

# **Easywave Control Center**

Documentation for iPhones and iPads



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## 1.0 Easywave CCserv

The **Easywave CCserv** is the centre for the end customer's platform. This server is simply inserted into a socket outlet. All Easywave household components are then on hand as a central communication point.

The **Easywave CCserv** can be used in any 230V socket outlet. As in all electrical devices, it should be ensured that the air supply is not cut off from the device.

The LEDs on the top of the casing signal various operating statuses. The following statuses are displayed:

- Top LED is on: power supply connected.

Left green LED is on: booting routine complete, the device is ready

to use.

Left red LED is on: a loaded update is being checked,
Left red LED flashes: an update is being loaded and installed,
Right green LED: CPU activity. The faster the LED flashes,

the higher the processor load,

Bottom blue LED is on: server is set as a WLAN client,Bottom blue LED flashes: WLAN communication is active.

settings are changed at a later date,

The **Easywave CCserv** server comes fully configured. If settings are changed at a later date, they can be adapted to your needs using a web browser. In order to do this, it is necessary to connect the **Easywave CCserv** to a PC/notebook via LAN or WLAN.

#### 1.1 Technical details

Dimensions 95mm (L) x 65mm (W) x 48.5mm (H)

Supply voltage 100 - 240V / 50 – 60Hz

Power input 5W (average), 20W (maximum)

Processor 1.2GHz

L1 cache: 16K instruction + 16K data

L2 cache: 256KB

Memory DDR2 800MHz, 16-bit bus

512MB 16bit DDR2 @ 800MHz data rate

NAND flash controller, 8-bit bus

512MB NAND flash: 4GB x8, direct boot

Hardware security engines AES, DES and 3DES encryption algorithms

SHA1 and MD5 authentication algorithms

LAN 1x Gigabit Ethernet

USB 2x USB 2.0
Permissible ambient temperature 0- 55°C
Weight 200q



## 1.2 Supported devices

The **Easywave CCserv** server supports virtually all wireless transmitters (sensors) and wireless receivers (actuators) in the Easywave product range.

If new products come onto the market, they are deployed to the **Easywave CCserv** server via regular software updates.

#### 1.3 USB connectors

Wireless transmission between the **Easywave CCserv** server and the end devices to be controlled is performed via the RX09 USB transceiver.

The RX09 is included in the scope of delivery and must simply be inserted into the **Easywave CCserv** server so that the entire Easywave product range can be controlled.



## 1.4 Standard settings

## 1.4.1 Login details for the Easywave CCserv server

A standard login for the **Easywave CCserv** server is set the standard configuration. For security reasons, this must be changed after initial login using the Easywave app.

Username: Admin Password: Admin

# 1.4.2 Login details for the web configuration interface

enexWeb configuration is possible by opening the URL: https://192.168.x.y:10000 from a connected device.

Username: Admin Password: S&\$H%@S

# 1.4.3 WLAN password, server and network settings

- LAN: the Easywave CCserv server acts as a DHCP client
- WLAN: is switched on and forms an independent network (DHCP server),
  - The name of the WLAN (SSID) is "**EasywaveCCserv-**\*\*\*\*" (visible), where \*\*\*\* stands for the last 2 bytes (4 digits) of the MAC address.
  - It has WPA2 encryption activated with network key: "E@sy1W@ve2Serv"
- The Easywave CCserv's IP address in the WLAN network is: 192.168.3.1.
- The Easywave CCserv is accessible via port 12345.
- Host name: "Easywave CCserv",
- Automatic updates are switched on.
- A reboot is initiated via the hardware reset (recessed button).



#### 1.4.4 Factory reset

All network settings can be reset to the standard defaults using the **enexWeb** configuration tools. In order to do this, you need to log in using the **enexWeb** login details (see Item 1.4.2).

## 1.4.5 Resetting the admin login details

The "Admin" login can be used for 5 minutes with the standard password "**Admin**" after the power supply has been broken. This account **always** has admin rights and cannot be deleted, so that new user passwords may be configured here.

