RouterBOARD mAP

Quick Setup Guide and Warranty Information

The mAP is a small AP device with 2 ethernet ports, Ether1 supports powering by PoE, ether 2 supports PoE output for powering another device.

Connecting

- 1. Connect your Internet cable to port 1, and your PC to port 2. If using the mAP to power another router using the PoE output feature, connect the router to Ether 2, and use the built in wireless AP to configure the mAP
- 2. Set computer/router IP configuration to *automatic* (DHCP)
- 3. Wireless AP mode is enabled by default, you can connect to the SSID "MikroTik". Log into your router from your web browser by opening 192.168.88.1 in the address bar
- 4. The Ether 2 port suports PoE output, with auto detection feature. This means you can connect Laptops and other non-PoE devices without damaging them. The PoE on Ether2 outputs approximately 2V below input voltage, and supports up to 0.5A (So provided 24V PSU will provide 22V/0.5A output to the Ether2 PoE port).

Powering

The device accepts powering from the power jack or from the first Ethernet port (Passive PoE):

- DC power jack (5.5mm outside and 2mm inside diameter, female, pin positive plug) accepts 8-57V DC
- The first Ethernet port accepts 802.3af/at and passive Power over Ethernet accepts 8-57V DC. Some Gigabit PoE output devices might require crossover cable to power this device
- mAP can also be powered with the built in microUSB port, using the USB 5V power

Under maximum load, the power consumption of this device is 4W (when not using PoE output)

Booting process

The device is preinstalled with MikroTik RouterOS software. It can be configured in several ways.

This device doesn't come fitted with a Serial Port connector, so initial connection has to be done via the Ethernet cable. Connect to wireless SSID "MikroTik" and open **192.168.88.1** in your web browser. Username is **admin** and there is no password. In case IP connection is not available, Winbox can be used to connect to the MAC address of the device. More information here: http://wiki.mikrotik.com/wiki/First_time_startup

In case you wish to boot the device from network, for example to use MikroTik Netinstall, hold the RESET button of the device when starting it until the LED light turns off, and Metal will start to look for Netinstall servers.

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By default, the device is preconfigured with a simple firewall on the WAN port, this configuration can be viewed when first connecting to the Router via Winbox. It will ask whether to keep this configuration or clean it to use your own. LAN/WLAN ports have DHCP server enabled.

Extension Slots and Ports

- Two 10/100 Ethernet ports, supporting automatic cross/straight cable connection (Auto MDI/X), so you can use either straight or cross-over cables for connecting to other network devices.
- One Integrated Wireless 2.4GHz 802.11b/g/n 1x1 MIMO, Onboard PIF antennas, max gain 1.2dBi
- One microUSB 2.0 port

Resetting the device

In case you wish to return the device to its original configuration, you can use the RESET button which is located to the left of the Ethernet ports. Hold this button during boot time until LED lights start flashing, then release the button to **reset RouterOS configuration.** You can use this procedure if you have forgotten the password to access the device, or simply wish to return the unit to its default configuration state.

Buttons and Jumpers

- RouterOS reset jumper hole (on the bottom of case, behind one of the rubber feet) resets
 RouterOS software to defaults. Must short circuit the metallic sides of the hole (with a
 screwdriver, for example) and boot the device. Hold screwdriver in place until RouterOS
 configuration is cleared.
- RouterBOOT reset button (RESET, front panel) has two functions:
 - ✓ Hold this button during boot time until LED light starts flashing, release the button to reset RouterOS configuration (same result as with RouterOS reset hole)
 - ✓ Hold this button during boot time longer, until LED turns off, then release it to make the RouterBOARD look for Netinstall servers.

Operating System Support

Currently tested operating system is MikroTik RouterOS starting from version 6.7

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Hardware. MikroTik warrants all RouterBOARD series equipment for the term of twelve (12) months from the shipping date to be free of defects in materials and workmanship under normal use and service, except in case of damage caused by mechanical, electrical or other accidental or intended damages caused by improper use or due to wind, rain, fire or other acts of nature.

To return failed units to MikroTik, you must perform the following RMA (Return Merchandise Authorization) procedure. Follow the instructions below to save time, efforts, avoid costs, and improve the speed of the RMA process.

- 1. If you have purchased your product from a MikroTik Reseller, please contact the Reseller company regarding all warranty and repair issues, the following instructions apply ONLY if you purchased your equipment directly from MikroTik in Latvia.
- 2. MikroTik does not offer repairs for products that are not covered by warranty. Exceptions can be made for: CCR1016-12G, CCR1016-12G-BU, CCR1036-12G-4S, RB1100, RB1100AH, RB1100AHx2, RB1200, RB600, RB600A and RB800 as a paid service (fees apply).
- 3. Out-of-warranty devices and devices not covered by warranty sent to Mikrotik will be returned to the sender at sender's cost. If the customer has not organized return of such rejected devices within 12 months from the day of arrival, MikroTik has the right to discard them.

RMA Instructions are located on our webpage here: http://rma.mikrotik.com

This document is provided "as is" without a warranty of any kind, expressed or implied, including, but not limited to, the implied warranty of merchantability and fitness for a particular purpose. The manufacturer has made every effort to ensure the accuracy of the contents of this document, however, it is possible that it may contain technical inaccuracies, typographical or other errors. No liability is assumed for any inaccuracy found in this publication, nor for direct or indirect, incidental, consequential or other damages that may result from such an inaccuracy, including, but not limited to, loss of data or profits. Please report any inaccuracies found to support@mikrotik.com

Federal Communication Commission Interference Statement (FCC ID: TV7RBMAP2N)

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.

23 cm minimum distance has to be maintained between the antenna and user. Under such configuration, the FCC radiation exposure limits set forth for an population/uncontrolled environment can be satisfied.