth
- Operating temperature: -20 °C to +70 °C
- Power supply: 9-35 VDC or 24 VAC
- Maximum current consumption: 200 mA at 12 VDC
- Standby current consumption: 70 mA at 12 VDC
- Relay output, both models: max. 30 V / 500 mA
- Size (length / width / depth):
  Controller: 50 x 70 x 37 mm, PRO: 60 x 65 x 41 mm
- Weight: Controller: 60 g, PRO: 110 g

Wiring and installation

The wiring diagram is located on the top of the module enclosure. The module operates from 9-35 VDC or 24 VAC. A 1 A power supply is required for stable operation. The maximum load of the potential-free relay output of the WiFi/BT Controller and each potential-free relay output of the WiFi/BT Controller PRO is 30 V / 500 mA.
The WiFi/BT Controller has one NO relay output and no inputs.
The WiFi/BT Controller PRO has two NO relay outputs and two optocoupler inputs.
The input connection points are IN1+, IN1-, IN2+ and IN2-.
A maximum of 24 VDC can be connected to the inputs.

Wiring guide

WiFi/BT Controller

Red	Power
Black	
Yellow	Output (NO)
Blue	

WiFi/BT Controller PRO

Thick Red	Power
Thick Black	
Red	IN1+
Black	IN1-
Orange	IN2+
White	IN2-
Green	Output 1 (NO)
Yellow	
Brown	Output 2 (NO)
Blue	

Depending on the model and production batch, the wire colors may vary. **The current wiring information is shown on the inside of the cover**. The power supply connection is polarity-independent when direct current is used.

In addition to electrical control, the installer must provide a means of mechanical opening.

Indications and functions of the module

Push-button:

- short press - select the module connection mode (1x Bluetooth pairing, 2x WPS)
- long press - delete the settings (PIN code, Bluetooth connections and WiFi connection)

LEDs:

Blue - Bluetooth connection/operation

Green - WiFi connection/operation

Red - push service connection/operation

When the module is switched on, the **blue, green** and **red** LEDs flash simultaneously and then in sequence. If WiFi is not configured, the sequence runs four times and the blue LED remains lit. When the blue LED flashes, the module is available via Bluetooth. This mode remains active for 10 minutes; after that, only paired devices can access the module.



Start the **Cloud Manager** application and pair the module via Bluetooth within 10 minutes. After Bluetooth setup, connect the module to the local WiFi network. When WiFi setup is complete, the module restarts automatically and connects to the configured network. A successful connection is indicated by the green LED. If the connection fails, the module retries up to 20 times.

The module then connects to the push service. When this connection is successful, the red LED lights up. After a power interruption, Bluetooth pairing mode is activated automatically and the blue LED flashes. After 10 minutes, the LEDs turn off and flash only during communication. The blue LED remains continuously lit while a Bluetooth connection is active.

If the module cannot connect to the WiFi network, it restarts as though no WiFi connection had been configured. This allows the settings to be changed.

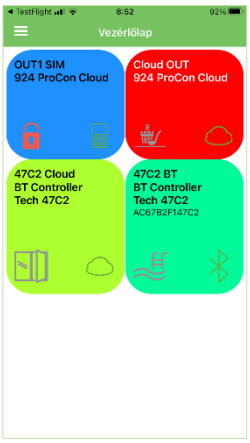
Download the Cloud Manager application

Search for Cloud Manager in the App Store or Google Play Store and download it to your iOS or Android device.

The application can also control devices operated by GSM commands and IP modules registered in the cloud. This manual contains information only about the WiFi/BT Controller and WiFi/BT Controller PRO.

Control panel

When you open **Cloud Manager**, the Control Panel displays the control icons created for all devices connected via **Bluetooth** or **the cloud**.

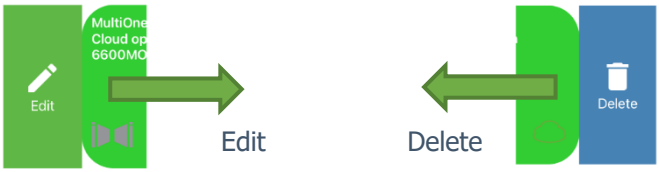


To create an icon, enter its name and select the control type, duration and connection type. For an internet connection, use the email address and password configured on the server during installation or later. Then select the icon image and press the button to create the control icon on the Control Panel.

You can customize the name, color and image of each control icon using the available options.

Press and **hold the icon**, then swipe **it to the right** or **left.**

Swipe right to edit, swipe left to delete.



Enable swipe editing

Swiping a control icon opens the editing options. This function can be turned on or off in the Settings menu.

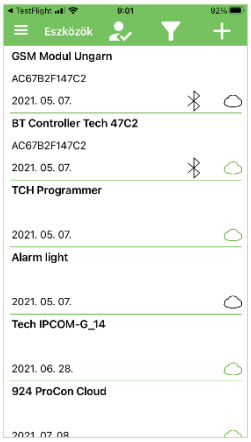
Devices

The Devices menu contains the devices you have already registered.

An icon in the device row indicates whether the connection uses Bluetooth or the cloud. Green indicates an active connection. If both connections are available, both icons are green.

If you do not already have a registered device, you can add it with the "+" button.

In the top menu, you can log in with your email address and filter the list after logging in.



Add a device in Cloud Manager

IMPORTANT! Before adding a device, check whether the device is already paired with your mobile device. Review the paired devices in the Bluetooth settings of the mobile device.