## 1.5 Easywave CCserv connection via LAN

For a LAN connection, the CCserv's IP address is assigned via the (DSL) router's DHCP server on site. This IP address can be read in the router menu by listing the devices with the currently assigned device IP addresses.

# 1.6 Easywave CCserv connection via WLAN

The **Easywave CCserv** server acts as an access point in the WLAN connection. A new WLAN network now appears on your iPhone / iPad with the name "**EasywaveCCserv-\*\*\*\***".



The standard password for this WLAN is: E@sy1W@ve2Serv

The CCserv server's standard IP address is: 192.168.3.1

This password must be changed after initial login in order to avoid misuse.



## 2.0 Easywave CCapp – the visualisation

The first part of this section will give you information about the important elements of the program control. This begins with the technical prerequisites, logging into the application, and the basic functions.

**Technical prerequisites:** iPhone/iPad/iPod with iOS version 6.1 or higher

There should be 20MB of free space on your device.

Where to buy: you can download the app under the name of "Easywave"

from the Apple Store using the standard purchasing procedure. Other search terms that you

can use are: CCapp, Easywave, ELDAT.

#### 2.1 Initial use



Make sure that the CCserv server and your iPhone/iPad are connected to the same network (e.g. WLAN).

#### **Automatic search**

When starting the app for the first time, it automatically searches for a CCserv server in the network.

You can log in using the following data as soon as the server is found:

Login: Admin Password: Admin

Then you will be asked to change the existing password. Please make a note of the password. You will have access to the application after inputting the password.

You can search for the server manually if it cannot be found. Please click on the "**lookup Easywave CCserv**" function to perform this search. You can input the connection data manually if necessary.



# 2.2 First steps

After connecting your end device to the **Easywave CCserv** server, you will see that the only item that has been added is the "Service" room. As all devices are allocated to a room, we recommend that you start by adding more rooms.

The **rooms** can be used to specifically control individual home automation devices (e.g. if you are in the living room and want to dim the light in the room, select the "living room" from the list of added rooms. There you will find a list of all devices that are allocated to this room).

**Sequences** can be used to group devices from various rooms so that they can be controlled together with one click. This can also be used to configure automatic controls.

The individual Easywave products can be trained and managed in the **Devices** menu.



## 2.3 Managing rooms

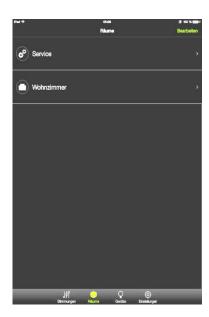
Select the "**Rooms**" application on the main screen. You will get an overview of all rooms added.

#### 2.3.1 Add or delete a room

Click on the "**Edit**" button in the top right of the screen to add a new room. More icons will now appear. In the top right, there is a "+" symbol to create a new room and a "-" symbol in front of the rooms that have already been added if you want to delete a room.



Please ensure you have admin rights. This button is only displayed if you have admin permissions.



#### Add room

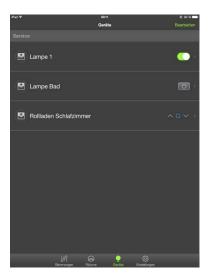
Please click on the "+" symbol.

Another screen with a choice box for the room symbol and a text field will open. You can input the name of the room in the text field. The keyboard appears if you click on the text field. Input the name and save this entry.



# 2.4 Managing devices

Select the "**Devices**" application on the main screen. You will get an overview of all devices added. If sensors are used, the current operating status will be displayed. If actuators are used, there is the option of issuing switching commands.





#### 2.4.1 Adding, connecting, and controlling new devices

Click on the "**Edit**" button in the top right of the screen and then on the "+" symbol to add a new device (sensor or actuator).

Another screen with a choice box for the devices symbol and a text field will open. You can input the name of the device in the text field. This must be biunique. The keyboard appears if you click on the text field. Input the name and continue with the process by clicking "Next".

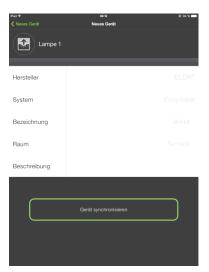


The user is then always informed about the next work steps and their status using intuitive user guidance. This means that you do not need device-specific knowledge.



