RouterBOARD QRT series

Quick Setup Guide and Warranty Information

The RouterBOARD QRT comes as a complete kit. It includes a built in dual chain wireless device, and a dual polarization antenna. It has one Gigabit Ethernet connector which supports MDI-X auto detection.

First use

1.   Connect an Ethernet cable to the port behind the small plastic door
2.   The QRT accepts 24V Passive PoE from a PoE injector
3.   The default IP address from LAN is 192.168.88.1 for configuration from a web browser
4.   Username is **admin** and there is no password

Powering

The device accepts powering from the Ethernet port (Passive PoE) 8-30V DC. Package contains a 24V adapter. Maximum power consumption of the device is 21W @ 24V. s

Booting process

Initial connection has to be done via the Ethernet cable. 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.

Buttons and Jumpers

*   **Loading the backup RouterBOOT loader**: Hold this button before applying power, release after three seconds since powering, to load backup Boot loader. This might be necessary if the device is not operation because of a failed RouterBOOT upgrade. When you have started the device with the backup loader, you can either set RouterOS to force backup loader in the RouterBOARD settings, or have a chance to reinstall the failed RouterBOOT from a fwf file (total 3 seconds)
*   **Resetting the RouterOS configuration**: If you keep holding this button for 2 more seconds until LED light starts flashing, release the button to reset RouterOS configuration (total 5 seconds)
*   **Enabling CAPs mode**: To connect this device to a wireless network managed by CAPsMAN, keep holding the button for 5 more seconds, LED turns solid, release now to turn on CAPs mode (total 10 seconds)
*   **Starting the RouterBOARD in Netinstall mode**: Or Keep holding the button for 5 more seconds until until LED turns off, then release it to make the RouterBOARD look for Netinstall servers. You can also simply keep the button pressed until the device shows up in the Netinstall program on Windows (total 15 seconds)
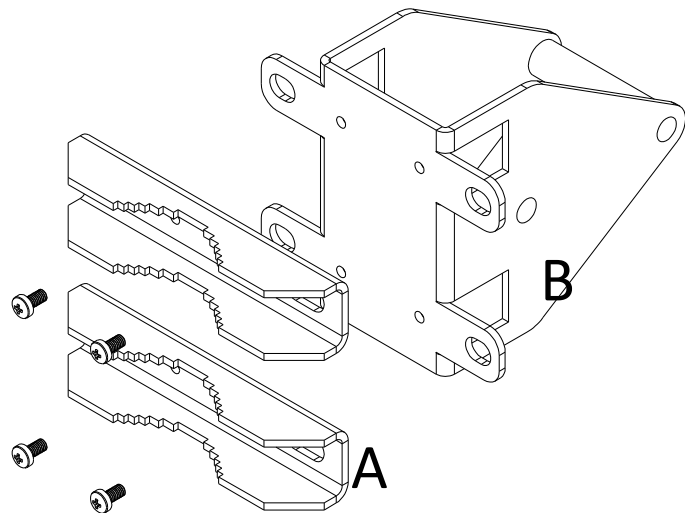
Operating System Support

