DOREMiDi
www.doremidi.cn

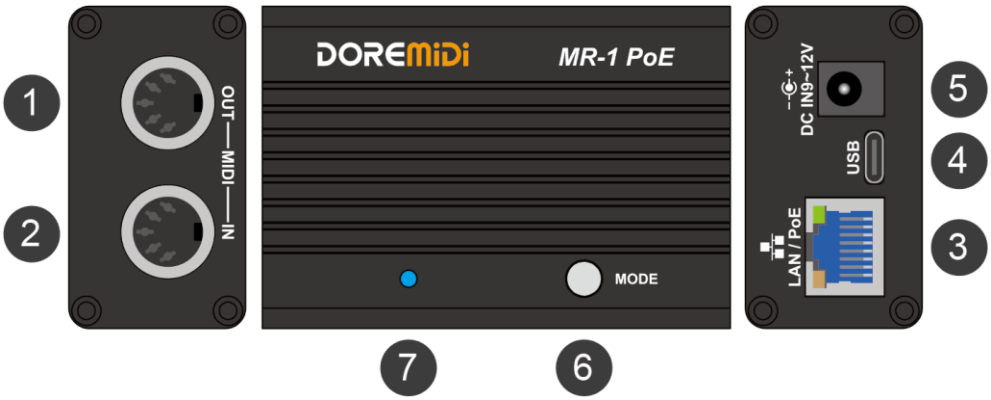
MIDI Network Box PoE
MR-1 PoE

Instructions

1. Introduction

MIDI Network Box PoE (MR-1 PoE) is a RTP-MIDI gateway with PoE function designed by DOREMiDi. MR-1 PoE has PoE function and can be powered by a gateway with PoE function. MR-1 PoE can connect MIDI devices to the LAN through RTP-MIDI in the LAN, and complete low-latency and high-stability MIDI communication with computers and other RTP-MIDI devices.

2. Appearance



1. MIDI OUT: 5Pin MIDI port, connect to the MIDI IN port of MIDI Device.
2. MIDI IN: 5Pin MIDI port, connect to MIDI OUT port of MIDI device
3. MIDI LAN: Ethernet port, connect Ethernet equipment through network cable, such as network router, network switch, etc.
4. USB: USB-C port, can be connected to a computer and communicate with MIDI IN/OUT, can configure network IP, and support power supply for the product.
5. DC IN 9V~12V: Product power supply port, power supply voltage 9~12VDC, use DC5.5*2.1 plug, tip is positive and sleeve is negative.
6. MODE: Mode switch button, press and hold for 3 seconds to switch between **Listener/ Initiator mode**, press and hold for 10 seconds to restore to **factory settings** (red and blue led flash alternately), press and hold the button to power the product, it will enter **upgrade mode** (red and blue led flash alternately).
7. LED: Mode indicator, blue is listener mode, red is initiator mode, The red and blue indicators flash alternately to restore factory settings and upgrade mode.

(Note: The listener mode can be connected to a device with RTP-MIDI function such as a computer, and the initiator mode can be actively connected to the RTP-MIDI device of DOREMiDi.)

3. Product Parameters

Name	Description
Model	MR-1 PoE
Size (L x W x H)	83 x 55 x 30mm
Weight	120g
MIDI Interface	Built-in high-speed optocoupler, 5-Pin interface, 16-channel MIDI interface with one input and one output for high-performance processing
MIDI LAN Interface	Standard Ethernet RTP-MIDI interface
LAN Indicator Light	Network communication indicator, Network working indicator
POWER Interface	Use DC interface for power supply, power supply voltage 9V~12VDC
MIDI Compatibility	Compatible with all MIDI devices with MIDI standard interface
USB Compatibility	USB class compliant MIDI device, plug and play
Listener Mode	Support up to 5 RTP-MIDI terminals connected at the same time