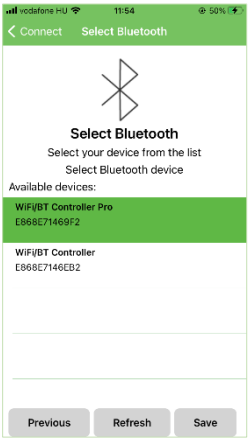
If it is already paired, remove it using the "Forget Device" command before continuing.

Bluetooth device setup

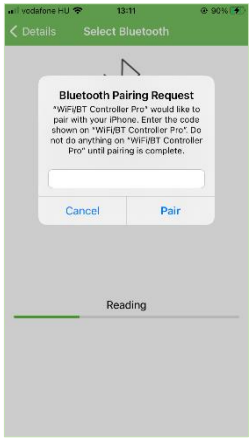
Whenever power is applied to the WiFi/BT Controller or WiFi/BT Controller PRO, the Bluetooth interface is activated automatically for 10 minutes and is ready for pairing. Make sure the blue LED on the device is flashing.

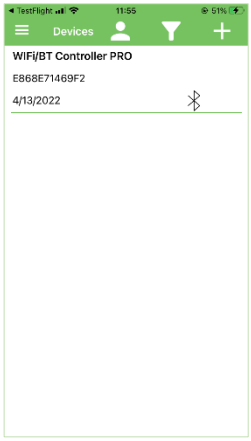
If you select Bluetooth, select the available Bluetooth device from the list (1) and press Save to continue. Enter the password for pairing, which defaults to 1234. (2)

After you press Save, the device appears in the application. (3)



1.





3.

Device settings

In the Devices menu, select the programmed device to view its operating settings and connection status.

The available menu items may vary depending on the module type and firmware version.

Basic data

Location

The assigned device name is displayed and can be changed at any time.

Version

The product software version is displayed.

Communication

Bluetooth

The device type and MAC address are displayed.

Version

The communication software version is displayed.

WiFi network

The name of the WiFi network currently connected to the module is displayed. If no WiFi network has been selected, this field is empty; open the menu item to configure or update it.

Status

The Status menu provides detailed information about the WiFi/BT Controller connection status.

WiFi / WiFi setup / WiFi network name / WiFi connection status / server connection status. "Push ready" indicates whether instant notifications are operating correctly.



Cloud

WiFi cloud settings

Here you can assign a local WiFi network to the device to enable remote access and establish the cloud connection.

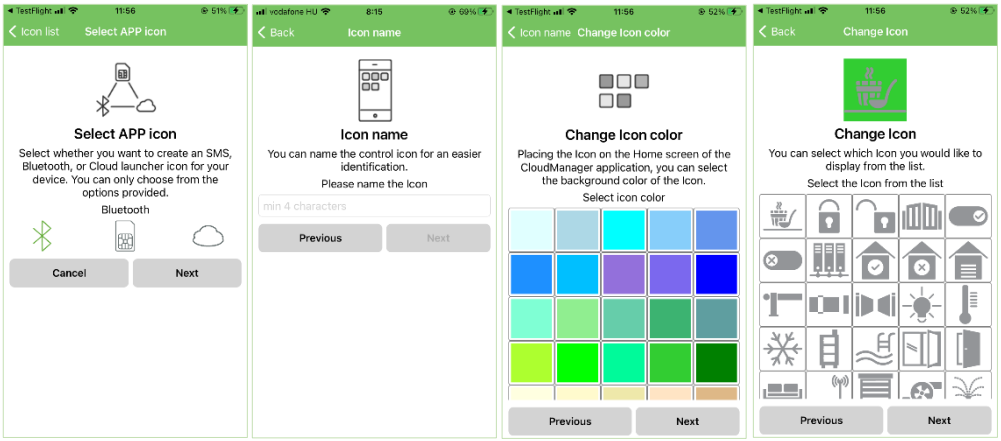
Functions

Add icon

Select "Create icon" to create a new control icon in the application.

Add a Bluetooth control icon

After pressing the "+" button, select the Bluetooth icon (1) and click the "next" button to enter the name of the control icon. (2) Next, you can specify the background color of the control icon. (3) Click the "next" button to select which icon you want to display from the list. (4)



1. Select the output control type:

Timing (Monostable)

Controls the output for the time set in the device.

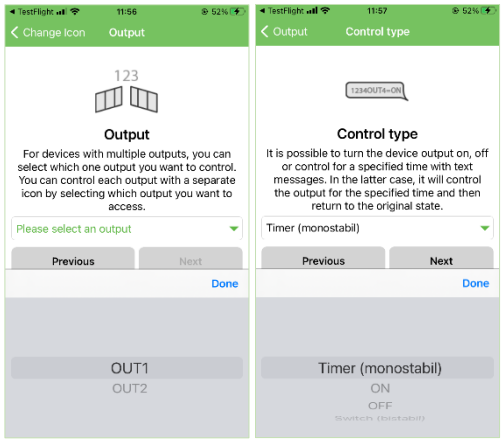
Toggle (Bistable)

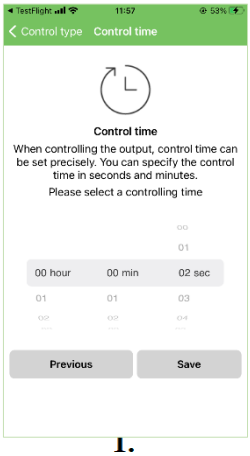
When activated, the output changes state and remains in that state until it is controlled again.

For timed control, specify how long the output should remain active. (1)

Set the control time in hours, minutes and seconds.