Currently tested operating system is MikroTik RouterOS (starting from version v6.2).
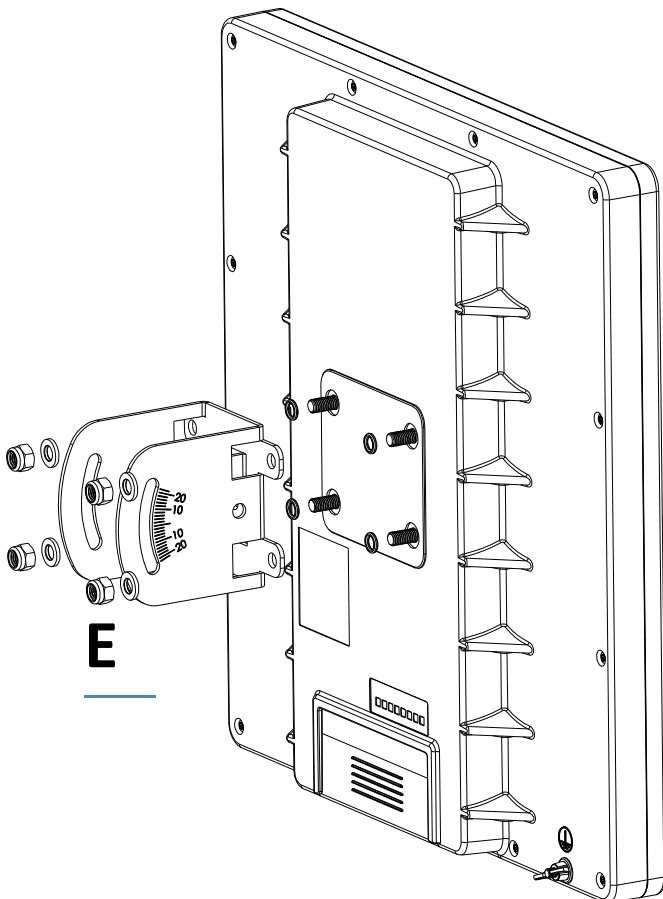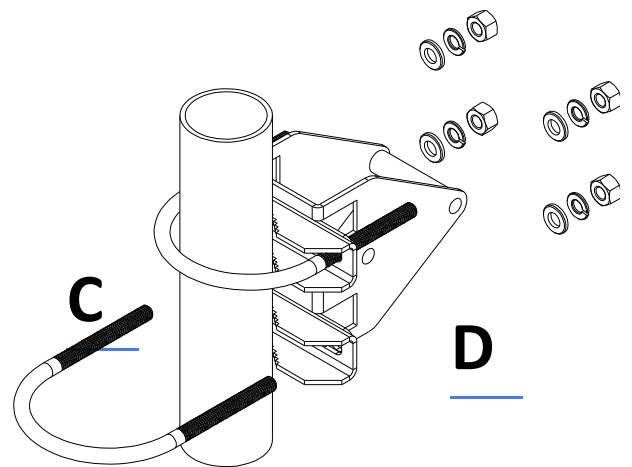
Mounting

The QRT box contains several parts that need to be assembled. Please follow this process:

Start by attaching the two pole brackets (A) to the swivel adjuster (B), by using the four provided screws (use a PH1 screwdriver).
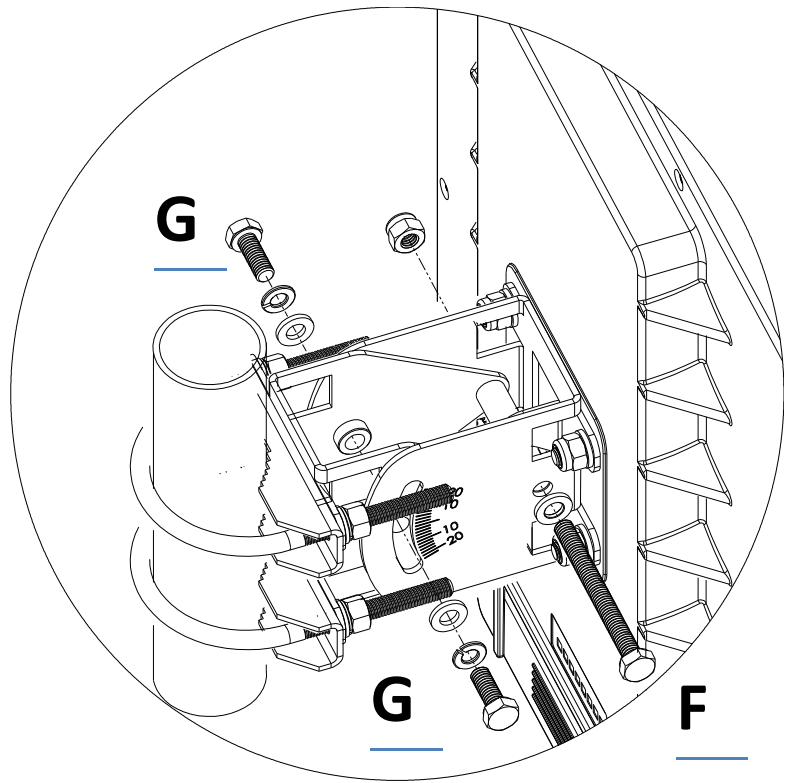
Next, put the two U-bolts (C) around the mast or pole, and guide them through the holes on the swivel adjuster (D). Then, tighten the U-bolts, each with one regular washer, one spring washer, and one nut, as shown in the image to the right. All nuts need to be tightened using a size 10 (3/8 in) wrench.

