

# ACW-05

WALL PLATE REMOTE CONTROLLER

Operation Manual V1.0



Easy remote volume, source selection, and mute control for non-technical operators

# ACW-05

WALL PLATE REMOTE CONTROLLER

# Operation Manual V1.0

Software version 0.3.13 and above

For any support related questions please contact: <a href="mailto:info@apex-audio.be">info@apex-audio.be</a>
Keep this manual and a record of the product serial number for future reference.

This document has been put together with as much care as possible. The information within is complete and correct on the date of publication. However, updates on the specifications, functionality or software may have occurred since publication. To obtain the latest version of both manual and software, please visit <a href="https://www.apex-audio.be/downloads">https://www.apex-audio.be/downloads</a>





Serial number of this product

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## Important Safety Instructions

This appliance is not intended to be used by persons, including children, with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they are supervised or have been given instructions on how to use the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

# Do not drop liquid, metal or combustible into the product.

- If any liquid or metal is dropped into the product, power off the product and disconnect power supply, then contact professional staff for solutions.
- Pay attention to the children when they are close to the product.
- Do not damage the power cable.
- Do not damage, change, wind, bend, heat or drag the power cable forcibly.
- Do not put weights (such as the product itself) on the power cable.
- Do not drag the cable forcibly when you pull out the power plug. If the power cable is damaged, please contact the local distributor to repair or replace it.



#### Do not open the cover or change the product by your own.

High voltage components are installed in the product. When you open the cover, high voltage, electric shock or other dangerous situations may occur. If inspection, adjustment or maintenance is required, contact the local distributor for help.



### Do not install the product in an improper place.

- Do not install the product in humid places, such as the bathroom, the shower room, the place near windows or outdoor environments where experience rain, snow or other harsh—weather. The product installation is also required to avoid a place around by hot spring vapour. The preceding environments may cause faults or electric shock under extreme conditions.
- Do not put exposed fire source, such as an ignited candle, on the product.

#### Maintenance and Servicing

Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personal.

Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.

#### **Intended Use**

The equipment may only be used for the purpose described in the operation instructions. Never carry out any work on the equipment other than as specified in the operating manual.

Never push objects of any kind into this product through openings, as they may touch dangerous voltage points or short-cut parts, which could result in a fire or electric shock.

#### **Environmental Precaution**

Electrical and electronic equipment may contain hazardous substances for humans and their environment.

1

The "crossed out wheelie bin" symbol present on the device and represented above is there to remind one of the obligation of selective collection of waste. This label is applied to various products to indicate that the product is not to be thrown away as unsorted municipal waste. At the end of life, dispose of this product by returning it to the point of sale or to your local municipal collection point for recycling of electric and electronic devices.

Customer participation is important to minimize the potential affects on the environment and human health that can result from hazardous substances that may be contained in this product.

Please, dispose of this product and its packaging in accordance with local and national disposal regulations including those governing the recovery and recycling of waste electrical and electronic equipment.

Contact your local waste administration, waste collection company or dealer.

#### Safety notices:

#### Denmark

Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord.

#### Finland:

Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan.

#### Norway:

Apparatet må tilkoples jordet stikkontakt.

#### Sweden:

Apparaten skall anslutas till jordat uttag

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## Dear Customer,

Thank you for choosing the APEX ACW-05 to meet your sound reinforcement needs. Designed for flexibility and ease of use, the ACW-05 wall plate controller enables systems integrators to configure and manage settings remotely using any device with a web browser through the ACW Manager WebUI.

Each controller can access an unlimited number of APEX CloudPower amplifiers connected to the same network via Wi-Fi or Ethernet. Flexible audio zoning is possible using channels from multiple amplifiers, all seamlessly controlled through the ACW-05.

## **Applications**

With its intuitive touchscreen interface, the ACW-05 is ideal for non-technical users across a wide range of environments, including:

Education

Retail

Hospitality

Fitness

Conferencing

Houses of Worship

And more

## **Foreword**

The ACW-05 is a networked wall-mounted controller purpose-built for use with APEX installation amplifiers. Featuring a compact 4" touchscreen, it provides users with real-time level metering and straightforward control over volume, mute functions, and source selection across one or more audio zones.

An integrated Bluetooth® input allows audio streaming directly from personal devices, enabling flexible BYOD (Bring Your Own Device) use cases.