Maximum selectable control time:





1.

Controller: 240 seconds; PRO: 18 hours, 12 minutes and 15 seconds (65,535 seconds).

After setting, the **control icon** will appear in the icon list (2) as well as on the **Control Panel**.

Pressing the control icon activates the output.



2.

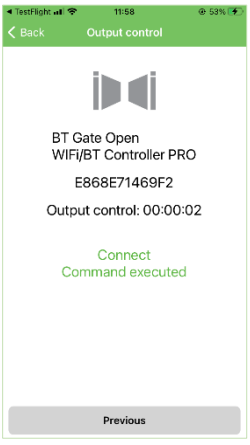
Control button information

Information displayed on the control button:

- **Function button name**: unique name of the device or function to be controlled
- **Location name** (device name provided during registration)
  This name makes the module easy to identify when several devices are used.
- **ID number**: the MAC address of the WiFi/BT Controller or WiFi/BT Controller PRO

Pressing the control button once activates the output.

For a control icon configured via Bluetooth, the device MAC address is displayed below the assigned name during control. For a cloud control icon, the email address used for control is displayed.



Connecting to a WiFi network

After connecting via Bluetooth, you can connect the device to a local WiFi network. This allows you to access it from any location with internet access and control its output or outputs remotely. Once the WiFi connection has been configured in the application, the device becomes available in the cloud.
A cloud connection supports an unlimited number of users.

Connecting to a WiFi network with the Cloud Manager application

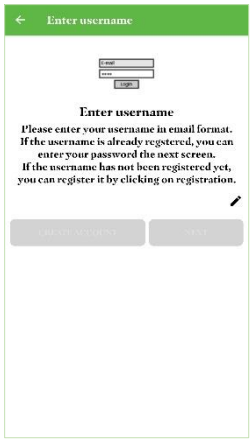
Open Cloud Manager and select the device you want to configure from the device list. (1)



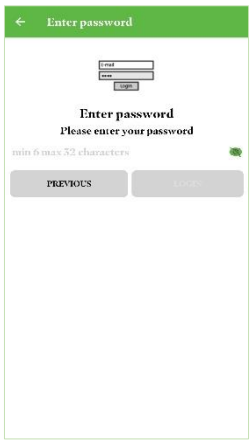




Open the WiFi cloud settings and select one of the available WiFi networks. (2)
Enter the WiFi network password. (3)



Enter an email address as the **user ID**. (1)
You will be able to access the device settings with the email address you entered.
Check that the email address is correct, contains no typing errors and has no leading spaces.



Enter the **user password.** (2)
For an existing registered email address, the application confirms successful verification with a green check mark.



After a successful save, the WiFi/BT Controller or WiFi/BT Controller PRO module will be added to the cloud. (3)

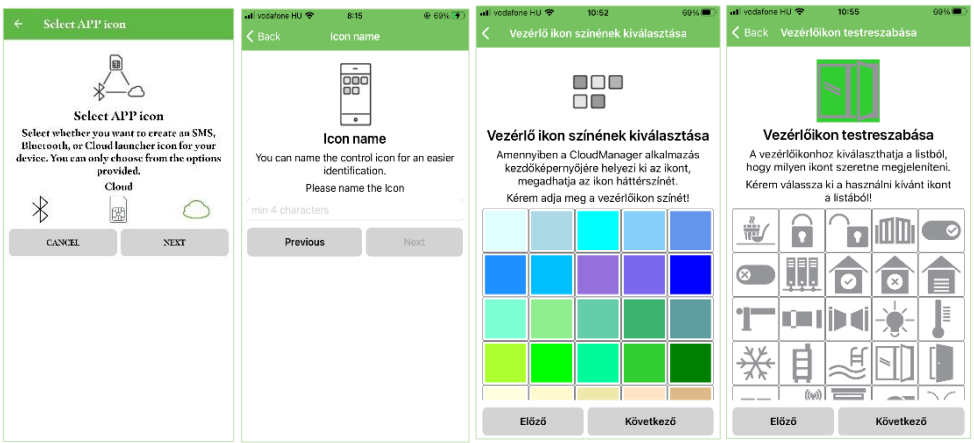
3.

Create cloud control icon

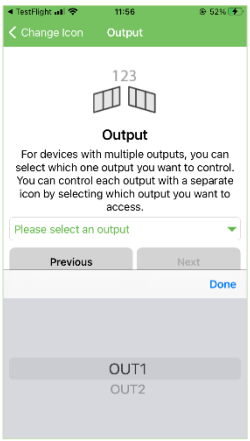
The previous steps described Bluetooth pairing and the creation of a Bluetooth control icon. Once the device is available through a WiFi network, you can also create cloud control icons that can be used outside the local WiFi range.



Make sure you are logged in with the email address you provided when setting up your WiFi connection.
If there is no check mark, log in using your registered email address and password.
After logging in successfully, find the device you want to control in the devices menu.
Select Create Icon, then choose the cloud icon to create a cloud-based control icon (1). Enter its name (2), select the background color (3), and choose an icon from the list (4).

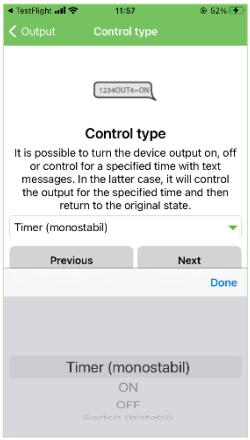


1. 2. 3. 4.



Depending on the device, **select the output you want to control**.

