

ALLOY
SmartHome

Alloy Hub3



Safety Instructions v1.0.

MEET YOUR ALLOY SMARTHOME HUB

Alloy SmartHome Hub lets you easily monitor, regulate and secure your home from anywhere in the world.



1.0. | INSTALLATION

PACKAGING CONTENT

- Main unit
- Power adapter 115/230V AC to 12V DC
- Ethernet cable
- 4x Drywall anchor
- 4x Brick wall anchor
- 4x Wall screw
- User manual

1.1. HOW TO FIND THE SERIAL NUMBER

Your serial number is located on the back side of the Alloy SmartHome Hub, make a note of it as it will be required when registering your server online.

1.2. CONNECT TO ETHERNET

Connect your Alloy SmartHome Hub to your broadband router via Ethernet cable.

The Ethernet port is located on the bottom of the Alloy SmartHome Hub.

Alloy SmartHome Hub queries your DHCP server for an IP address. If you do not have a DHCP server in your local network, after 60 seconds Alloy SmartHome Hub will auto-configure itself with a link-local IPv4 address (in 169.254.0.0/16 range).

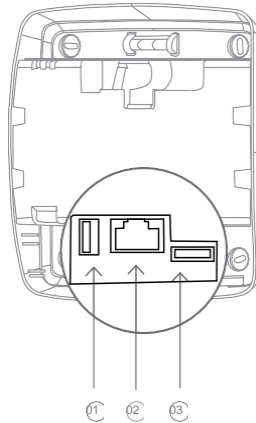
1.3. CONNECT TO WiFi

The unit can also be connected to the WiFi. To connect to the WiFi:

1. Make sure the unit is powered off (power it off if necessary)
2. Connect power cable
3. Hold Button 1 until all LEDs start flashing sequentially.

If it succeeds connecting, LED will light up green (red means that there was a connection problem). In this case, reset the unit and try again, making sure the password is correct for the selected WiFi network. Reset the unit by holding Button 2 for 4 seconds.

- 01 USB port
- 02 Ethernet port
- 03 Power input



1.3. POWER UP

Plug the power adapter into mains supply wall socket and the other end into server. You should see following LED sequence:

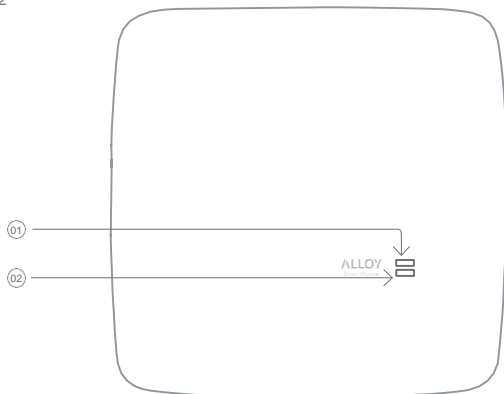
01 | Steady blue light: Operating system is loading
02 | Blue light flashing: Application is loading

03 | Alloy SmartHome Hub getting ready or offline: slowly flashing green light

04 | Alloy SmartHome Hub ready: steady green light when stable internet connection is established

01 Button 1 / LED indicator 1

02 Button 2 / LED indicator 2



1.4. POWER DOWN

Disconnect the power cable.

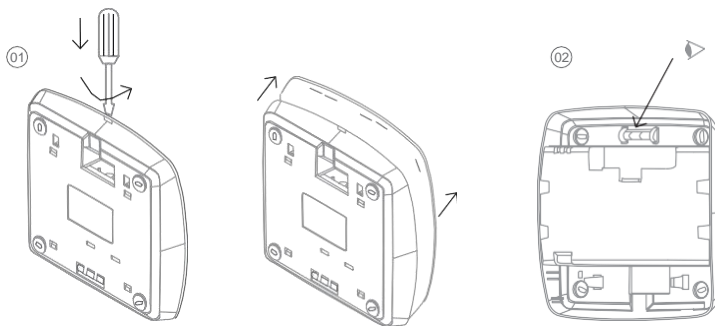
1.5. RESET

To reset Alloy SmartHome Hub, hold Button 2 for 4 seconds.