The controller is configured via the ACW Manager WebUI, accessible from any web-enabled device on the same network. Each ACW-05 can interface with amplifier channels from all APEX installation amplifiers over Wi-Fi or Ethernet, allowing dynamic audio zoning across multiple units.

Designed to offer intuitive, hands-on audio control without the complexity or cost of a full DSP or AV control system, the ACW-05 is an ideal solution for a wide variety of commercial and institutional applications.

The ACW-05 supports both PoE (Power over Ethernet) and AC mains power and is compatible with standard EU wall boxes. It is fully interoperable with the entire APEX installation amplifier range.

## **Product Highlights**

- 4" Touchscreen
- Volume, Source Select, and Mute control
- Level metering Control multiple zones from single ACW-05
- Bluetooth streaming
- Connect to multiple networked amplifiers
- Manage remotely from browser-based WebUI
- Fits standard EU wall boxes
- Wifi and Ethernet network connection
- PoE
- AC voltage 110V and 240V
- Remote firmware update
- Fits standard EU wall boxes
- Fits standard US wall boxes (requires optional bracket)



## Before You Get Started

#### **About This Manual**

Please read all instructions and safety warnings carefully before operating the ACW device. Retain this manual in a safe and accessible location for future reference.

The most recent version of this manual can always be downloaded from the APEX website: www.apex-audio.be/downloads

This document provides detailed information for the setup, configuration, and operation of the ACW Series wall plate controllers.

### **Inspection and Unpacking**

Each ACW unit is meticulously inspected and securely packed at the factory. The packaging is designed to withstand typical transport conditions. However, upon receipt, please inspect the unit carefully for any signs of damage that may have occurred during transit.

If damage is suspected:

Do not discard any packaging materials.

Notify the carrier immediately, as they are responsible for any transport-related damage.

We strongly recommend keeping all original packaging for future transport or storage of the unit.

### **Operating Environment**

The ACW Series is designed for reliable operation in typical indoor environments. To ensure optimal performance, operate the device under the following conditions:

Temperature range: 10°C to 60°C (50°F to 140°F)

Relative humidity: 10% to 60% (non-condensing)

Avoid exposing the unit to extreme temperatures, high humidity, or direct contact with liquids.

### **Power Requirements**

Before connecting the ACW unit to a power source, ensure that your local AC supply falls within the unit's supported voltage range.

The ACW is designed to operate with an AC input of 110–240 V at a frequency of 50–60 Hz. The unit is equipped with auto-ranging power detection, eliminating the need for a manual voltage selector. It will automatically adjust to the supplied voltage within the supported range.

Important: Connecting the device to an incorrect power supply may result in equipment damage and void the warranty.

#### **Installation Guidelines**

When installing the ACW unit, observe the following recommendations to ensure safe and reliable operation:

If the device has been transported from a cold environment into a warm room, internal condensation may occur.

Allow the unit to acclimate for at least one hour at room temperature before powering it on.

Failure to follow this guideline may lead to moisturerelated malfunctions or long-term component damage.

# Compatibility

#### WebUI

Requires an HTML5 compatible browser - Mac, iOS, Windows, Android.

### **Devices**

CloudPower Series, using a Software version 1.3.5S and above.

# Connection Limits

### **Zone Sliders**

Each wall controller is able to have a total of 15 zone sliders.

#### **Connected Devices**

It is possible to have a maximum total of 15 CloudPower series devices linked to any ACW

The Total number of ACW connected to your network is unlimited.

## **Connections**



## 1 Capacitive Touch Display

The ACW™ features a high-resolution capacitive touch display, which leverages the natural electrical conductivity of the human body to detect input. When a user touches the screen with a finger—or a compatible input device such as a capacitive stylus—the display senses the precise location and timing of the touch.

Capacitive touchscreens offer several key advantages:

High Accuracy – Delivers precise control without the need for pressure.

Responsive User Experience – Inputs are registered instantly and reliably, improving ease of use for all users.

This technology is widely adopted in modern consumer electronics and professional AV applications due to its reliability, responsiveness, and user-friendly operation.





