Manuals+ — User Manuals Simplified.

MIKroTik BcAPL-2nD Cap Lite Wall Ceiling Access Point Dual Chain 2.4GHz User Manual

Contents

MikroTik

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Included with the product are two different casings, which can easily be swapped out, or, if you really like to fit the

design with the environment, we are providing 3D printer friendly design files.

Connecting

- Connect POE to the Ethernet port, please see cAP lite#Powering section for instructions on how to connect POE.
- Set your computer IP configuration to automatic (DHCP).
- The device wireless access point mode is enabled by default.
- The device will boot up and Wireless network will be available for connecting.
- Open network connections on your PC, mobile phone or other device and search for MikroTik wireless network and connect to it.
- Once connected to the wireless network, open **https://192.168.88.1** in your web browser to start configuration, since there is no password by default, you will be logged in automatically.
- We recommend clicking the "Check for updates" button and updating your RouterOS software to the latest version to ensure the best performance and stability.
- Choose your country, to apply country regulation settings and set up your password on the screen that loads.

Powering

The device accepts power from the Ethernet port and USB port, so you must either use the included passive PoE injector or make sure your switch supports passive or 802.3af/at PoE output.

- Ethernet port accepts 12-57 V DC   (802.3af/at or passive PoE).
- MicroUSB DC   5 V.

The power consumption under maximum load can reach 4 W. Connecting to a POE Adapter:

1. Connect the Ethernet cable from the device to the POE port of the POE adapter.
2. Connect an Ethernet cable from your LAN to the LAN port of the POE adapter, please mind arrows for data and power flow.
3. Connect the power cord to the adapter, and then plug the power cord into a power outlet.

Configuration

Once logged in, we recommend clicking the "Check for updates" button in the QuickSet menu, as updating your RouterOS software to the latest version ensures the best performance and stability. For wireless models, please make sure you have selected the country where the device will be used, to conform with local regulations. RouterOS includes many configuration options in addition to what is described in this document. We suggest starting here to get yourself accustomed to the possibilities: **https://mt.lv/help**. In case IP connection is not available, the Winbox tool (**https://mt.lv/winbox**) can be used to connect to the MAC address of the device from the LAN side (all access is blocked from the Internet port by default). For recovery purposes, it is possible to boot the device from the network, see a section Reset button.

Reset button

The reset button has three functions:

- Hold this button during boot time until LED light starts flashing, release the button to reset RouterOS configuration (total 5 seconds).
- Keep holding for 5 more seconds, LED turns solid, release now to turn on CAP mode. The device will now look for a CAPsMAN server (total 10 seconds).
- Or Keep holding the button for 5 more seconds until LED turns off, then release it to make the RouterBOARD look for Netinstall servers (total 15 seconds).

Regardless of the above option used, the system will load the backup RouterBOOT loader if the button is pressed before power is applied to the device. Useful for RouterBOOT debugging and recovery.

Expansion slots and ports

- One 10/100 Ethernet port, supporting automatic cross/straight cable correction (Auto MDI/X). Either straight or crossover cable can be used for connecting to other network devices.
- One Integrated Wireless 2.4 GHz 802.11b/g/n.
- One USB type AB slot.

Accessories

The package includes the following accessories that come with the device:

- DC   EU/US Switching Power Supply 24 V, 0.2 A, 4.8 W, Level VI, cable:1.5m).
- POE Injector with shielded ethernet cable/connector (RBPOE).
- K-49 fastening set.
- Map wall cover.