You simply need to state whether it is an actuator or a sensor in the "**Designation**" field in order to add the corresponding device to the server by clicking on "**Synchronise device**".

You will then get instructions, e.g. when and how long a certain button on the end device needs to be pressed; where this button is; which (flashing) signals a device emits to visualise the synchronisation, and so on.



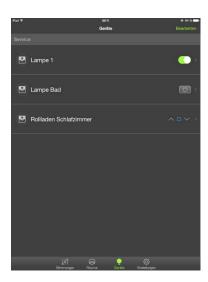
If you want to enter a detailed description, the corresponding input field is provided for this. All entries are made using the standard keyboard. If all entries have been made, the new end device can be synchronised with the **Easywave CCserv** server. In this process, simply set the desired operating mode. You will then be told about the next steps in the training procedure in small dialogue boxes.



Each completely synchronised device is added to a device list. This shows both switchable and dimmable devices. The added sensors and their current status are also displayed here.

All devices are allocated to rooms in order to make it easier to get an overview of their local fields of application. The corresponding headings separate sections of the rooms. Now all devices can be easily operated using the relevant buttons.

As all devices in a network communicate with the **Easywave CCserv** server, the operating statuses are constantly updated on all registered applications.



#### 2.4.2 Deleting devices

Click on the "**Edit**" button in the top right of the screen to delete a device from the application. Then a "-" symbol will appear in front of each device that has already been programmed. Click on this symbol and confirm deletion in order to permanently delete the device from the application.



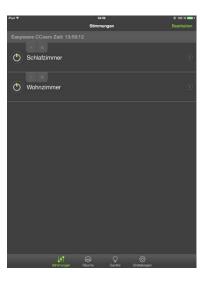


## 2.5 Managing Sequences

Sequences can be used to combine several actuators into one switch group which you can then activate by tapping on the corresponding sequence (e.g. you have a room with 2 lamps that you want to switch off and 2 devices, such as a TV and DVD player, that you want to switch on. You can combine the desired statuses into one "film night" sequence. Then you just need to tap the sequence instead of controlling all 4 devices individually).

Sequences can also be time controlled, e.g. to switch everything off at night to save electricity or to make it look like someone is at home. Sequences can be triggered using sensor values as well.

This means that for example a light can be switched on if a motion sensor detects movement.



#### 2.5.1 Adding Sequences

In the main screen, please switch to the "**Sequences**" area to add a sequence. Click on the "**Edit**" symbol here in the top right corner of the screen and then click on the "+" symbol.

In the following dialogue box, you can select a symbol for the sequence and set a description.

If you do not want to set the sequence as active for the time being, you may just deactivate this sequence. This means that this sequence will not work.

Then click on the "Save" button. This means that the mood settings have been added. You can activate a sequence with the saved switching commands by simply tapping on the button with the name of the sequence.





## 2.5.2 Configure a sequence

In the next step, you now state which of the memorized devices should be switched to which status when the sequence is activated.

To do this, click on the ">" symbol on the right edge of the sequence button. This takes you to the sequence configuration/details area. You can edit a sequence from here.

You can use the following functions:

Devices: Define all devices to be controlled here

Atomate: Define all sensor activating this sequence

**Timer:** If you want to automatically switch on a sequence

at a particular time, you can store your chosen

times here.



#### 2.5.3 Add devices to a sequence

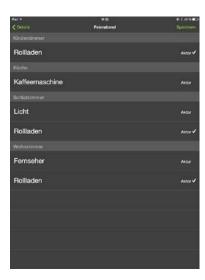
Click on "**Devices**" in a sequence configuration menu. You will get a list of all devices that you have already added.

Now click on the "**Edit**" button. Here you can select the desired actuators by tapping on the tick to the right of the respective name. Then click on the "**Save**" button.

You will now get an updated list with all of the devices that you have clicked on and their respective statuses.

Now set the desired actuator statuses. The actuators should adopt these statuses when the sequence is switched on. In principle, the set status is immediately saved here.