Now take the mounting bracket (E), and put it on to the back of the antenna. Use one rubber ring, one washer, and one nut for each of the built-in bolts (in that order).

Finally, attach the swivel adjuster to the mounting bracket. Use the long bolt in the position (F). Put one regular washer, and one spring washer onto the shorter screws, then put them in positions (G). Do not tighten too much, as you need to adjust the antenna now.

Once antenna level and angle are adjusted according to the wireless signal in software, tighten all nuts. Note the degrees of angle for future reference.

Copyright and Warranty information

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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 for RB911G-5HPnD-QRT: TV7RB912G-5HPND
FCC ID for RB911G-5HPacD-QRT: TV7RB922-5HPACT

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.

13 cm minimum distance has to be maintained between the antenna and the occupational user and 28 cm to general public. Under such configuration, the FCC radiation exposure limits set forth for an population/uncontrolled environment can be satisfied.

Antenna Installation. WARNING: It is installer's responsibility to ensure that when using the authorized antennas in the United States (or where FCC rules apply); only those antennas certified with the product are used. The use of any antenna other than those certified with the product is expressly forbidden in accordance to FCC rules CFR47 part 15.204. The installer should configure the output power level of antennas, according to country regulations and per antenna type. Professional installation is required of equipment with connectors to ensure compliance with health and safety issues.

CE

CE Declaration of Conformity

Full Declaration of Conformity (DoC) may be obtained by visiting this web page: **http://routerboard.com/doc/**

[EN] English	Hereby, MIKROTIKLS SIA declares that this ROUTERBOARD is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
[BG] Bulgarian	С настоящето, MIKROTIKLS SIA декларира, че ROUTERBOARD е в съответствие със съществените изисквания и другитеприложими разпоредби на Директива 1999/5/ЕС.
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[DK] Danish	Undertegnede MIKROTIKLS SIA erklærer herved, at følgende udstyr ROUTERBOARD overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
[DE] German	Hiermit erklärt MIKROTIKLS SIA dass sich das Gerät ROUTERBOARD in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
[EE] Estonian	Käesolevaga kinnitab MIKROTIKLS SIA seadme ROUTERBOARD vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
[GR] Greek	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Ο ΚΑΤΑΣΚΕΥΑΣΤΗΣ MIKROTIKLS SIA ΔΗΛΩΝΕΙ ΟΤΙ ROUTERBOARD ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ
[ES] Spanish	Por la presente, MIKROTIKLS SIA declara que este ROUTERBOARD cumple con los requisitos esenciales y otras exigencias relevantes de la Directiva 1999/5/EC.
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[LV] Latvian	Ar šo MIKROTIKLS SIA deklarē, ka ROUTERBOARD atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
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[FI] Finish	MIKROTIKLS SIA vakuuttaa täten että ROUTERBOARD tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
[SE] Swedish	Denna utrustning är i överensstämmelse med de väsentliga kraven och andra relevanta bestämmelser i direktiv 1999/5/EC.
[NO] Norwegian	MIKROTIKLS SIA Erklærer herved at ROUTERBOARD er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.