RJ-45 Ethernet connector for control via the web interface. Connect this port to your LAN

IEEE 802.3af Power over Ethernet

**Power over Ethernet (PoE)** is a technology that enables network-connected devices—such as IP phones, wireless access points, and security cameras—to receive both data and electrical power over a single standard CAT-5 (or higher) Ethernet cable, without requiring separate power wiring.

The ACW™ supports PoE in accordance with the IEEE 802.3af standard, allowing for streamlined installation and reduced cabling complexity. This is especially advantageous in environments where access to conventional AC power outlets is limited or where a clean, clutter-free installation is preferred.

Note: Ensure that your network switch or injector is PoE-compliant and meets the power requirements of the ACW™ unit.

Pins At Switch	T568A Colour	T568B Colour
Pin 1	White/Green Stripe	White/Orange Stripe
Pin 2	Green Solid	Orange Solid
Pin 3	White/Orange Stripe	White/Green Stripe
Pin 4	Blue Solid	Blue Solid
Pin 5	White/Blue Stripe	White/Blue Stripe
Pin 6	Orange Solid	Green Solid
Pin 7	White/Orange Stripe	White/Orange Stripe
Pin 8	Brown Solid	Brown Solid

PoE Parameters		
Property	802.3af (802.3at Type 1) PoE+	
Power Available at PD	12.95 W	
Max Power Delivered	15.40 W	
Voltage Range (at PSE)	44-57 V	
Voltage Range (at PD)	37-57 V	
Max Current Imax	350 mA	
Max Cable Resistance	20 Ω	
Supported Cabling	Cat3 & Cat5	
Supported Modes	Mode A (endspan), Mode B (midspan)	

\*\*Maximum Cable Length 100m\*\*







AC mains power input, the connector is marked "L" line and "N" neutral ensure the correct colour coding standard is used in your region.

Region	Earth (E)	Neutral (N)	Line 1 (L1)	Line 2 (L2)	Line 3 (L3)
Europe / UK					
	Green	Blue	Brown	Black	Grey
UK (old)	Green	Black	Red	Yellow	Blue
Australia					
	Green	Black	Red	White	Blue
USA					
	Green	White	Black	Red	Blue



### **Cleaning and Maintenance**

### **Things Needed to Clean Your Touch Screens**

To effectively clean touch screens, you will need a few essential items. Here are the key things you should have:

#### Microfiber Cloth

A high-quality microfiber cloth is a must-have for cleaning touch screens. It is gentle and non-abrasive, effectively removing fingerprints, smudges, and dust without scratching the surface.

#### **Cleaning Solution**

Choose a cleaning solution specifically formulated for touch screens or electronic devices. Look for alcohol-free and ammonia-free options to avoid damaging the screen's protective coating. Alternatively, you can use a homemade solution by mixing distilled water and isopropyl alcohol in a 50:50 ratio.

#### **Distilled Water**

Distilled water is recommended for diluting the cleaning solution or using it on its own. It helps prevent streaks and mineral deposits that regular tap water might leave behind.

#### **Spray Bottle**

If using a homemade or diluted cleaning solution, a spray bottle is convenient for applying the solution to the microfiber cloth in a controlled manner. Avoid directly spraying the solution onto the touch screen.

#### **Compressed Air**

Compressed air can be useful for gently blowing away dust or debris from hard-to-reach areas like edges, ports, and buttons. It helps maintain cleanliness in intricate parts without the risk of moisture damage.

**How Often Do You Need to Clean Your Touch Screen?** The frequency of cleaning your screen depends on various factors, including the environment in which the screen is used, the level of usage, and personal preference. However, as a general guideline, it is recommended to clean your screen regularly to maintain its cleanliness and functionality.

Just like other personal devices like smartphones or tablets that are used frequently and come into contact with hands and surfaces regularly, a weekly or bi-weekly cleaning routine is advisable. This helps prevent the buildup of smudges, fingerprints, and germs that can accumulate over time.

In professional settings where touch screens are used intensively, such as in retail stores, restaurants, or healthcare facilities, it may be necessary to clean the screens more frequently. Consider incorporating a daily or every-other-day cleaning routine to ensure optimal cleanliness and hygiene.



### **Accessing Network Settings**

The Network menu provides access to the IP configuration settings of the ACW™ Series devices. These settings can be adjusted using either the touchscreen interface or the web-based control panel.



#### Access via Touchscreen:

To access network settings directly from the device:

Touch the top of the display and swipe downward twice in succession

This gesture reveals the system settings menu, including Network Settings.