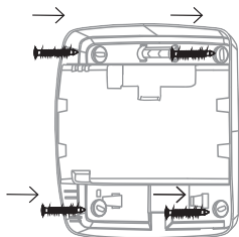
2.0. | MOUNTING

2.1. WALL MOUNTING

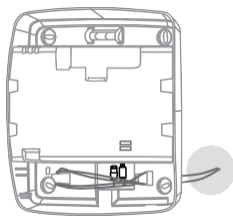
1. Use a flat blade screwdriver to open Alloy SmartHome Hub body.
2. Place back of Alloy SmartHome Hub on the wall and mark 4 hole positions on the wall. Please make sure your device is placed straight (see the spirit level on the device) .
3. Remove Alloy SmartHome Hub, drill 4 holes on the wall, place Alloy SmartHome Hub back on the wall, use the attached mounting screws to tighten the device on the wall.
4. Insert wires through the wiring hole, wind the excess cable on the parallel posts.
5. To close Alloy SmartHome Hub align the guide rails of the front cover and push the cover evenly and gently until it clicks.



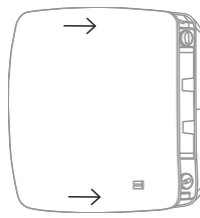
03



04



05



3.0. | SPECIFICATIONS

→ SYSTEM

- ARM Cortex-A7 Quad-Core
1.3GHz CPU
- 256MB RAM
- 4GB FLASH

→ NETWORK

- Ethernet 100BASE-TX
- WiFi 802.11 a /c /b /g /n /ac
- Bluetooth 5
- Radio module (Z-Wave™)

→ OPERATING SYSTEM

- Linux

→ ACCESSORIES

- CAT5e UTP patch LAN Cable

→ POWER

- Power input: 9-12VDC
- Battery-backed RTC
- Powersupplyinput: 100-240VAC,
50/60Hz

- Power usage: Idle: 1.2W, Max: 2.4W

→ ENVIRONMENTAL

- Temperature Range:
 - Operating: 0°C to 40°C (32°F to 104°F)
 - Storage: -25°C to 70°C (-13°F to 158°F)
- Humidity: 5% to 95% non-condensing

→ LEDS

- 2 programmable buttons
- 2 programmable RGB LEDs

→ I/O

- USB 2.0 downstream port

→ REGULATORY COMPLIANCE

- Safety: UL
- FCC, CE, IC
- RoHS

➔ PHYSICAL DIMENSION

- 195 (L) x 195 (W) x 26 (H) millimeters
- 7.6 (L) x 7.6 (W) x 1.02 (H) inches

➔ WARRANTY

- 1 year standard

➔ AUTOMATION OPTION

- Remote automation software
- Online remote interface



4.0. | SAFETY

Disconnect the network cable and power adapter or any other connected peripherals if any of the following conditions exist:

- The power cord or connector is damaged or frayed.
- The Alloy SmartHome Hub or cables are exposed to rain, water/fluids, or excessive moisture.
- The Alloy SmartHome Hub power adapter is damaged and you suspect it needs to be serviced.



Avoid installing the Alloy SmartHome Hub near or inside ~~of~~ electromagnetic interference.

4.1. IMPORTANT SAFETY INSTRUCTIONS

- Read, keep and follow these instructions.
- Heed all warnings.
- Do not use this product near water or expose the product to dripping or splashing of water or liquid of any kind.
- Clean only with a dry cloth.
- Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
- Only use attachments and accessories specified by the manufacturer.

1. | IMPORTANT SAFETY INSTRUCTIONS

Disconnect the network cable and power adapter or any other connected peripherals if any of the following conditions exist:

- The power cord or connect or is damaged or frayed.
- The AlloyHub3 or cables are exposed to rain, water/fluids, or excessive moisture.
- The AlloyHub3 power adapter is damaged and you suspect needs to be serviced.
- !Avoid installing the AlloyHub3 near or inside sources of electromagnetic interference.
- Clean only with a dry cloth.
- Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
- Only use attachment sand accessories specified by the manufacturer.

