

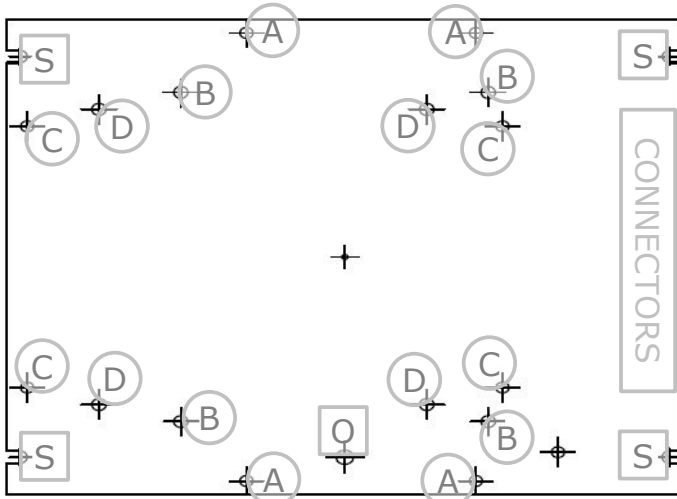
# RouterBOARD Small Outdoor Case

## Installation Guide and Warranty Information



### Assembling the Kit

1. Mount antenna connectors and Ethernet insulator in their respective holes. Seal the unused holes with the provided rubber seals **H** and **I**.
2. Install the distancers **J** on the baseplate **C** using screws **K**, according to the drawing below. There are 4 distancers for mounting a RouterBOARD. Place them on top of the baseplate in one of the positions marked with the same letter (placement differs depending on the RouterBOARD type used, so choose letter A, B, C or D, according to the list below the drawing) and tightened with screws from underneath. Note that the baseplate is not symmetric, so it is very important to place it **exactly** as seen on the drawing.


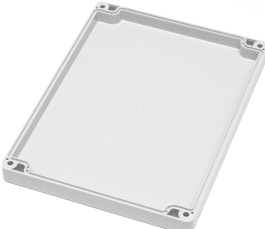
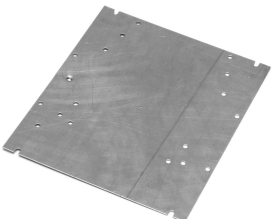















A – RouterBOARD 532  
B – RouterBOARD 133  
C – RouterBOARD 112  
D – reserved for future products

3. Place the baseplate **C** inside the case box **A**, minding the orientation of the baseplate. Note that if you have installed the baseplate correctly, a hole in the case will match the point O on the drawing. Install the grounding screw **G** in the point O. It is supposed to go all the way through the baseplate and through the case. Then fasten the baseplate with screws **K** at the points marked as S on the drawing above.
4. Connect all antenna pigtails and Ethernet cords to the RouterBOARD and secure it on the previously installed distancers with the screws **K**. Note that the RouterBOARD must be oriented with its Ethernet ports towards the "CONNECTORS" mark on the drawing above.

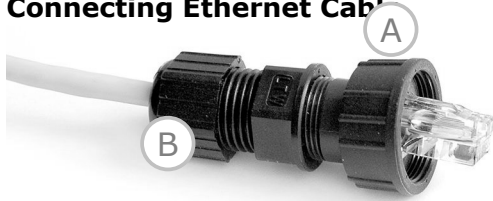
### Case and Mounting Kit

The RouterBOARD you have received, is shipped with the following parts:

		
Item A (1 pcs). Base	Item B (1 pcs). Cover	
		
Item C (1 pcs). Baseplate	Item D (2 pcs). Mounting rail	
		
Item E (1 pcs). Rubber isolation cord	Item F (4 pcs). Case screw M4	Item G (1 pcs). Ground screw M4
		
Item H (1 pcs). Ethernet seal	Item I (2 pcs). Antenna seal	Item J (4 pcs). Distancer
		
Item K (12 pcs). Inner screw M3	Item L (1 pcs). Lock washer M4	Item M (1 pcs). Wing nut M4
		
Item N (3 pcs). Mounting screw	Item O (13 pcs). Washer M4	Item P (2 pcs). Mounting ring

5. Insert the rubber isolation cord **E** into the shaft near the edge of the case cover **B**, and trace the cord all the way around the cover. The cord is supposed to be longer than needed – you will need to cut it so that both ends are slightly overlapping. The cord must match the ridge near the edge of the base **A**. Close the case and secure the cover with the screws **F** tightly.
6. Screw the mounting rail **D** to the bottom of the base **A**. The rail should be elevated to allow rings **P** to go underneath, so place three washers **O** under the rail on each of the three holes of the base, then put one washer under each screw **N** and secure the rail very tightly. Note: use all three screws to prevent moisture from leaking into the case through these holes.
7. Use the rings **P** to fasten the case on the mast. Mind the orientation, as advised on the case: it must be mounted with connectors down, as there are two small ventilation holes, which must never be pointed up to avoid water leaking inside the case causing irreparable damage to the equipment inside. Make sure to tighten the rings reliably to prevent the device shift/rotate in high wind.

### Connecting Ethernet Cable



1. Pull the Ethernet cable through the assembly shown on the picture (you should have received the assembly together with the device).
2. Install an RJ45 connector on the Ethernet cable, and plug it in the device.
3. Screw the **A** part on top of the Ethernet socket of the device.
4. Hand tighten the **B** part to seal the opening of the assembly.

### Connecting External Antenna Cable (optional)

If the RouterBOARD was purchased with external antenna connector option, screw the connector of the antenna cable on the appropriate antenna attachment of the case. Hand tighten the connector (do **not** use vice grips for this job). When tying the coaxial cable, make sure no water can get into it and/or into the equipment it is attached to. It is very important to seal the connection properly with a good rubber tape made particularly for this purpose (note that many general purpose tapes will not prevent moisture to leak into connector, or will fail after some time). **Note:** do not bend the cable straight: you should keep a radius of curvature allowing the cable to bend without applying force.

### Safety Precautions

**IMPORTANT: LIVES MAY BE AT RISK!** Contacting power lines may cause injury or death. Make sure that in no case may equipment or personnel come in direct or indirect contact with power lines. All overhead wiring should be assumed to be power lines. Ensure that the mast may not contact power lines even if it falls during or after installation. If a person comes in contact with electricity and is not able to move, you **MUST NOT** touch that person to avoid the same fate! Instead, use a known non-conductive stick or rope to pull him/her away from the electric line.

Respect safe procedures when working above the ground. Do not work alone: a friend or co-worker can save your life in case of an accident.

### Grounding

The installation infrastructure (towers and masts), as well as antennas and the device itself, must be properly grounded, and lightning arrestors must be installed on all external antenna cables (near the antennas or on the antennas themselves) to prevent equipment damage and human injury. Note that lightning arrestors will not have any effect if not grounded. Note also that damages caused by static electricity and lightning are not covered by warranty.

Use 1 AWG (7mm in diameter) wire with corrosion-resistant connectors. Secure it on the grounding screw **G** with a lock washer **L** and a wing nut **M**. Be sure to check that the grounding infrastructure you use is indeed functional (as opposed to decorative-only grounding present on some sites).

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**Hardware.** MikroTiks SIA warrants all RouterBOARD series equipment for the term of fifteen (15) 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.

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 Latvia

To return failed unit or units to MikroTiks you must perform the following RMA (Return Material Authorization) procedure. Follow the instructions below to save time, efforts, avoid costs, and improve the speed of the RMA process. Take into account that all goods have one year warranty.

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

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