#### Access via Web Interface:

Network settings can also be configured remotely using any web browser:

Navigate to the ACW Manager WebUI. Go to: Device Configuration » Network Settings

From either interface, you can view and edit key network parameters such as IP address, subnet mask, gateway, and DHCP/static IP selection.

#### Connect via a router

Connect the ACW $^{\text{\tiny{M}}}$  device's LAN connector together with a PC to a router. The use of a router is mandatory in DHCP mode to obtain IP addresses. After a connection is established with the router, the ACW $^{\text{\tiny{M}}}$  device will receive an IP address that will be displayed in the network menu. Enter this address in your device's browser, and the ACW $^{\text{\tiny{M}}}$  software will open on your device. The ACW $^{\text{\tiny{M}}}$  software is web-based, so there is no need for software installation.

Tip: For installations using fixed IP addresses, ensure the selected IP does not conflict with other devices on the network.



### **Accessing the Web UI**

To access the ACW web interface, you need to establish a connection between your device and the amplifier's server. This can be accomplished using one of the methods outlined below.

#### Via a LAN

- 1. Connect the CONTROL port of the amplifier to the same LAN as your device.
- 2. If the IP mode is set to DHCP (default), the amplifier will get an IP address assigned by the router. You can view this IP address from the amplifier's front panel: Settings > Network. If the mode is set to Static, you might need to adjust the IP address from the front panel.
- 3. Enter the device IP address into your web browser's address bar.
- 4. Enter the login credentials to access the web interface, both are set to "admin" by default.



#### Directly via a network cable

- Connect the Ethernet port of your computer directly to the CONTROL port of the device using a network cable
- 2. Make sure the amplifier is in DHCP mode (default), which can be adjusted through the front panel under Settings > Network.
- 3. The device will be assigned an automatic IP address within the 169.x.x.x range.
- 4. Enter the login credentials to access the web interface, both are set to "admin" by default.

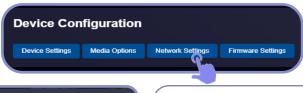


## Web UI / Settings / Network

In the network tab, you can access all network-related settings, including the device's LAN and WiFi.

#### Via Web UI

The LAN and WiFi section gives control over the device's IP configuration.





### ΙP

In DHCP mode, an IP address will be automatically displayed when a connection is established with the router.

In static mode, you need to manually enter an IP address.

#### **Subnet Mask**

For DHCP mode, the subnet will also be automatically displayed when the connection is established. In static mode, you must manually enter the subnet mask.

#### **Gateway**

For DHCP mode, the gateway will also be automatically filled in.

In static mode, provide the router's address, typically ending with "1".