2. | DISPOSING AND RECYCLING YOUR PRODUCT



(Waste Electrical & Electronic Equipment)
(Applicable in countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal. (Applicable in countries with separate collection systems)

At Alloy SmartHome, we understand and are committed to reducing any impact our operations and products may have on the environment. To minimize this impact Alloy SmartHome designs and builds its products to be as environmentally friendly as possible, by using recyclable, low toxic materials in both products and packaging.

Disclaimer

Some content and services accessible through this device belong to third parties and are protected by copyright, patent, trademark and/or other intellectual property laws. Such content and services are provided solely for your personal non-commercial use. You may not use any content or services in a manner that has not been authorised by the content owner or service provider.

Without limiting the foregoing, unless expressly authorised by the applicable content owner or service provider, you may not modify, copy, republish, upload, post, transmit, translate, sell, create derivative works, exploit, or distribute in any manner or medium any content or services displayed through this device.

3. [ONE(1)YEARLIMITEDWARRANTY

Alloy SmartHome, warrants this product (the "Product") against defects in materials and/or workmanship under normal use for a period of ONE

(1) YEAR from the date of purchase by the original purchaser ("Warranty Period"). If a defect arises and a valid claim is received within the Warranty Period, then as your sole remedy (and Alloy SmartHome's sole liability), Alloy SmartHome will at its option either 1) repair the defect at no charge, using new or refurbished replacement parts, or 2) replace the Product with a new product that is functionally equivalent to the original, in each case within 30 days following receipt of the returned Product. A replacement product or part assumes the remaining warranty of the original Product. When a Product or part is exchanged, any replacement item becomes your property and the replaced Product or part becomes Alloy SmartHome's property. Obtaining Service: To obtain warranty service, visit <https://smarthome.com/contact-support>. Please be prepared to describe the Product that needs service and the nature of the problem. Any claim under this Limited Warranty must be submitted to Alloy SmartHome before the end of the warranty period. Exclusions: This warranty does not apply to a) damage caused by failure to follow instructions relating to the Product's use or the installation of components; b) damage caused by accident, abuse, misuse, transport, neglect, fire, floods, earthquake or other external causes; c) damage caused by service performed by any one who is not an authorized representative of Alloy SmartHome; d) accessories used in conjunction with a covered Product; e) a Product or part that has been modified to alter functionality or capability; f) items intended to be periodically replaced by the purchaser during the normal life of the Product, including, without limitation, batteries, bulbs or cables; g) a Product that is used commercially or for a commercial purpose, in each case as determined by Alloy SmartHome.

EXCEPT FOR BODILY INJURY, ALLOY SMARTHOME SHALL NOT BE LIABLE FOR (I) ANY LOST PROFITS, COST OF PROCUREMENT OF SUBSTITUTE PRODUCTS, OR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR (II) ANY AMOUNTS IN EXCESS OF THE PURCHASE PRICE FOR THE PRODUCT, IN EACH CASE WHETHER RESULTING FROM THE USE OF OR INABILITY TO USE THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, EVEN IF COMPANY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION AND EXCLUSIONS MAY NOT APPLY TO YOU. TO THE EXTENT PERMITTED BY APPLICABLE LAW, ALLOY SMARTHOME DISCLAIMS ANY AND ALL STATUTORY OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS. IF ALLOY SMARTHOME CANNOT LAWFULLY DISCLAIM STATUTORY OR IMPLIED WARRANTIES, THEN TO THE EXTENT PERMITTED BY LAW, ALL SUCH WARRANTIES SHALL BE LIMITED IN DURATION TO THE WARRANTY PERIOD. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights and you may also have other rights, which vary from country to country. To exercise your rights under this warranty, please follow the instructions above under the heading "Obtaining Service", or contact Alloy SmartHome, LLC, 8665 E. Hartford Drive, Suite 200, Scottsdale, AZ 85255. Alloy SmartHome is a registered trademark of Alloy SmartHome, LLC.

