RouterBOARD 493 series

Quick Setup Guide and Warranty Information

First use

- Insert the MiniPCI cards. This device has three MiniPCI slots.
- Connect antenna cables to the MiniPCI cards.
- Install the board in a case and connect other peripherals and cables.
- Plug in power cable to turn on the board.

Powering

The board accepts powering from the power jack, or from the LAN1 Ethernet port:

1. direct-input power jack **J901** (5.5mm outside and 2mm inside diameter, female, pin positive plug) accepts 9..28 V DC (overvoltage protection starts at 28.5V-29V).
2. LAN1 Ethernet port **J601** accepts 9..28 V DC input (at the board; higher voltage is needed to compensate for power loss on long cables – at least 18V suggested) from non-standard (passive) Power over Ethernet injectors (no power over datalines). The board **does not** work with IEEE802.3af compliant 48V power injectors.

CAUTION: all power inputs are always active, but only one of them may be used at a time to avoid damage of equipment. The maximum output of the power supply available for extension cards is normally 10W (3.0A).
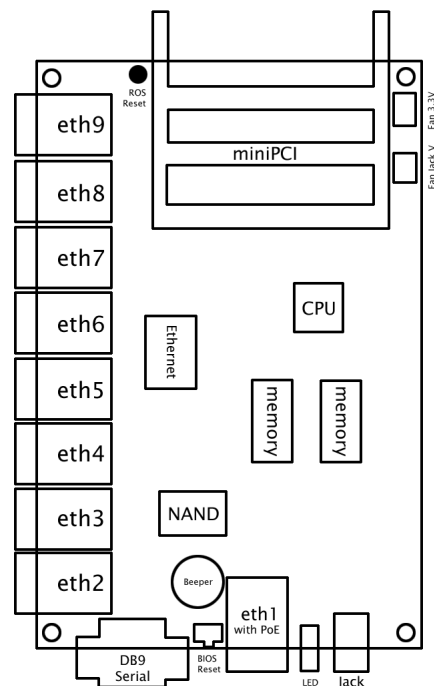
Booting process

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 the device will start to look for Netinstall servers.

It is also possible to connect with the onboard RS232C serial port. The serial port is set by default to 115200bit/s, 8 data bits, 1 stop bit, no parity, flow control off.

Extension Slots and Ports

- Nine Ethernet ports, supporting automatic cross/straight cable correction (Auto MDI/X), so you can use either straight or cross-over cables for connecting to other network devices. The first Ethernet port (marked with the "PoE" label and detached from the 8-port block) accepts 9..28 V DC powering from a passive PoE injector. The other eight Ethernet ports (placed as a block) **do not** support PoE powering.
- Three MiniPCI Type IIIA/IIIB ports with 3.3V power signaling.
- DB9 RS232C asynchronous serial port.

Operating System Support

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

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. We do not offer repairs for products that are not covered by warranty. Exceptions can be made for RB1000 series.
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**

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CE Declaration of Conformity

C E

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

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[ES] Spanish	Por la presente, MIKROTĪKLS SIA declara que este ROUTERBOARD cumple con los requisitos esenciales y otras exigencias relevantes de la Directiva 1999/5/EC.
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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 použití**: 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 v 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