#### Via Touch Panel

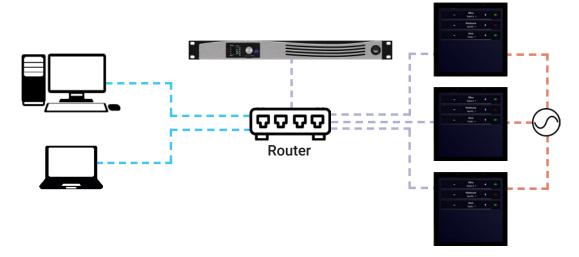




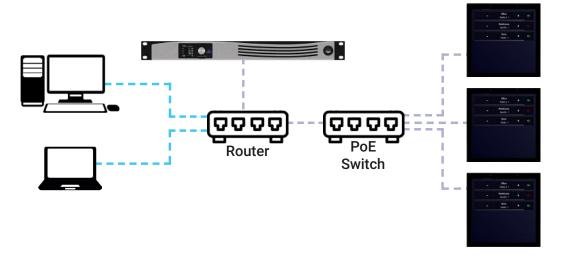


## **Example Network set-ups**

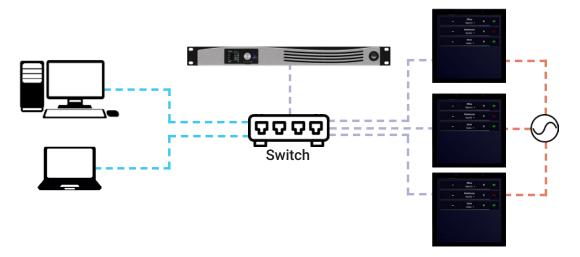
## **DHCP IP without POE**



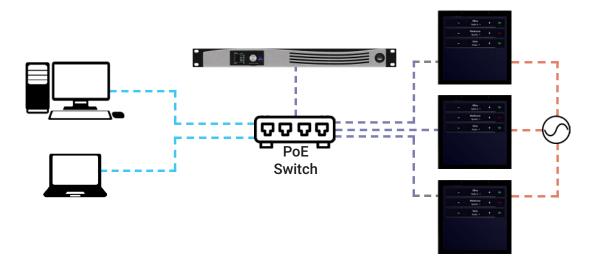
## DHCP IP with POE



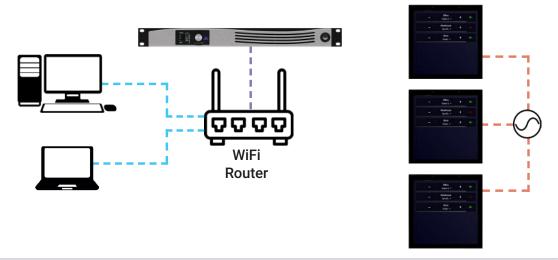
## Static IP without POE



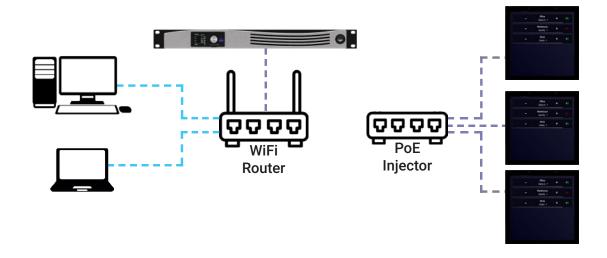
## Static IP with POE



## WiFi DHCP IP without POE



## WiFi DHCP IP with POE





### **Screen Saver Settings**

The wall panel controller is equipped with a screen saver feature designed to optimize screen longevity and provide at-a-glance time display when the device is idle. This feature is particularly useful in environments such as building lobbies, conference rooms, smart homes, or industrial control areas, where the device remains powered on for extended periods.

#### **Purpose of the Screen Saver**

The screen saver helps to:

Prevent image retention (burn-in) on the touchscreen by limiting static display elements

Extend the overall lifespan of the display

Display the current local time, allowing users to quickly reference the time even when the device is not in active use

Maintain a clean and professional appearance on idle devices in publicly visible locations



#### **Accessing Screen Saver Settings**

To configure the screen saver settings on your wall panel controller:

- Swipe on the top of the twice
- Tap Device icon from the home screen

#### **Configurable Timeout Duration**

You can set the timeout duration, which determines how long the device must remain idle before the screen saver activates.

Available timeout options range from 2 minutes to 30 minutes

Timeout options are adjustable in 1-minute increments

A shorter timeout is recommended in environments where display longevity is a priority or where user interaction is infrequent

### Example:

In a hotel lobby, you might choose a 3-minute timeout to ensure the screen is not displaying static information for too long. In a smart home control system, a 15-20 minute timeout may be more suitable for casual use.

#### **Screen Saver Display**

Once activated, the screen saver will:

Display the current time in local time zone

Update automatically in sync with the system clock

Remain visible until the user interacts with the screen (e.g., touch input)

The time display is designed with high contrast for visibility and energy efficiency.

#### **System Time**

The time and date shown by the screen saver is taken from your network system time.

If this is unavailable,

the Apex brand Logo will be displayed





## Firmware Update

Updating the firmware can conveniently be done through the web interface. Firmware updates will be available when new features are implemented. Please note that you need to restart the amplifier manually to complete the process.





### Online Update:

- 1. Ensure you are connected to a WAN
- 2. Click "Online Update", a Pop-up window will appear showing the update is in progress
- 3. When the update is finished the window will close
- 4. Refresh the Web Interface.



### **Update From File Via LAN:**

- 1. Download the latest firmware zip file from www.apex-audio.be/downloads
- 2. Click "Select file" and select the file you have just downloaded
- 3. Click "Update", a Pop-up window will appear showing the update is in progress
- 4. When the update is finished the window will close
- 5. Refresh the Web Interface



### **Device Management**

Device Type, Showing the model of the connected device. This is not adjustable.