For cloud output control, select the output control type.



Timer (Monostable)

Controls the output for the time set in the device.



ON

Turns the output on.

OFF

Turns the output off.

TOGGLE (Bistable)

Pressing the control button toggles the output state.



In monostable mode, set how long the output should remain active.

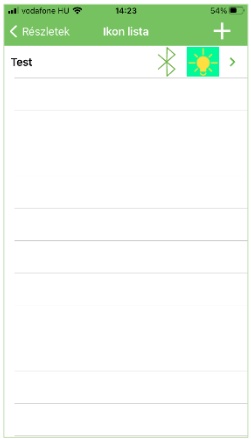
Set the control time in hours, minutes and seconds.

Maximum selectable control time:

Controller: 240 seconds; PRO: 18 hours, 12 minutes and 15 seconds (65,535 seconds).

Next, the **control icon** will appear in the icon list and on the Control Panel.

Pressing the control icon activates the output.



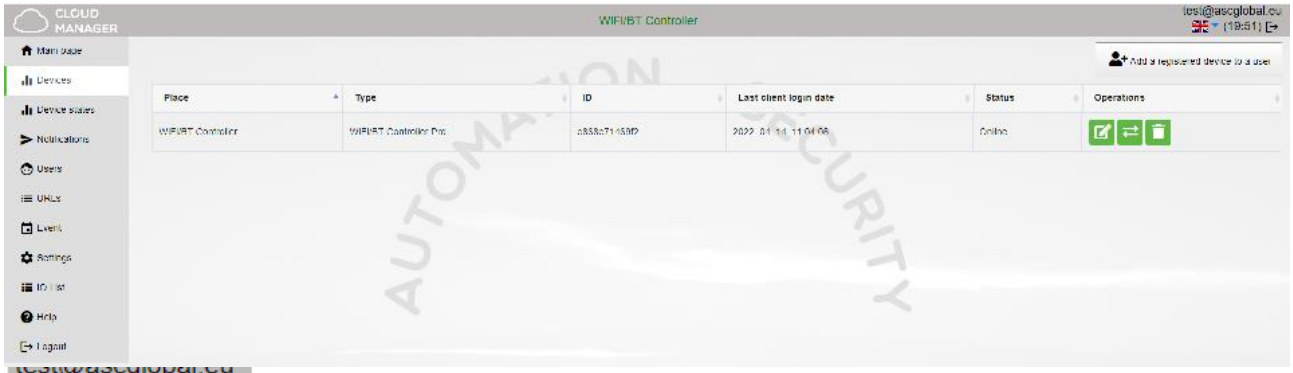
WiFi/BT Controller and WiFi/BT Controller PRO in ASCloud Manager

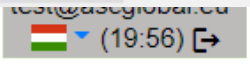
After registration, the WiFi/BT Controller and WiFi/BT Controller PRO can also be accessed and controlled at www.ascloudmanager.com.

Web interface

After login, the control interface for all registered cloud-connected devices is displayed in the Devices menu. Online device names are shown in green; device names without a cloud connection are shown in red.

The page will automatically log you out after 20 minutes of inactivity. You can see the current time in the

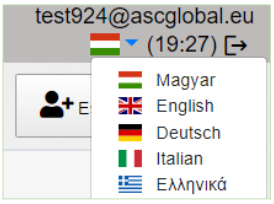




upper right corner of the screen.

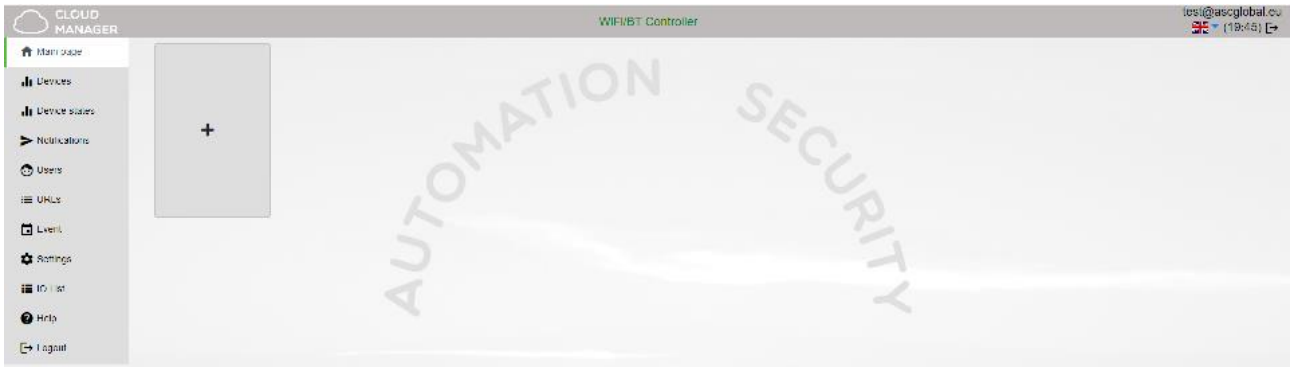
Select language

In the drop-down menu, you can change the page language. The language can also be changed after login. The service is currently available in 5 languages.