Operating system support

The device supports RouterOS software version 6. The specific factory-installed version number is indicated in the RouterOS menu /system resource. Other operating systems have not been tested.
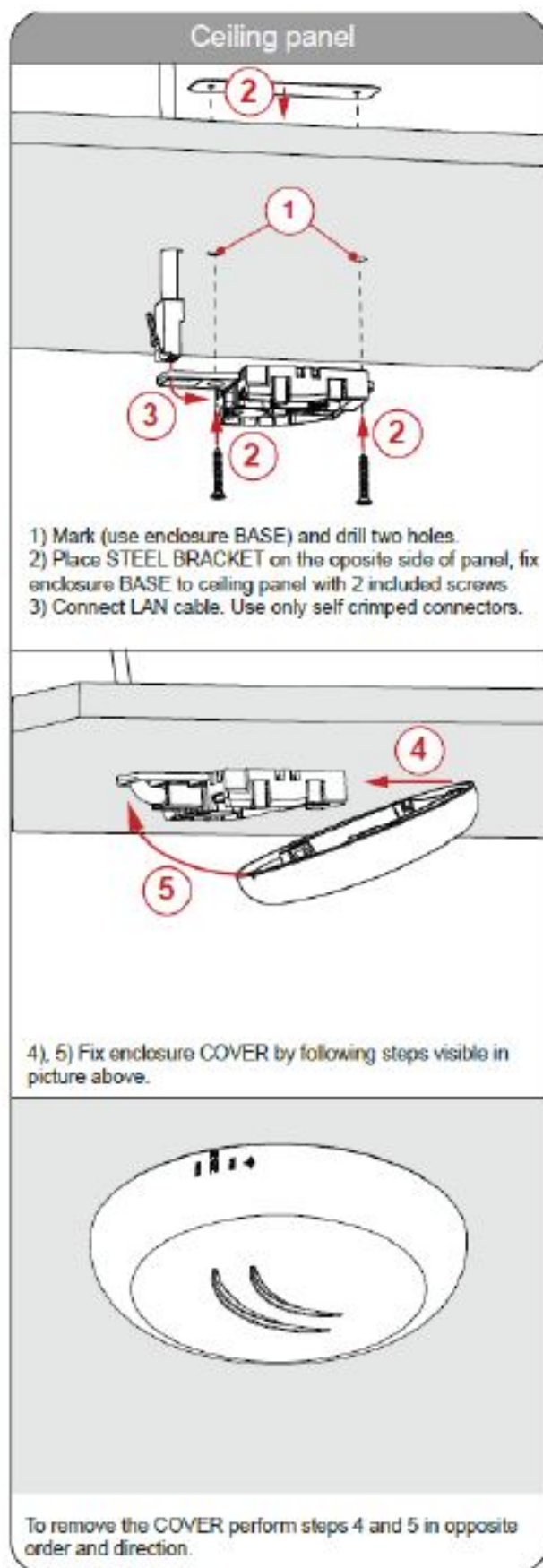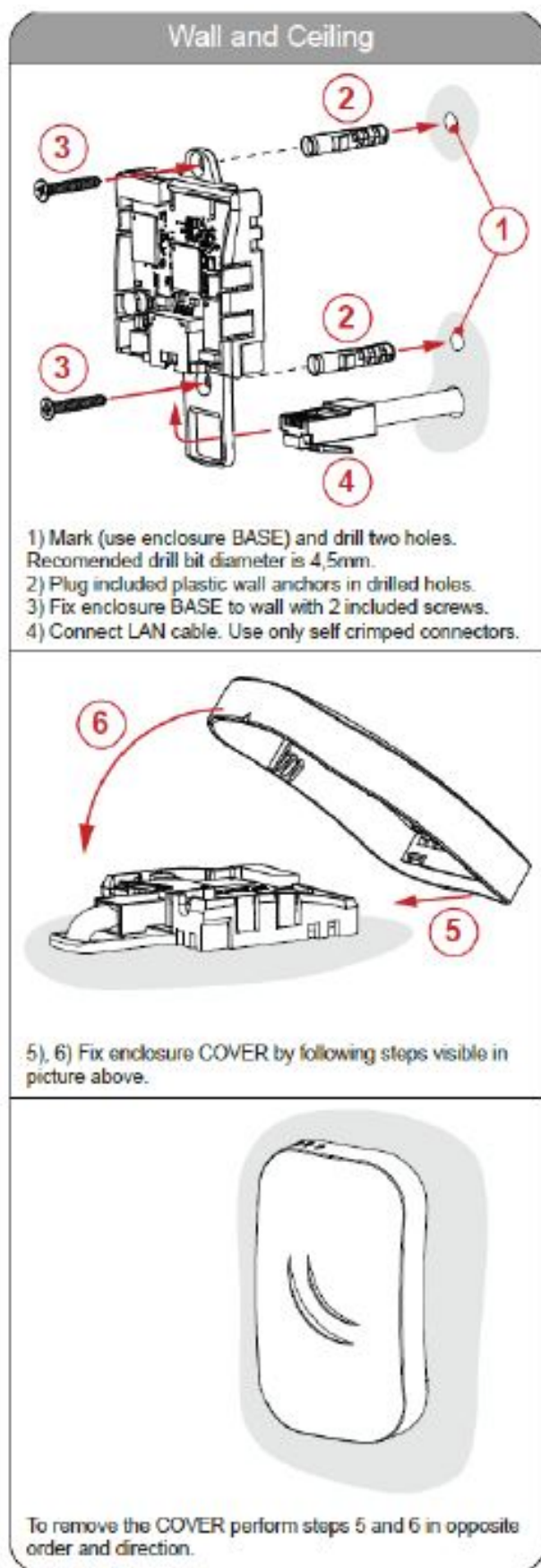
MikroTik mobile app

https://help.mikrotik.com/docs/display/UM/cAP+lite

Use the MikroTik smartphone app to configure your router in the field, or to apply the most basic initial settings for your MikroTik home access point.