Set the desired Easywave transmitter and its status in the "Automate" menu, so that when this is reached/triggered, the mood is switched on.





#### 2.5.4 Timer

If you want to automatically activate the sequence at a certain time, save the respective times by going into the configuration menu for the corresponding sequence and clicking on the "**Timer**" menu item there.

You now need to save the possible flexible times using the control wheel:

- Set the weekday on the first wheel,
- On the second the **date**,
- On the third the **month**,
- On the fourth the **hour**.
- On the fifth the **minute**.

Save the switching time using "add time"

This time is now added to your time list. You can add as many times as you like.

If you want to change an existing switching time, simply click on the time and then change it to the desired value.

You can deactivate the timing for a sequence at any time by setting the "Timer active" button to INACTIVE.

To delete a switching time, use your finger to swipe from right to left over the switching time you want to delete and then click on the "**Delete**" button.





# 2.5.5 Deleting a sequence

In the main screen, switch to the "**Sequences**" area. All of the existing sequences will be displayed as a list.

Use your finger to swipe from right to left over the mood you want to delete. The "**Delete**" button then appears. Click on the button and confirm the following confirmation message. The sequence is deleted.





#### 2.6 User administration

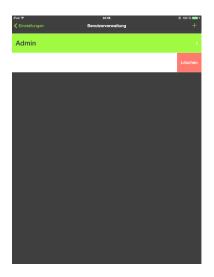
Users can be added and passwords reissued for individual users using the "User administration" tool in the "Settings" menu. The prerequisite for this is prior login with admin rights.

New users can be added as administrators and receive the rights needed, so that they can also adjust settings and manage users.

You can add a new user by tapping on the "+" in the top right corner of the screen.

You can issue or revoke admin rights by clicking on an existing user.





# 2.7 Easywave CCremote

You can control your **Easywave CCserv** server using **Easywave CCremote**, even if you do not have access to your home network.

This service must be manually activated as you need to pay for the **CCremote** function. Activation requires the **Easywave CCserv** server to be registered.

If you have registered a system, all users that have access to this system may use this service without further additional costs. Should you use an additional CCserv system, and would also like to operate this system remotely as well, this system must separately be activated. All costs are raised for one individual CCserv-system only.



You can activate the service using the "**Settings**" menu point, then "**Easywave CCremote**" and there using the "**Buy an extension**" button.





For activating the "CCremote", you must be locally connected with the **Easywave CCserv** and the internet.

Following this, the supplier-specific commercial conditions are displayed; you must then confirm these, before the "Your account details" form for the invoice data appears.

Once you have performed this step, your data will be sent to you **Easywave CCserv**, which now approves itself for service. Ensure that your CCserv is connected with the internet.



**CCremote** in an additional service that is chargeable

Note that CCserv may result in connection fees if you do not have a flat rate for your mobile internet connection. If CCserve confirms, after a few seconds, that activation was successful, you can use the service immediately.

The service activated by you can be terminated at any time and the **Easywave CCremote** service will therefore be deactivated. In order to do this, just go to the management area, open the "**Settings**" menu and click on **Easywave CCremote** again. Now you receive a query window with the option of deactivating the service again. You only need to confirm this query now.

# 2.8 Connecting with additional Easywave CCserv

The **Easywave Control Center** supports connections with several **Easywave CCserv**. If you have another system, e.g. in a holiday apartment, you can control this with the same App.

For this, proceed as follows:

- Launch the App; the usual start screen appears. Always ensure that both, the server and its end device, are in the same subnetwork
- Click on the "Change Login Data" button
- Click on the "lookup Easywave CCservs" button
- You will see a list of all the recently found servers.
- By clicking on the "+" symbol, you will add additional servers to your list.



The list of servers is divided into two groups: "Reachable Easywave CCservs" and "Remote servers". "Reachable Easywave CCservs" are servers that are connected with the App in the local network. "Remote Servers" are servers that can only be reached online. Additional costs may accrue here depending on your mobile tariff.