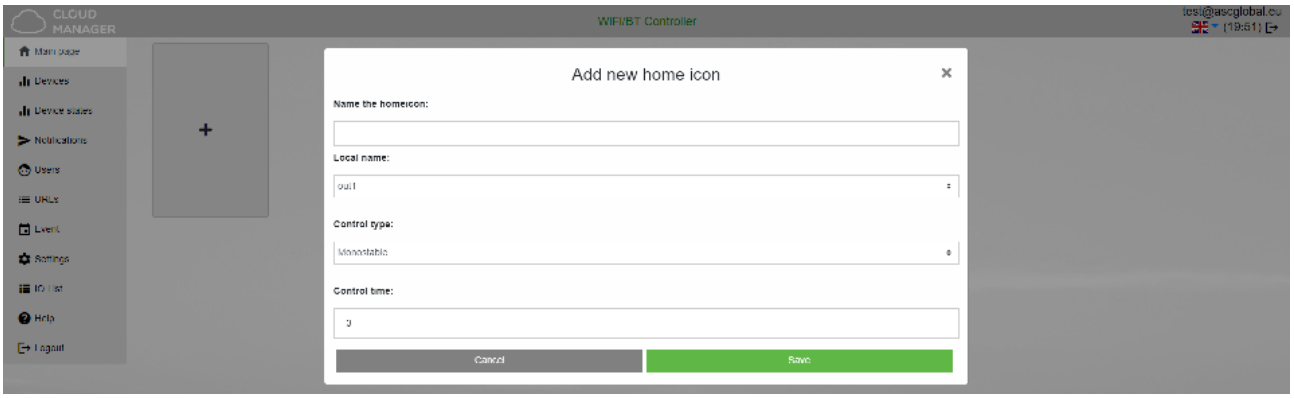


Main Page

On the Main Page, you can create your own control button. The page is empty by default.



Click the "+" button.



Enter a name for the control icon.

With the WiFi/BT Controller PRO, **you can select Output** 1 or Output 2. The WiFi/BT Controller has one output.

Choose the **control types:**

Monostable

Controls the output for the time set in the device.

Bistable ON

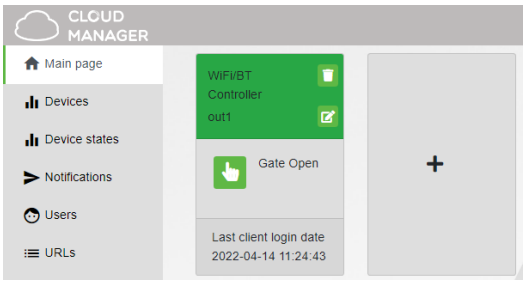
Turns the output on.

Bistable OFF

Turns the output off.

Bistable switch

Pressing the control button toggles the output state.



After saving the settings, you can use the control button. Pressing it displays a system message about the operation or status of the output.

Devices

Clicking the **"Devices"** menu displays a list of modules available according to your permissions, together



with basic information**.**

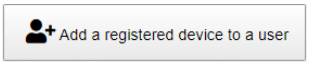
Location: the name assigned during registration or installation

Type: device type
ID: MAC identifier of the device
Last login: time of the most recent connection to the cloud
Status: device connection status. Online - connected; Offline - not available through the cloud service
Operations: rename, replace or delete devices in the cloud

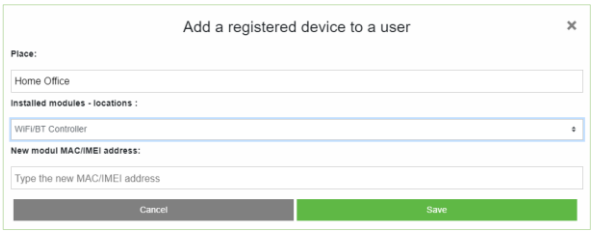
Add WiFi/BT Controller to ASCloud Manager (Web)

There are two ways to assign a WiFi/BT Controller to your account on the ASCloud Manager website:
1) Add your account to the module in the **user settings of a device that is already registered** in the cloud.
You can only assign a cloud-registered device directly to your account that is not already assigned to a user. In the case of a **WiFi/BT Controller already registered in the cloud**, you can easily and quickly add the module you want to use to your user account with a few clicks by modifying the users assigned to the device.
2) For a new device, **configure the local WiFi network using WPS so** that the device can access the ASCloud Manager server. After **WPS pairing**, the module becomes available in the cloud and can be configured. You can then assign it to your account and change the access permissions.
After registration, the module can be configured remotely at any time.

Add a registered device



Click "**Add a registered device to a user**" and enter a name for the new device, such as a location or another unique identifier. If several devices are installed at the same location, you can associate the device with an existing installation location. Enter the MAC address shown on the enclosure to register the device in the cloud.



Device operations 

You can access the device settings by selecting them from the list and clicking on the module row.
Device setup (rename)



You can give your device a unique name of your choice for easier identification.

Device replacement



Use this feature to replace the device with a new module. The data and settings saved for the old device in ASCloud Manager are copied to the new module; only the device ID changes.

NOTICE!
After copying (cloning), the new device replaces the old device in the cloud, and the old module can no longer be used on this interface.

Delete device



Press and hold the small black button on the module panel for 5 seconds, then delete the WiFi/BT Controller or WiFi/BT Controller PRO from the cloud using the trash icon in the same row. Follow this order; otherwise, the device may register itself in the cloud again.

