

# RouterBOARD 433/433AH

## Quick Setup Guide and Warranty Information

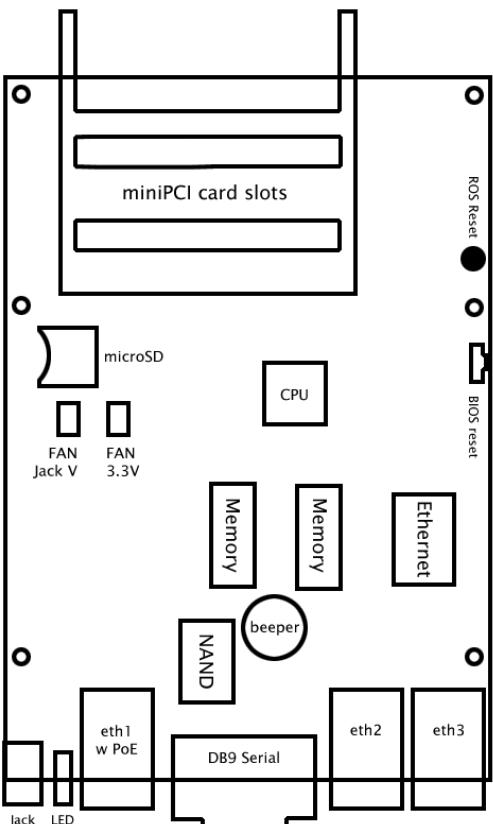
### First use

1. Insert the MiniPCI cards;
2. Install the board in a case and connect antenna wires, if needed;
3. Connect other peripherals and cables;
4. Plug in power cable to turn on the board.

### Powering

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

1. direct-input power jack **J801** (5.5mm outside and 2mm inside diameter, female, pin positive plug) accepts 10..28 V DC (overvoltage protection starts at 30V).
2. LAN1 Ethernet port **J601** accepts 10..28 V DC input (at the board; higher voltage 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 maximum output of the power supply available for extension cards is normally 16W.

### 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](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

1. Three 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 accepts 10..28V DC powering from a passive PoE injector. The other two Ethernet ports **do not** support PoE powering.
2. Three MiniPCI Type IIIA/IIIB ports with 3.3V power signaling.
3. DB9 RS232C asynchronous serial port.
4. microSD card slot for storage expansion (only on RB433AH)

## Buttons

- RouterOS reset hole. While booting, and holding a metal object in this hole (so that its metal sides short-circuit) will cause RouterOS software to be reset to defaults
- BIOS Loader backup button. Holding the button while booting will cause the backup bootloader to be used.

## Operating System Support

Currently tested operating system is MikroTik RouterOS (starting from version 3.4).

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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>

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# CE Declaration of Conformity

The full Declaration of Conformity (DoC) may be obtained by visiting this web page:

<http://routerboard.com/certification/>



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**БГ. Инструкция:** Свържете адаптера на захранване, за да включите устройството. Отворете 192.168.88.1 в уеббраузър, за да настроите продукта. Повече информация в <http://wiki.mikrotik.com>

**CZ. Návod k použití:** Připojte napájecí adaptér k zapnutému přístroji. 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:** Ühdage 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. J interneto naršykite 192.168.88.1 Atidarykite galite konfigūruoti gaminį. Daugiau informacijos rasite <http://wiki.mikrotik.com>

**HU. Használati utasítás:** Csatlakoztassa a hálózati adaptort a készülék bekapcsolásához. Megnyitánya 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. Instrucțiuni de utilizare:** Conectați adaptorul de alimentare pentru a porni aparatul. Deschide 192.168.88.1 într-un browser web pentru a configura produsul. Mai multe informații 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. Käytöohje:** Kytkie virtalähde pääälle laitteeseen. Avaa 192.168.88.1 selaimen määrittää tuotteen. Lisää tietoa <http://wiki.mikrotik.com>

**SE. Instruktionsmanual:** Anslut nätdaptern 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. Bruksanvisning:** 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 οδηγών:** Συνέστε 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>