EN. 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 http://wiki.mikrotik.com **BG. Инструкция**: Свържете адаптера на захранване, за да включите устройството. Отворете 192.168.88.1 в уеб браузър, за да настроите продукта. Повече информация в http://wiki.mikrotik.com **CZ. Návod k použiti**: Připojte napájecí adaptér k zapnutí přístroje. Otevřete 192.168.88.1 ve webovém prohlížeči pro konfiguraci produktu. Více informací najdete v http://wiki.mikrotik.com **DK. Instruktionsbog**: Tilslut strømadapteren for at tænde for enheden. Åbn 192.168.88.1 i en webbrowser til at konfigurere produktet. Mere information i http://wiki.mikrotik.com **FR. Mode d'emploi**: Connectez l'adaptateur d'alimentation pour allumer l'appareil. Ouvrez 192.168.88.1 dans un navigateur Web pour configurer le produit. Plus d'informations dans http://wiki.mikrotik.com **DE. Bedienungsanleitung**: Verbinden Sie das Netzteil, um das Gerät einzuschalten. Öffnen Sie 192.168.88.1 in einem Web-Browser, um das Produkt zu konfigurieren. Weitere Informationen im http://wiki.mikrotik.com **EE. Kasutusjuhend**: Ühendage toiteadapter seadme sisselülitamiseks. Avatud 192.168.88.1 in veebilehitseja seadistada toodet. Rohkem teavet http://wiki.mikrotik.com **ES. Manual de instrucciones**: Conecte el adaptador de alimentación para encender la unidad. Abra 192.168.88.1 en un navegador web para configurar el producto. Más información en http://wiki.mikrotik.com **IT. Manuale di istruzioni**: Collegare l'adattatore di alimentazione per accendere l'unità. Aprire 192.168.88.1 in un browser Web per configurare il prodotto. Maggiori informazioni in http://wiki.mikrotik.com **LV. Lietošanas instrukcija**: Pievienojiet Strāvas adapteri, lai ieslēgtu ierīci. Atvērt 192.168.88.1 ar interneta pārlūku, lai konfigurētu produktu. Plašāka informācija http://wiki.mikrotik.com **LT. Naudojimosi instrukcija**: Prijunkite maitinimo adapterį įjunkite įrenginį. Į interneto naršyklę 192.168.88.1 Atidarykite galite konfigūruoti gaminį. Daugiau informacijos rasite http://wiki.mikrotik.com **HU. Használati utasítás**: Csatlakoztassa a hálózati adaptert a készülék bekapcsolásához. Megnyitása 192.168.88.1 egy webböngészőben beállítani a terméket. Több információ http://wiki.mikrotik.com **NL. Handleiding**: Sluit voedingsadapter aan op het apparaat in te schakelen. Open 192.168.88.1 in een webbrowser om het product te configureren. Meer informatie in http://wiki.mikrotik.com **PL. Instrukcja obsługi**: Podłącz adapter zasilania, aby włączyć urządzenie. Otwórz 192.168.88.1 w przeglądarce internetowej, aby skonfigurować urządzenie. Więcej informacji w http://wiki.mikrotik.com **PT. Manual de instruções**: Conecte o adaptador de alimentação para ligar o aparelho. Abra 192.168.88.1 em um navegador da web para configurar o produto. Mais informações em http://wiki.mikrotik.com **RO. Instrucţiuni de utilizare** : Conectaţi adaptorul de alimentare pentru a porni aparatul. Deschide 192.168.88.1 într-un browser web pentru a configura produsul. Mai multe informaţii în http://wiki.mikrotik.com **SK. Návod na použitie**: Pripojte napájací adaptér k zapnutiu prístroja. Otvorte 192.168.88.1 vo webovom prehliadači pre konfiguráciu produktu. Viac informácií nájdete v http://wiki.mikrotik.com **SI. Navodila**: Priključite napajalnik za vklop naprave. Odprite 192.168.88.1 v spletnem brskalniku nastaviti izdelek. Več informacij http://wiki.mikrotik.com **FI. Käyttöohje**: Kytke virtalähde päälle laitteen. Avaa 192.168.88.1 in selaimen määrittää tuotteen. Lisää tietoa http://wiki.mikrotik.com **SE. Instruktionsmanual**: Anslut nätadaptern för att slå på enheten. Öppna 192.168.88.1 i en webbläsare för att konfigurera produkten. Mer information på http://wiki.mikrotik.com **NO. Bruksanvisningen**: Koble strømadapteren for å slå på enheten. Åpne 192.168.88.1 i en nettleser for å konfigurere produktet. Mer informasjon på http://wiki.mikrotik.com **GR. εγχειρίδιο οδηγιών**: Συνδέστε τον προσαρμογέα τροφοδοσίας για να ενεργοποιήσετε τη μονάδα. Ανοίξτε 192.168.88.1 σε ένα πρόγραμμα περιήγησης στο Web για να διαμορφώσετε το προϊόν. Περισσότερες πληροφορίες στο http://wiki.mikrotik.com

See www.routerboard.com for more information. Contact support@mikrotik.com for support questions.   23/03/15