Device status

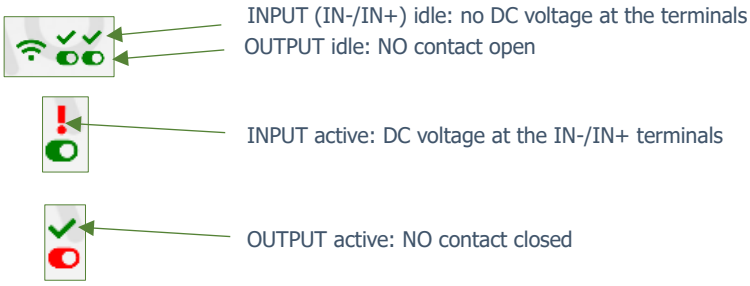
Place	Type	ID	Status	Status date	Last client login date
WiFi/BT Controller	WiFi/BT Controller Pro	e868e71469f2		2022. 04. 14. 11:41:12	2022. 04. 14. 11:51:12

You can view the current output states and, on the PRO model, the input states.
The cloud connection status of the registered device is displayed separately.



Green indicates the idle state. Move the cursor over the item to display its assigned name.
If the device is not connected to the cloud, its status is shown as Offline.

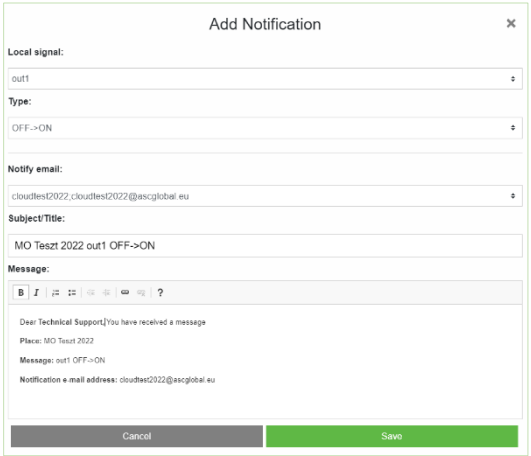
The WiFi/BT Controller has one output. The WiFi/BT Controller PRO allows you to monitor two outputs and two inputs.



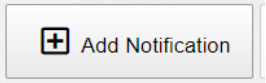
Notifications

There are two types of notifications:
- **system notifications**, which contain important messages about the server, software updates or the system
- **status notifications**, which send information about selected controls and states to the selected email address

Add notification



Press the "**Add notification**" button.

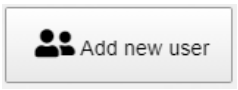


Local signal
Select the output or input of the WiFi/BT Controller or WiFi/BT Controller PRO whose state change should trigger a notification.
Under Type, select the direction of the state change:
OFF -> ON: send a notification when the state changes to ON
ON -> OFF: send a notification when the state changes to OFF
Notified email address
Select the email address to which the notification should be sent. You can also customize the subject and message.

NOTE!
Depending on the user account used to register the module, the required email address may not appear here. In the Users menu, select the required email address, open the editing options and add it as a notification email address. Save the setting, log out of www.ascloudmanager.com, and then log in again before continuing the notification setup.

Adding and managing users

You can assign users to the device using their email addresses and passwords and grant individual output-control permissions.



The WiFi/BT Controller has one output. For the WiFi/BT Controller PRO, permissions can be assigned separately for two outputs and two inputs.

User access

You can edit user access, grant individual permissions, change the user password, or delete the user using the appropriate icon.



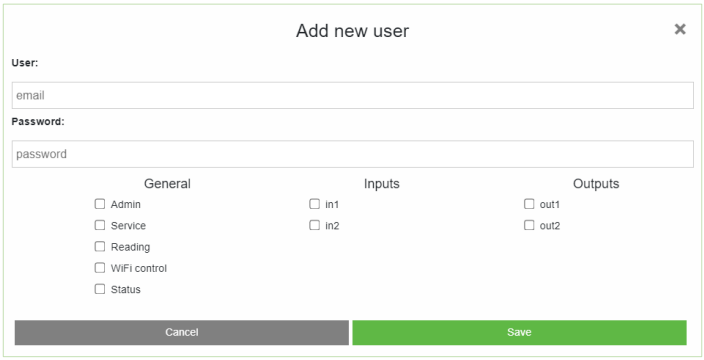
Admin: administrator permissions

Provides all permissions except deletion of the user who granted the access.

Service: provides access to service data related to module operation.

Read-only: provides read-only access.

WiFi restriction: limits the user to controlling the output only while connected to the local WiFi network.



Note!

For this function, the WiFi/BT Controller must remain connected to the local WiFi network with adequate signal strength.

Near the gate, the mobile device may connect to the WiFi/BT Controller automatically via Bluetooth. It may therefore be difficult to determine which connection was used. If the gate can be controlled nearby but not remotely, check the WiFi and cloud connections. If the WiFi restriction field is left blank, the output can be controlled from any location with an internet connection.

With a suitable WiFi and internet connection, the WiFi/BT Controller can be accessed remotely.

OUT1: assign the output to the user.

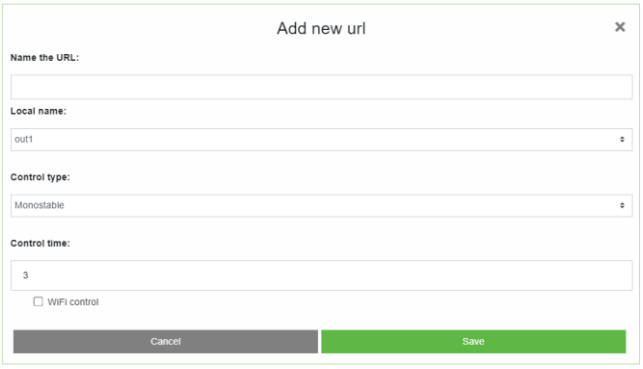
After saving, the settings can be used immediately.