## 3.0 The enexWeb configuration tool

With the aid of the **enexWeb** configuration tool, settings can be easily applied on the server using a web browser. This is accessed using the URL "https://192.168.x.y:10000". Within this, 192.168.x.y stands for the IP address of the **Easywave CCserv** in the local network; the parameter 10000 states the port used. Please enter "Admin" as the user, and the password is "S&\$H%@S" the first time you log in.

URL: https://192.168.x.y:10000

User: Admin

Password: S&\$H%@S

## 3.1 The first login process

After the first login, the user is requested to enter a new password for security reasons.



Once the user has successfully logged in to **enexWeb**, the current system status is shown. From the start page shown, both the system and network settings can be applied; this is described in detail in the following chapters.





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## 3.2 System settings

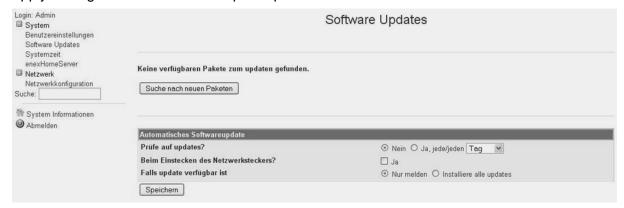
## 3.2.1 User settings

Under the "System" menu point, the user has the option of defining the language of **enexWeb**, its appearance, and the password for signing in. After clicking on the "**Apply changes**" button, all settings are applied.



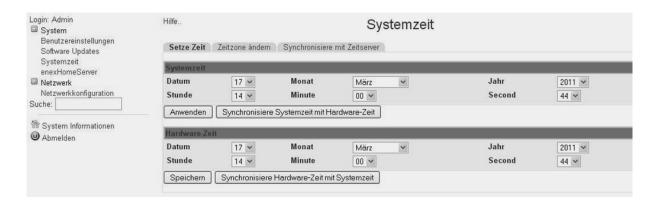
## 3.2.2 Software updates

Under the "Software updates" column, the user is informed about available updates and is able to apply settings that automate the update process.



# 3.2.3 Change system time

The system time can be set manually or even synchronised from a time server online. The following image shows the corresponding input fields in the screen.

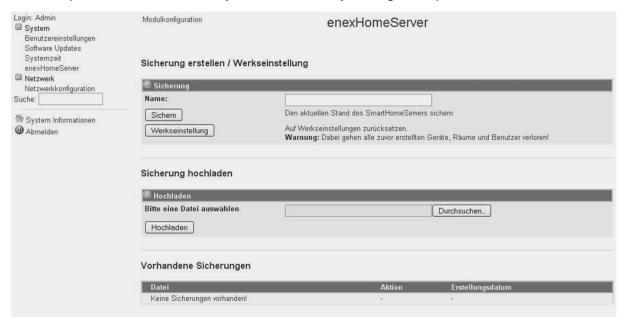




## 3.2.4 Saving configurations and restoring factory settings

The current configuration of the **Easywave CCserv** can be saved or a previously saved configuration can be loaded to the **Easywave CCserv** using the "smartCONTROL" menu.

It is also possible to restore the system to its factory settings if required.





If you restore the factory settings, all previously added devices, rooms and users will be deleted!



## 3.3 Network Settings

This section is intended for advanced users and is used for configuring the network settings. The symbols indicated are used to denote the individual sections.



#### 3.3.1 Network Interfaces

In order to gain an overview of the active interfaces, click on the Network Interfaces symbol on the home page of the module. The page that appears next lists the active interfaces (with their allocated IP addresses), as well as those interfaces which should be activated when the system boots up.



The IP address, status and various other settings can be adjusted by clicking on the respective interface.





#### 3.3.2 WLAN

The WLAN settings can be accessed by clicking on the WLAN symbol.