Manufacturer / Importer: Alloy SmartHome, LLC
8665 E. Hartford Drive, Suite 200, Scottsdale, AZ 85255

4. | DECLARATION OF CONFORMITY

We, Alloy Alloy Hub3, Tri plus grupad.o.o., Banjaveciva 11, 10000 Zagreb, Croatia, declare that the product AlloyHub3isincompliancewithallthetechnicalregulationsapplicabletotheproductwithinthescopeofCouncil Directives2014/53/EU.Toaccesslatestcertificationpleasefollowthelink:smartrent.com/hardware/docs.



Manufacturer'sName:Tri plus grupad.o.o.

Address: Banjaveciva 11, 10000 Zagreb, Croatia

Product name: AlloyHub3

Model: ah3.zw8eu.4G

Operating Temperature: -10° C to 35° C

Function	Operation Frequency	Max RF output power:	Limit
BLE	2402MHz~2480MHz	-1.5 dBm	20 dBm.
BT(BR+EDR)	2402MHz~2480MHz	4.7dBm	20 dBm.
WiFi 802.11b/g/n(HT20,HT40)	802.11b/g/n(20MHz): 2412~2472MHz; 802.11n(40MHz):2422~2462MHz	16.98 dBm	20 dBm.
5.2G(802.11a/n20/n40/ac20/ac40/ac80)	802.11a/ n20/ac20:5180MHz~5240MHz 802.11 n40/ac40:5190MHz~5230MHz 802.11ac80:5210MHz	17.88 dBm	23dBm.
5.3G(802.11a/n20/n40/ac20/ac40/ac80)	802.11a/ n20/ac20: 5260MHz~5320MHz 802.11 n40/ac40: 5270MHz~5310MHz 802.11ac80: 5290MHz	17.84 dBm	20dBm.
5.6G(802.11a/n20/n40/ac20/ac40/ac80)	802.11a/ n20/ac20: 5500MHz~5700MHz 802.11 n40/ac40: 5510MHz~5670MHz 802.11ac80: 5775MHz	14.2 dBm	20dBm.
5.8G(802.11a/n20/n40/ac20/ac40/ac80)	802.11a/ n20/ac20:5745MHz~5825MHz 802.11 n40/ac40:5755MHz~5795MHz 802.11ac80: 5610MHz	13.32 dBm	13.98dBm.
LTE FDD B1	TX(Uplink):1920-1980MHz; RX(Downlink):2110-2170MHz	22.96 dBm	23(dBm) ±2,7(dB)
LTE FDD B3	TX(Uplink) :1710-1785MHz; RX(Downlink):1805-1880MHz	24.2 dBm	23(dBm) ±2,7(dB)
LTE FDD B7	TX(Uplink) :2500-2570MHz; RX(Downlink):2620-2690MHz	22.74 dBm	23(dBm) ±2,7(dB)
LTE FDD B8	TX(Uplink): 880MHz to 915 MHz RX(Downlink): 925 MHz to 960 MHz	23.7 dBm	23(dBm) ±2,7(dB)
LTE FDD B20	TX(Uplink): 832 MHz to 862 MHz RX(Downlink): 791 MHz to 821 MHz	23.62 dBm	23(dBm) ±2,7(dB)
LTE FDD B28	TX(Uplink): 703 MHz to 748MHz RX(Downlink): 758 MHz to 803 MHz	23.63 dBm	23(dBm) ±2,7(dB)
Z-wave	Tx(Uplink): 868.4MHz~869.85MHz	9.36dBm	--

Warning:

1. The product shall only be connected to a USB interface of version USB2.0.
2. Adapter shall be installed near the equipment and shall be easily accessible.
3. The plug considered as disconnect device of adapter.

4. Accessories information:

Model: KA1801A-1201500USL

Input: 100-240V~50/60Hz 0.55A Max

Output: 12.0V ~1500mA

Tri plus grupad.o.o.hereby declares that this Smart Phone is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

This information has to be presented in such a way that the user can readily understand it. Typically, this will necessitate translation into every local language (required by national consumer laws) of the markets where the equipment is intended to be sold. Illustrations, pictograms and using international abbreviations for country names may help reduce the need for translation.