Device name, this is set using the Cloud amplifier Web interface

IP Address of the connected Device.

192.168.11.7

192.168.1.73

192.168.11.3



CP0716

CP1504

CP354

The controllable device is online, and can be linked to a wall controller. Green showing online and Red showing offline.

The con indicates if a device has a channel saved to a wall control. Red shows this device has no channel saved to a wall control. Green shown this device has at least one channel saved to a wall control.

The Device Management data is saved to the memory of the wall panel, allowing for offline configuration.



**CP716** 

**CP1504** 

**CP354** 

Add Device

### Adding a Zone

A zone is a function that allows for the use of the volume slider, mute button and input selection. Each zone is fully customizable. You are able to control any and all channels of each amplifier in the network, you are also able to add multiple amplifiers to each zone control by using a matrix selection screen

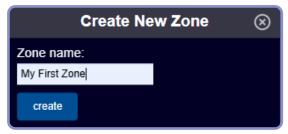
0

To add a Zone click on Add Zone.

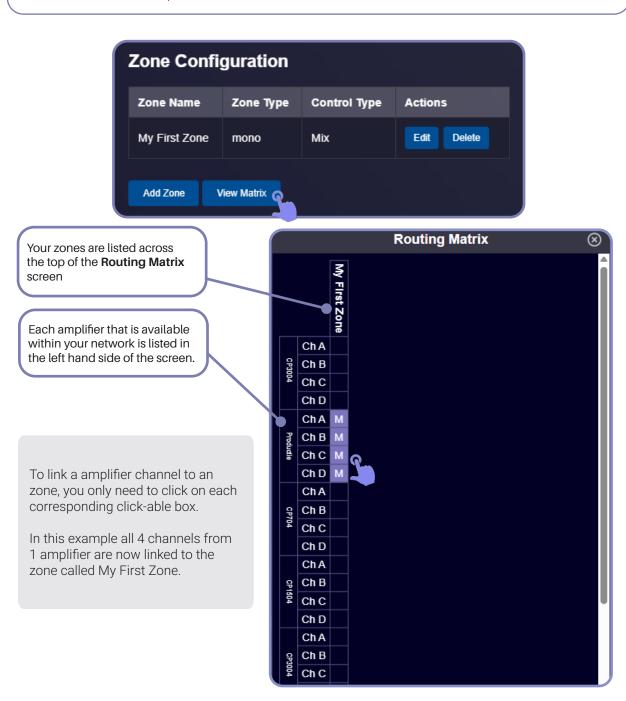


After clicking on Add Zone, you will be prompted to provide a zone name.





Once the zone has be made it is possible to configure the zone This includes which channels from which amplifier, will be controlled and what inputs will be selectable.



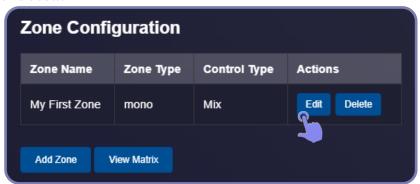


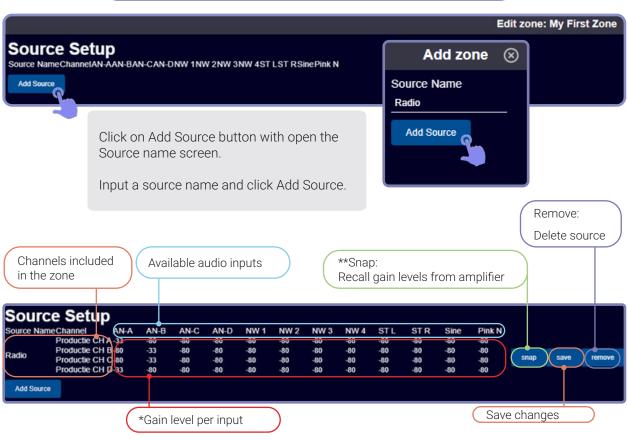
### **Source Setup**

The Edit button in the Actions section allows the user to add an input source to the wall controller and set the input gain of each input.

The gain values in this screen are considered to be a snapshot of values, selecting an input will recall these gain values in the amplifier files selected.

First click on the Edit button.