The screenshot above shows the connection settings for the wireless LAN. The meanings of the individual options illustrated here are as follows:

- SSID: freely selectable network identifier (must be unique for a network)
- Network Key: access to the respective network
- Encryption:
  - None: Data transferred are not encrypted.
  - WEP: Wired Equivalent Privacy. Data transferred are encrypted using WEP (64 or 128 Bit).
  - WPA: Wi-Fi Protected Access Pre-Shared Key. Data transferred are encrypted using TKIP, as per the WPA-PSK standard.
  - WPA2: Wi-Fi Protected Access Version 2 Pre-Shared Key. Data transferred are encrypted with AES, as per the WPA2-PSK standard.
- Channel: You can specify the operating frequency you are using in this field. If there is no
  interference from other access points within the environment, you do not need to
  change the value indicated.
- Signal Strength: Select the signal strength of the wireless network
- Router: Activates the router function
- DHCP Server: Activates the DHCP server

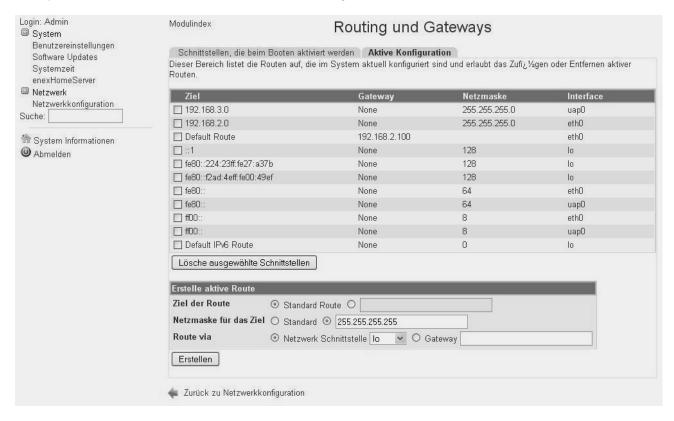
Under Access Point Info, the user can access a detailed overview of the active parameters. The connected devices that are linked to the **Easywave CCserv** are also shown here.

It is also possible to integrate the CCserv into an existing WLAN network as a client by clicking "Switch to Client Mode".



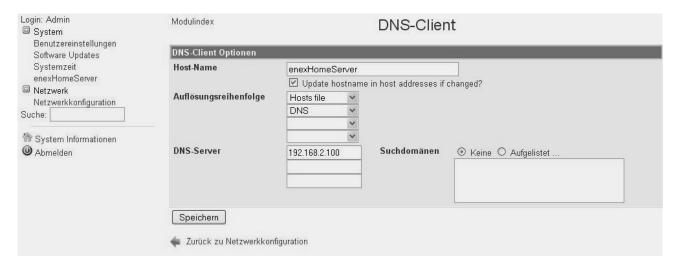
#### 3.3.3 Routing and Gateways

The menu option Routing and Gateways allows the user to configure the routes currently active on the system or those that should be activated during the next boot.



#### 3.3.4 DNS Client

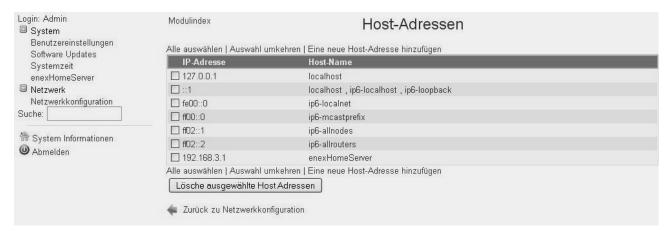
Under the heading "DNS Client", the user can change the name resolution of the **Easywave CCserv**, i.e. enter a host name and determine the order in which name resolution should occur (e.g. hosts file, DNS server). The user can also define the domain name server that is queried here.





#### 3.3.5 Host Addresses

The menu option "Host Address" is used for the allocation of host names to IP addresses. The list is based on a corresponding file, which is accessed via DNS server before name resolution, depending on the DNS settings.



Normally, no changes are necessary here, since the list already shows the **Easywave CCserv** under the same name in the table, linked to the IP address.

In order to avoid confusion with other **Easywave CCservs** present on the network, the last 2 bytes (4 characters) of the MAC address are added to the end of the host name. The host name then appears as "**Easywave CCserv-\*\*\*\***", with the stars acting as placeholders for the corresponding characters from the MAC address.