EU Declaration of Conformity

We,

Tri plus grupad.o.o. (Banjavičeva 11, 10000 Zagreb, Croatia) hereby declares that this Mobile Phone is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.


According to Article 10(2) of Directive 2014/53/EU, the Smartphone 3.5 can be used in Europe without restriction.

The full text of the EU declaration DOC is available at the following:

Restrictions in the 5 GHz band:

According to Article 10 (10) of Directive 2014/53/EU, the packaging shows that this radio equipment will be subject to some restrictions when placed on the market in Belgium (BE), Bulgaria (BG), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Croatia (HR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE), the United Kingdom (UK), Turkey (TR), Norway (NO), Switzerland (CH), Iceland (IS), and Liechtenstein (LI).

The WLAN function for this device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

	ES	LU	RO	CZ	FR	HU	SI
	DK	HR	BE	BG	DE	EE	IE
	EL	IT	CY	LV	LT	SK	MT
	NL	AT	PL	PT	FI	SE	TR
	NO	CH	IS	LI			

All essential radio test suites have been carried out.

ASPECTS	STANDARD NUMBER
Radio	ETSI EN 300 328 V2.2.2 (2019-07), ETSI EN 301 893 V2.1.1 (2017-05), ETSI EN 300 440 V2.2.1 (2018-07), ETSI EN 300 220-1 V3.1.1 (2017-02), ETSI EN 300 220-2 V3.2.1 (2018-06) EN IEC 62311:2020
ASPECTS	STANDARD NUMBER
EMC	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-3 V2.1.1 (2019-03) ETSI EN 301 489-17 V3.2.4 (2020-09) ETSI EN 301 489-52 V1.2.1 (2021-11) EN 55032:2015+A11:2020 EN 55035:2017+A11:2020 EN IEC 61000-3-2:2019 EN61000-3-3:2013+A1:2019
Health	EN IEC 62311:2020
Safety	EN 62368-1:2014+A11:2017

- FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
-
- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.
-
- NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
- If this equipment does cause harmful interference to radio or television reception,
- which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - -- Reorient or relocate the receiving antenna.
 - -- Increase the separation between the equipment and receiver.
 - -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - -- Consult the dealer or an experienced radio/TV technician for help.
- To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.
- FCC ID: 2AAU7-AH3 Contains FCC ID: XMR201807EG91NA
-

IC

- IC Caution
- This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
- This device may not cause interference.
- This device must accept any interference, including interference that may cause undesired operation of the device.

- FR
- L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
- L'appareil ne doit pas produire de brouillage;
- L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC:11391A-AH3 Contains IC: 10224A-2018EG91NA

This equipment complies with IC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

The WLAN function for this device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

5. | SPECIFICATIONS

→ MODEL NUMBER
ah3.zw8us.4G/EG91

→ SYSTEM

- ARM Cortex-A7Quad-Core
1.3GHzCPU
- 256MBRAM
- 4GBFLASH

→ NETWORK

- Ethernet 100BASE-TX
- WiFi802.11a/c/b/g/n/ac
- Bluetooth5
- Radio module (Z-Wave™)

→ OPERATING SYSTEM

- Linux

→ POWER

- Power input: 9-12VDC
 - Battery-backed RTC
 - Powersupplyinput:100-240VAC,50/60Hz
- Power usage: Idle:1.2W,
Max: 2.4W

→ ENVIRONMENTAL

- Temperature Range:
- Operating: 0°C to 40°C
(32°F to 104°F)

- Storage: -25°C to 70°C
(-13°F to 158°F)
- Humidity: 5% to 95% non-condensing

→ LEADS

- 2 programmable buttons
- 2 programmable RGB LEDs

→ I/O

- USB 2.0 downstream port

→ REGULATORY COMPLIANCE

- Safety: UL
- FCC, CE, IC
- RoHS