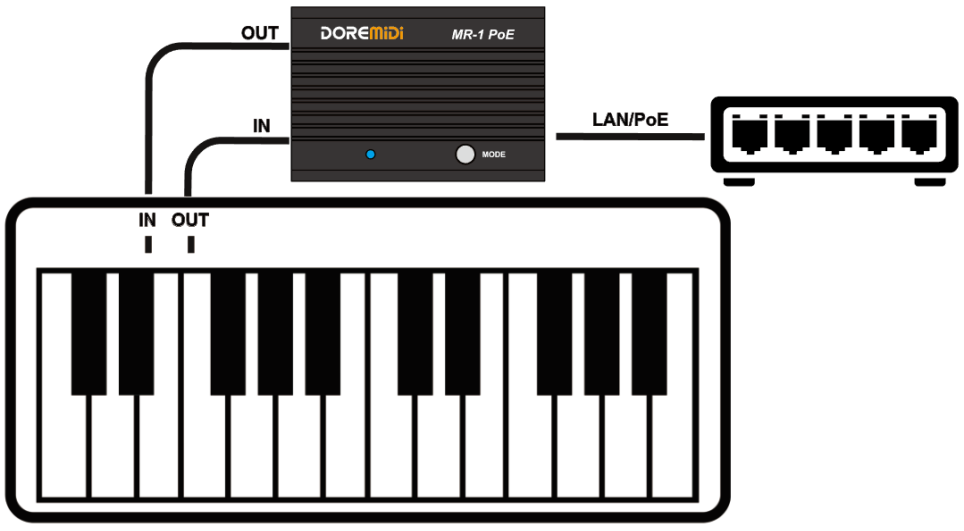
Initiator Mode	Support up to 3 DOREMiDi RTP-MIDI devices connected at the same time
Power Consumption	30mA(@12VDC), 30mA(@9VDC), 30mA(@5V-USB)
IP Address	By default, the IP address is automatically obtained and is assigned by a router with DHCP function. it can also be set to a static IP address and the IP address can be configured by connecting to a computer via USB-C.

4. Steps for usage

1. **Power supply:** MR-1 PoE supports multiple power supply methods.

Power supply	Description
Powered by USB-C port	Powered by USB-C connected to a computer, only 5V is supported.
Powered by DC port	The DC port supports 9~12V adapter power supply, negative inside and positive outside.
Power over Ethernet	To power the product through the network port, please make sure your router/switch has PoE function.

2. **Connect MIDI devices:** Use a 5-pin MIDI cable to connect the MIDI IN of the MIDI device to the MIDI OUT of the MR-1 PoE, and connect the MIDI OUT of the MIDI device to the MIDI IN of the MR-1 PoE.
3. **Connect to the local area network:** Use the RJ45 network cable to connect the "MIDI LAN" interface of the MR-1 PoE to a network router or network switch.



4. **Configure Initiator mode/Listenermode/Factory reset/Firmware upgrade mode**

Mode	Description	Operation
Listener	● Computers, mobile phones and other terminals can discover and connect to MR-1 PoE. ● Supports up to 5 terminals to connect.	Press and hold the MODE button for 3 seconds, the LED turns blue. The LED flashes when not connected, and stays on after successful connection.
Initiator	● In this mode, MR-1 PoE will automatically search for DOREMiDi's RTP-MIDI devices in the LAN and actively connect. ● Supports connecting up to 3 RTP-MIDI devices	Press and hold the MODE button for 3 seconds, the LED turns red. The LED flashes when not connected, and the LED stays on after successful connection.

Factory reset	After restoring the factory settings, the product will use the method of automatically obtaining an IP address. A router with DHCP function can assign an IP address to the product.	Press and hold the MODE button for more than 10 seconds, the red and blue lights flash alternately.
Firmware Upgrade	Used to upgrade the firmware of the product. Please pay attention to the DOREMiDi official website for new firmware.	Press and hold the MODE button, connect the product USB to the computer, then release the MODE button, the red and blue lights flash alternately.

(Note: ①To configure the MIDI network, please refer to "DOREMiDi Network MIDI Configuration Manual.pdf", which can be downloaded from www.doremidi.cn. ②When an RTP-MIDI device (such as a computer) in the local area network sends a SysEx message to the MR-1 PoE device, the maximum data size of each packet must not exceed 10K bytes.)