\*Gain levels can be edited after the snap button is used. Values and be added and deleted manually. Any fields that are left blank, will be unaffected by the slider adjustment.

\*\*The Snap function recalls the currently values from the amplifier mixing page



# Source Selection

Input selection is done by means of clicking on the input selection area, then clicking on one of the available inputs.





## **Home Screen**

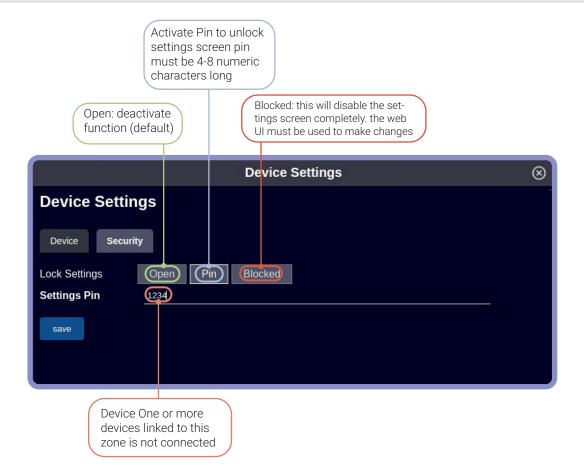




When the "Device" tab is selected, the user is able to control the screensaver settings (see page 15). The device name can be edited from this page, after editing the text ensure the save function is clicked. This function can be very useful when multiple units are connected to the same network.



When the "Security" tab is selected, the lock settings screen function can be adjusted.



# Specifications

Display			
Display	4" Capacitive touch panel		
Resolution	480x480 IPS		
Network			
WiFi	802. 11b/g/n		
Bluetooth	BLE 5.2		
Ethernet	10Mbit / 100Mbit		
Interface			
RJ45	1 x RJ45 Ethernet port, support PoE		
Type C	1 x Type C		
Power Supply	PoE, IEEE802.3af		
	AC 110-240V, 50Hz		
Other	Other		
Installation	EU single gang		
Color	White / black		
Working temperature	-10°C ~ 60°C		
Dimensions	86 x 85 x 36m m		
Unit Weight	120g		
Accessories Included			
Bracket	1 x Bracket for installation		
Wall Box	1 x 86 wall box		



## **Limited Warranty**

GiVa Audiovisual Technologies BV "Apex" warrants you, the original purchaser, or any party that purchases the device from you, that its products are free from defects in material and workmanship under normal use for a period of five (5) years from the date of original purchase. The date of purchase is the date which appears on the first invoice or any other proof of purchase provided by an Apex approved dealer.

Subject to the conditions and limitations set forth below, Apex will, at its discretion, either repair or replace any part of its products that prove to be defective, provided that the product is returned with proof of purchase, shipping prepaid, to an authorised Apex approved service facility.

Warranty cover of any repairs will only extend to the end of the original warranty period.

We will be happy to provide you with a list of authorised dealers to whom you can return the defective unit or who will give you a returns note to enable you to send the unit to the factory.

Service turn-around time will be as fast as reasonably possible. If you are not satisfied with the repair, contact Apex.

#### **Exclusions and Limitations**

This limited warranty covers only repair or replacement for defective products manufactured by Apex. Apex is not liable for, and does not cover under warranty, any loss of data or any costs associated with determining the source of system problems or removing, servicing or installing Apex products. This warranty excludes 3rd party software, connected equipment or stored data. Apex does not warrant that the operation of the product will be uninterrupted or error-free. In the event of a claim, Apex's sole obligation shall be replacement of the hardware.

This limited warranty does not cover:

- 1. Any damage to this product that results from improper installation, accident, abuse, misuse, natural disaster, insufficient or excessive electrical supply, abnormal mechanical or environmental conditions or other external causes:
- 2. Any damage caused by operating the product outside the permitted or intended uses described by Apex;
- 3. Any damage caused by any unauthorized disassembly, repair, or modification;
- 4. Consumable parts, such as batteries;
- 5. Any cosmetic damage.

Apex is not liable for consequential damages.

This limited warranty also does not apply to any product on which the original identification information (including serial number) has been altered, obliterated or removed or any product that has not been handled or packaged correctly.

Warranty services will be furnished only if the product is accompanied by a copy of the original retail dealer's invoice.

Warranty claims other than those indicated above are expressly excluded.