Set user details

You can change your own or another user's login details. Find the user's email address and select the settings  button.

Create a URL control icon

In the URL menu, you can use the "Add new URL" button to create a control icon for your desktop PC or laptop.



- Enter a name for the control icon used on the PC.
- Select the output.
  With the WiFi/BT Controller PRO, **you can select Output** 1 or Output 2. The WiFi/BT Controller has one output.

Choose the **control types:**

Monostable

Controls the output for the time set in the device.

Bistable ON

Turns the output on.

Bistable OFF

Turns the output off.

Bistable switch

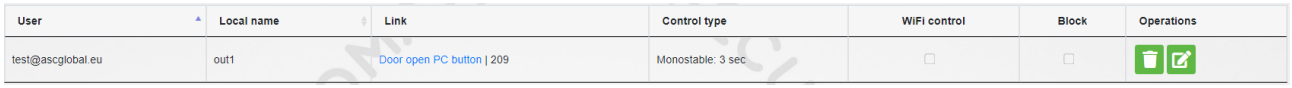
Pressing the control button toggles the output state.

WiFi restriction

You can specify whether the **local WiFi network must be available for control**. When the WiFi restriction is enabled, the control icon can be used only within the local WiFi network. When it is disabled, the output can be controlled from any location with an internet connection.

If you no longer want to use it, simply delete it with the appropriate symbol.

Drag the URL to the desktop with the left mouse button. The shortcut can then operate the device connected to the output.



User	Local name	Link	Control type	WiFi control	Block	Operations
test@ascglobal.eu	out1	Door open PC button | 209	Monostable: 3 sec	☐	☐	

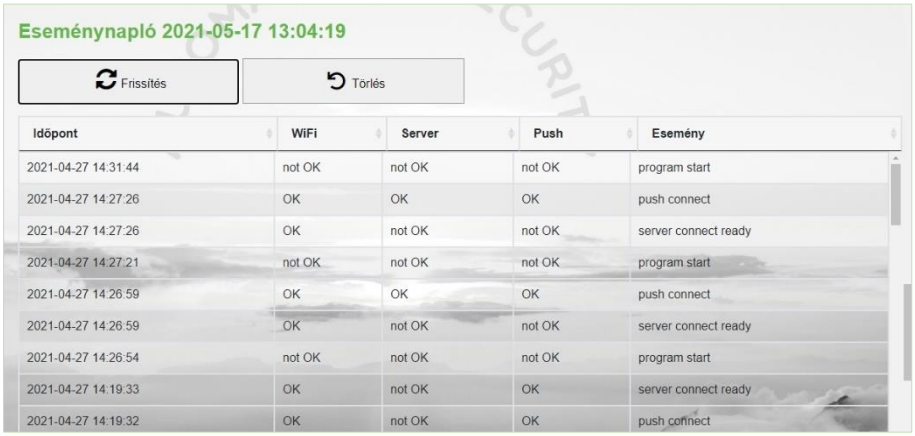
You can edit your existing URL connection. You can change your settings or disable them.

If you no longer want to use it, simply delete it with the appropriate symbol.

Event log

The event log shows when and which user controlled the output. It can be saved as an Excel file.





Settings

Information

This menu displays device information according to your permissions.

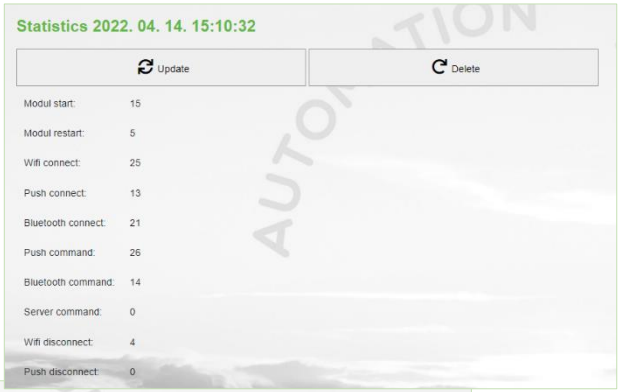


Name: device name;
MAC: MAC address

Date created: registration date
Last login: most recent login date
Last command: time of the most recent output control
Version: firmware version of the WiFi/BT Controller module
WiFi network (SSID): local WiFi network name
IPv4: local IP address assigned to the device
Operating hours: operating time since commissioning

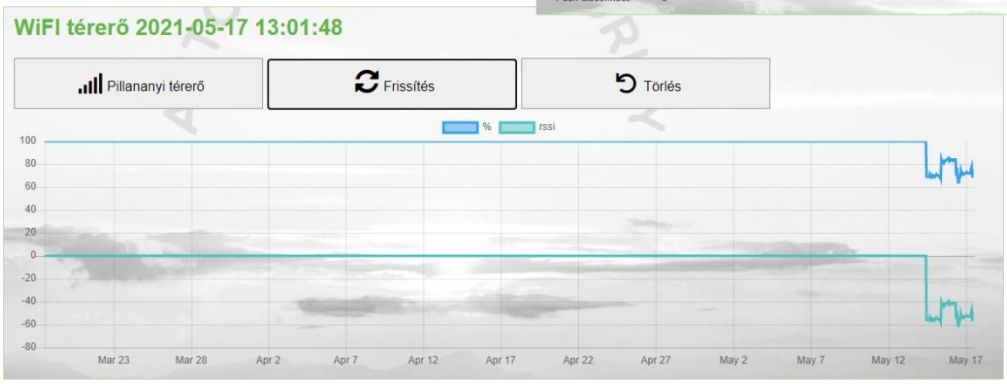
Statistics

After refreshing the page, the latest daily statistics show the number of module restarts, connections and control operations.