5. Configure the IP address

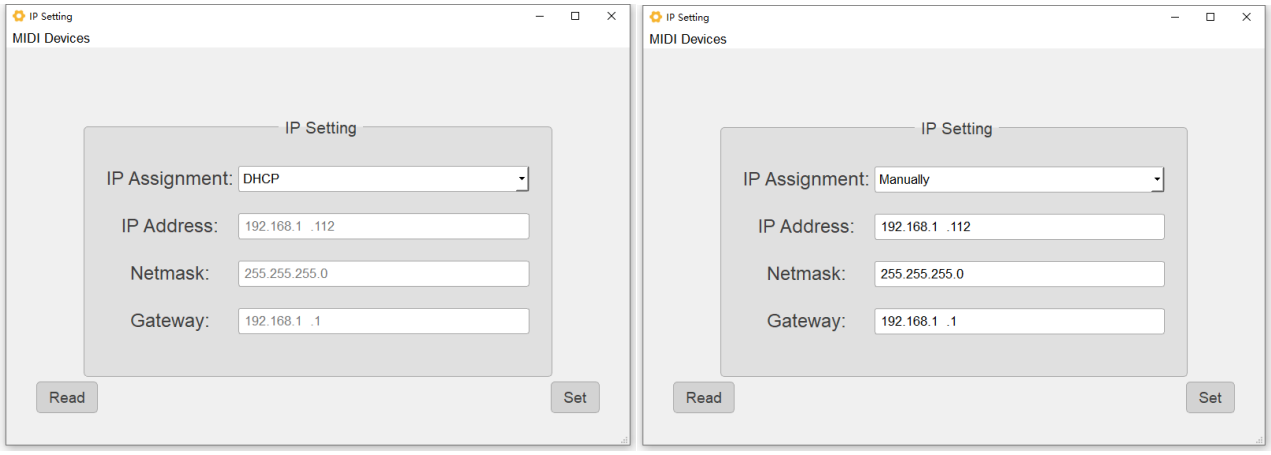
The factory default setting of MR-1 PoE is to automatically obtain an IP address (i.e. DHCP). This function allows a router with DHCP function to automatically assign an IP address. Users can set MR-1 PoE to a static IP address through DOREMiDi's "IP Tool" software. The following are the configuration steps:

Software environment requirements: Windows 7 or later versions of Windows, MacOS.

Windows: https://www.doremidi.club/download/Product/IP_Tool/IP_Tool.exe

MacOS: https://www.doremidi.club/download/Product/IP_Tool/IP_Tool.dmg

(Note: If the download link is not available, please download from the DOREMiDI official website: www.doremidi.cn)



- Connect the product to the computer, open the "IP_Tool" software, and click "MIDI Device" to connect the product.
- Read: Read the IP information of the product.
- Set: Set the configured IP information to the product.
- DHCP: When configured as DHCP, the product is assigned IP information by a router/switch with DHCP function.

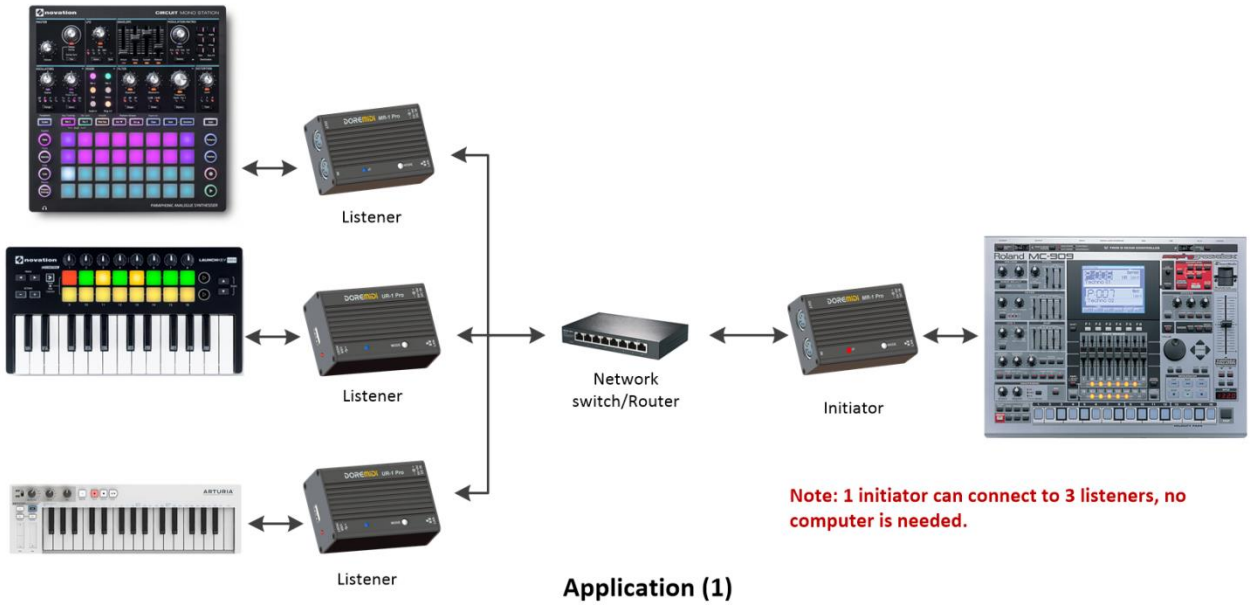
- Manually: When configured as Manually, you can manually configure the IP address/ Netmask / Gateway.