Mounting

Wall and Ceiling

1) Mark (use enclosure BASE) and drill two holes. Recomended drill bit diameter is 4,5mm.
2) Plug included plastic wall anchors in drilled holes.
3) Fix enclosure BASE to wall with 2 included screws.
4) Connect LAN cable. Use only self crimped connectors.

5), 6) Fix enclosure COVER by following steps visible in picture above.

To remove the COVER perform steps 5 and 6 in opposite order and direction.

Ceiling panel

1) Mark (use enclosure BASE) and drill two holes.
2) Place STEEL BRACKET on the oposite side of panel, fix enclosure BASE to ceiling panel with 2 included screws
3) Connect LAN cable. Use only self crimped connectors.

4), 5) Fix enclosure COVER by following steps visible in picture above.

To remove the COVER perform steps 4 and 5 in opposite order and direction.

Notice

- The Frequency band 5.470-5.725 GHz isn't allowed for commercial use.
- In case WLAN devices work with different ranges than the above regulations, then a customized firmware version from the manufacturer/supplier is required to be applied to the end-user equipment and also prevent the end-user from reconfiguration.

- For Outdoor Usage: End-user requires approval/license from the NTRA.
- Datasheet for any device is available on the official manufacturer website.
- Products with the letters "EG" at the end of their serial number have their wireless frequency range limited to 2.400 – 2.4835 GHz, the TX power is limited to 20dBm (EIRP).
- Products with the letters "EG" at the end of their serial number have their wireless frequency range limited to 5.150 – 5.250 GHz, the TX power is limited to 23dBm (EIRP).
- Products with the letters "EG" at the end of their serial number have their wireless frequency range limited to 5.250 – 5.350 GHz, the TX power is limited to 20dBm (EIRP).

Please make sure the device has a lock package (firmware version from the manufacturer) which is required to be applied to the end-user equipment to prevent the end-user from reconfiguration. The product will be marked with country code "-EG". This device needs to be upgraded to the latest version to ensure compliance with local authority regulations! It is the end users responsibility to follow local country regulations, including operation within legal frequency channels, output power, cabling requirements, and Dynamic Frequency Selection (DFS) requirements. All MikroTik radio devices must be professionally installed.

Federal Communication Commission Interference Statement

FCC ID: TV7RBCM2ND 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 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.

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 must not be co-located or operation in conjunction with any other antenna or transmitter.
IMPORTANT: Exposure to Radio Frequency Radiation. This equipment complies with the FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and any part of your body.

CE Declaration of Conformity

Manufacturer Hereby, Mikrotīkls SIA declares that the radio equipment type RouterBOARD is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: **https://mikrotik.com/products**

MPE statement

This equipment complies with EU radiation exposure limits set forth for an uncontrolled environment. This

equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body, unless specifically stated otherwise in page 1 of this document. In RouterOS you must specify your country, to make sure local wireless regulations are observed.

Frequency bands terms of use

Frequency range (for applicable models)	Channels used	Maximum Output Power (EIRP)	Restriction
2 412-2472 MHz	1 – 13	20 dBm	Without any restriction to use in all EU Member States
5 150-5250 MHz	26 – 48	23 dBm	Restricted to indoor use only*
5 250-5350 MHz	52 – 64	20 dBm	Restricted to indoor use only*
5 470-5725 MHz	100 – 140	27 dBm	Without any restriction to use in all EU Member States

It is the customer's responsibility to follow local country regulations, including operation within legal frequency channels, output power, cabling requirements, and DynamicFrequency Selection (DFS) requirements. All Mikrotik radio devices must be professionally installed!

Note. The information contained here is subject to change. Please visit the product page on **www.mikrotik.com** for the most up-to-date version of this document.

Instruction manual: Connect the power adapter to turn on the device. Open 192.168.88.1 in your web browser, to configure it. More information on {_}{+}**https://mt.lv/help+**

Documents / Resources

MIKroTik BcAPL-2nD Cap Lite Wall Ceiling Access Point Dual Chain 2.4GHz [pdf] User Manual
BcAPL-2nD, Cap Lite Wall Ceiling Access Point Dual Chain 2.4GHz