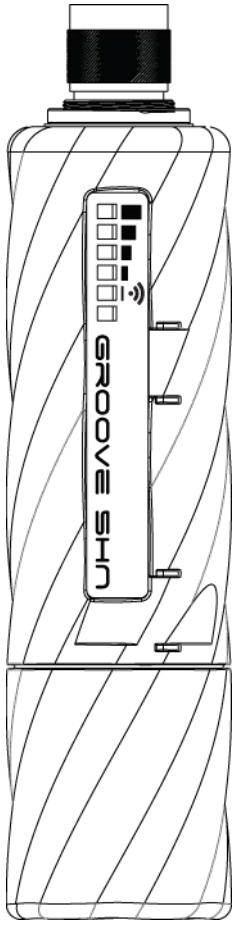
RouterBOARD Groove

Quick Setup Guide and Warranty Information

The RouterBOARD **Groove** comes preinstalled in an outdoor case, with a built-in wireless interface, an N-Male antenna connector, and one 10/100 Ethernet connector which supports MDI-X auto detection. The device is packaged with a 24V power adapter, a PoE injector and two mounting loops. Several models are available (dual band, single band, AP and CPE variants).



First use

1. Connect the antenna to the N-Male connector
2. Twist to open the Groove case, connect an Ethernet cable to the Ethernet port
3. Use the provided rubber insulator to put on the Ethernet cable, and push it into the case opening, so that the opening is tightly closed
4. The Groove accepts 8-30V Passive PoE from a PoE injector
5. The default IP address from Ether1 is 192.168.88.1 for configuration
   Username is **admin** and there is **no password**
6. Depending on the antenna used, you must set it's gain in the RouterOS software to ensure that EIRP meets the limit set by authorities. This is done in the Wireless menu.

Powering

The board accepts powering from the Ethernet port (Passive PoE):

- Ethernet port accepts passive Power over Ethernet 8-30V DC. Package contains a 24V adapter and a PoE injector.

Maximum power consumption of the device is 4W.

Booting process

Initial connection has to be done via the Ethernet cable. Open **192.168.88.1** in your web browser, and choose "Webfig" for browser based configuration or "Winbox" for a Windows utility with the same functions. 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.

Mounting

The Groove is to be mounted vertically, so that the Ethernet cable points downwards.

If you wish to tighten the Groove to a pole, you can do it with the provided mounting loops. The Groove comes bundled with two mounting loops - guide the loops around the Groove though the provided edge markings, and around the pole where it will be mounted. You should avoid connecting a loose Ethernet cable to the Ethernet port, secure the cable to a wall or the pole, so that the cable weight is not pulling the port. It is recommended to secure the Ethernet cable less than 2m from the Groove device. This is to ensure that the cable doesn't damage the port by it's weight, or doesn't fall out.

Expansion Slots and Ports

- Built in 5GHz or 2GHz (or both) wireless device (depends on model), 1x1 MIMO

- One 10/100 Ethernet port, supporting automatic cross/straight cable correction (Auto MDI/X), so you can use either straight or cross-over cable for connecting to other network devices. The Ethernet port accepts 8-30V DC powering from a passive PoE injector.

Buttons and Jumpers

- RouterOS reset jumper hole (no direct access, board has removed from case) – 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 (access through the plastic door) 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 reset hole)
    - Hold this button during boot time longer, until LED turns off, then release it to make the device **look for Netinstall servers.**

Operating System Support

Currently tested operating system is MikroTik RouterOS (starting from version v5.0).

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Hardware. MikroTik warrants all RouterBOARD series equipment for the term of one year 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. We do not offer repairs for products that are not covered by warranty. Exceptions can be made for RB1000, RB1100 and RB1200.
3. Out-of-warranty devices and devices not covered by warranty sent to Mikrotikls will be returned to the sender at sender's cost.

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

Manual. This manual 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 manual, 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:TV7GROOVE-5HN, TV7GROOVE-2HN, TV7GRV-A52HPN)

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. 20 cm minimum distance has to be maintained between the antenna and the occupational user and 45 cm to general public. Under such configuration, the FCC radiation exposure limits set forth for an population/uncontrolled environment can be satisfied.

MODIFICATIONS: The FCC requires the user to be notified that any changes or modifications to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment. The correction of interference caused by unauthorized modification, substitution or attachment will be the responsibility of the user. The manufacturer and its authorized resellers or distributors are not liable for any damage or violation of government regulations that may arise from failing to comply with these guidelines.

PROFFESIONAL INSTALLATION ATTESTATION: MIKROTIKLS SIA addresses the following items to ensure that the above referenced equipment is professionally installed: The TV7GROOVE-5HN, TV7GROOVE-2HN, TV7GRV-A52HPN will only be sold by MIKROTIKLS SIA or one of its authorized dealers. MIKROTIKLS SIA and its authorized dealers will be under strict marketing control and will only market and sell the TV7GROOVE-5HN to professionals.

Professional installation is required for the TV7GROOVE-5HN and will be performed only by someone knowledgeable of its use. MIKROTIKLS SIA will ensure that the TV7GROOVE-5HN is only marketed and sold to professionals.

The TV7GROOVE-5HN is not sold to the general public and is sold only for industrial or commercial use by professional installers.

LIST OF APPROVED 2GHz ANTENNAS:

- 24 dBi Dish DC 24-HD-PFIP
- 20 dBi Panel WLP-2450-20
- 17 dBi Sector SA 24-90-17-WB
- 15 dBi Omni Directional (pole) WL0-2450-15
- 13 dBi Omni Directional (hor. Polarization) HP, 0DH 24-13

LIST OF APPROVED 5GHz ANTENNAS:

- 8.5 dBi Omni MTI Wireless MT-482016NA
- 24 dBi Panel Pacific Wireless PA58-24
- 32 dBi Dish Pacific Wireless HDDA5W-32-DP

Antennas of same type and lower gain than those listed above may be used in compliance with certification.

CE Declaration of Conformity

Hereby MikroTik declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. The Declaration of Conformity may be obtained by contacting sales@mikrotik.com.