Note: ①In a network of multiple RTP MIDI devices, it is necessary to ensure that the IP addresses of the devices cannot be duplicated, and the network segments of the IP addresses must be the same. for example: "IP-1 : 192 : 168 : 1 : 112", "IP-2 : 192 : 168 : 1 : 113". The two IP addresses are different, but the network segment "192 : 168 : 1" must be the same.

②If you forget the IP address set by the product, you can press and hold the product button for more than 10 seconds until the red light and blue light flash alternately, indicating that the factory settings have been successfully restored. After the factory settings, the product will automatically obtain an IP address and use the DHCP function A router can assign an IP address to the product.

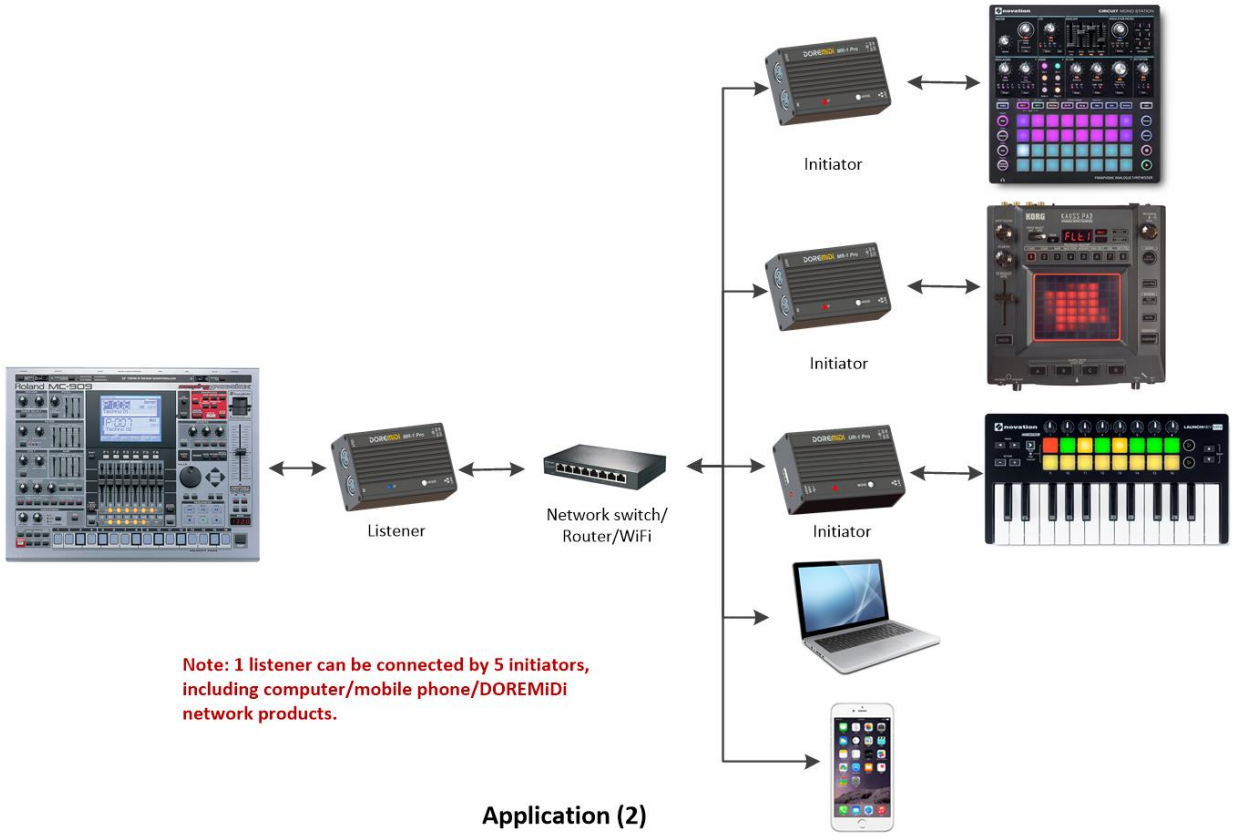
6. Introduction of typical application cases