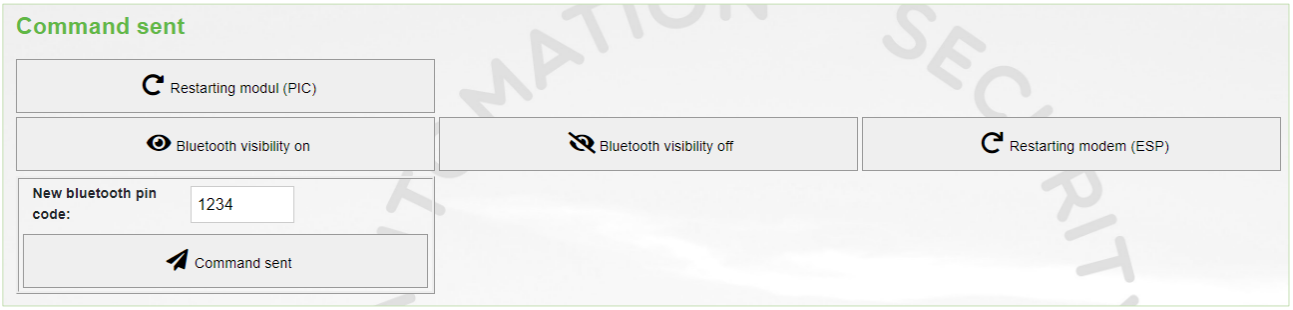


WiFi signal strength

This view shows the device WiFi connection information by day.



Send command



You can restart your module at the touch of a button. On PIC restart, the entire module is restarted, while on ESP restart, the program itself is restarted.

You can also set the visibility. If you want to set a new Bluetooth PIN code, you can also do so here.

The WiFi/BT Controller automatically enables Bluetooth for 10 minutes after power-up, so applying power to the module is sufficient for the initial connection.

WiFi

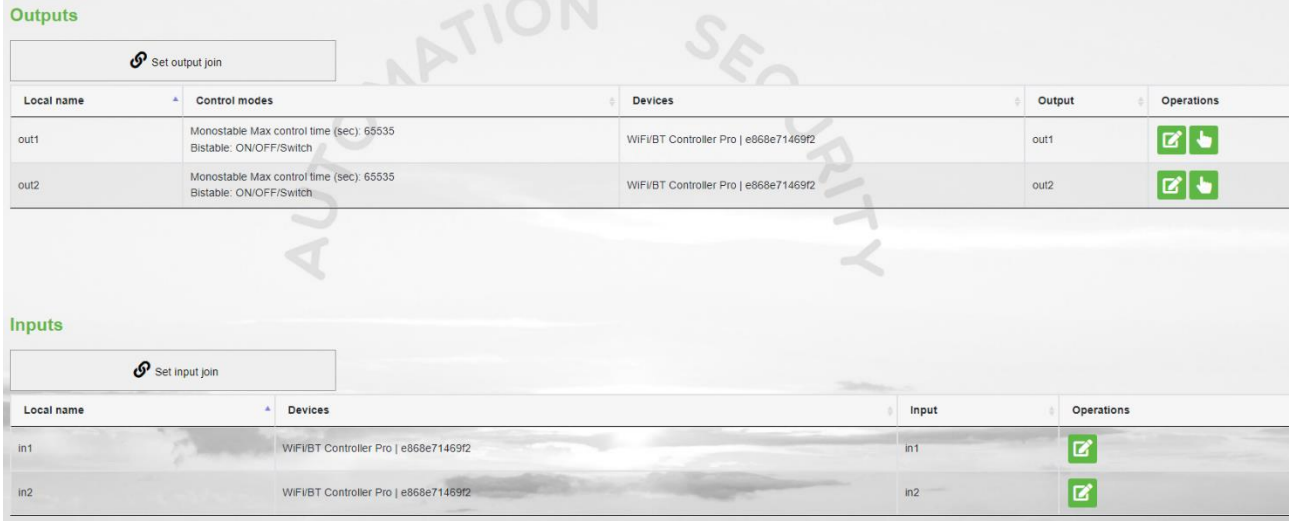
You can see which WiFi network the device is connected to and select a new network.

You can set the priority of the configured networks and select the preferred network.



I/O

In the I/O menu, you can view and configure the output connection data. Use the hand icon to control the output.



Help



Wiring and programming of WiFi/Bluetooth Controller

Video instructions are available in the Help menu.

Editing operations

To change the settings or control data of the selected device, click the corresponding module row.

 Use this button to rename the module for easier identification, e.g. Main entrance.

 Use this button to copy all cloud settings to another module. The existing settings are transferred to the new module.
The old module will no longer be available on this interface.

Data management policy

Users access the system with an email address and password, which are required for operation. The purpose of data processing is to provide authorized users with access to the system. Personal data is processed in accordance with the current ASC Global Privacy Policy.
Personal data must be handled in accordance with applicable legislation and the current Privacy Policy.

Manufacturer's responsibility

The Manufacturer is responsible for the operation and use of the system, including the intended use of the hardware and software, in accordance with applicable law.
The Manufacturer shall not be liable for any damages resulting from:
• the user loses the device used to control the system, the device is stolen, or the access credentials become available to an unauthorized person;
• the user chooses a simple or easy-to-crack password;
• the user directly or indirectly transfers the access credentials or a device capable of controlling the system to a third party.