1. Application 1: Before the computer is not needed, MR-1 PoE/MR-1 Pro/UR-1 Pro can connect and communicate through the network, set one product of them as the "Initiator", and the initiator can connect up to 3 listeners. As shown in the picture:



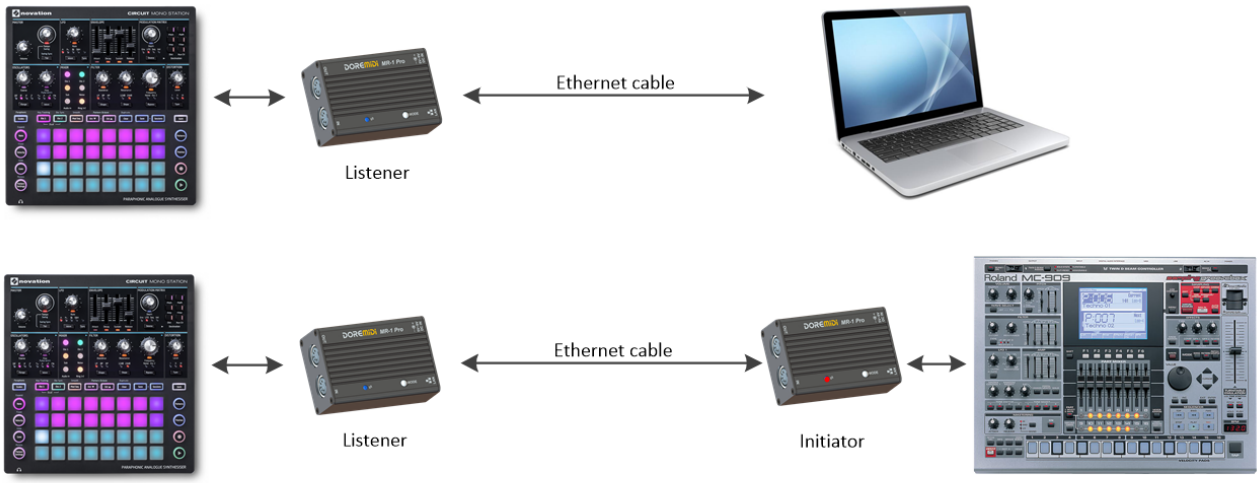
Application (1)

2. Application 2: One listener can communicate with multiple initiators at the same time, and can support up to 5 initiators, as shown in the figure:



Application (2)

3. Application 3: After configuring the MR-1 PoE/MR-1 Pro/UR-1 Pro as a static IP, you can connect the MIDI device to the computer via an Ethernet cable, or connect two MIDI devices. It is suitable for applications that need to extend MIDI communication. The communication distance of the Ethernet cable can reach more than 100 meters, which is stable and has no delay.



Application (3)

7. Precautions

1. This product contains a circuit board.
2. Rain or immersion in water may cause the product to malfunction.
3. Do not heat, press, or damage internal components.
4. Non-professional maintenance personnel are not allowed to disassemble the product.
5. The working voltage of the product is 5VDC, using a voltage lower or exceeding this voltage may cause the product to fail to work or be damaged.

8. Q&A

Question: The MIDI OUT/IN interface does not work.

Answer: Please make sure that the “MIDI OUT” of the product is connected to the “MIDI IN” of the instrument, and the “MIDI IN” of the product is connected to the “MIDI OUT” of the instrument.

Question: In the listener mode, the computer does not find the MR-1 PoE.

Answer: Please make sure that the computer and MR-1 PoE are in the same local area network.

If it is not resolved, please refer to "DOREMiDi Network MIDI Configuration Manual.pdf" at *www.doremidi.cn*.

Question: In the initiator mode, the MR-1 PoE cannot connect to RTP MIDI devices.

Answer: Please make sure that it is the RTP MIDI device of DOREMiDi. In addition, please make sure that the RTP MIDI device and MR-1 PoE are in the same local area network.

Question: iPhone cannot be connected, but other devices can be connected.

Answer: Please turn off the private address switch in the mobile network settings.

If the problem is not resolved, please contact customer service.

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Customer Service Email: info@doremidi.cn