summina UMH-21

summina High-Speed USB MIDI Host Box (UMH-21) Instruction Manual

Model: UMH-21 (Internal Reference: IWH7418930232970MU)

1. Introduction

Thank you for choosing the summina High-Speed USB MIDI Host Box (UMH-21). This device is designed to provide seamless MIDI connectivity for your electronic musical instruments and controllers. It acts as a bridge, allowing USB MIDI devices to communicate with traditional 5-pin DIN MIDI equipment without the need for a computer.

Key Features:

- **High-Speed USB MIDI Host:** Features a standard USB 2.0 interface, ensuring fast data transmission and broad compatibility with USB 2.0/1.0/1.1 MIDI devices.
- **Multiple Interfaces:** Equipped with USB-B for power, USB-A for connecting USB MIDI peripherals, and a 16-channel standard MIDI In/Out interface with high-performance FTP processing.
- **Optocoupler Isolation:** Built-in high-speed optocoupler isolation ensures reliable and interference-free MIDI data transmission.
- **Real-time Status Indicators:** Includes LED indicators for power, USB activity, and MIDI In/Out status.
- **Firmware Updatable:** Supports firmware updates to maintain compatibility with evolving MIDI devices and standards.
- **Durable Design:** Constructed with a premium metal frame, matte and brushed finish, and silicone pads for shock absorption and anti-slip stability.

2. Package Contents

Please verify that all items listed below are included in your package:

- summina High-Speed USB MIDI Host Box (UMH-21)
- USB Power Cable
- Instruction Sheet

Figure 2.1: Package Contents. This image shows the typical package contents for the summina UMH-21, including the High-Speed USB MIDI Host Box (UMH-21) itself, a USB power cable, and a printed instruction sheet.

3. Product Overview

Familiarize yourself with the various ports and indicators on your UMH-21 device.

Figure 3.1: Front View of UMH-21. This image shows the front panel of the summina DOREMiDi USB MIDI Host UMH-21. It features a USB HOST port, MIDI OUT, and MIDI IN ports, along with indicator lights. The top panel indicates 'DC IN 5V-12V'.

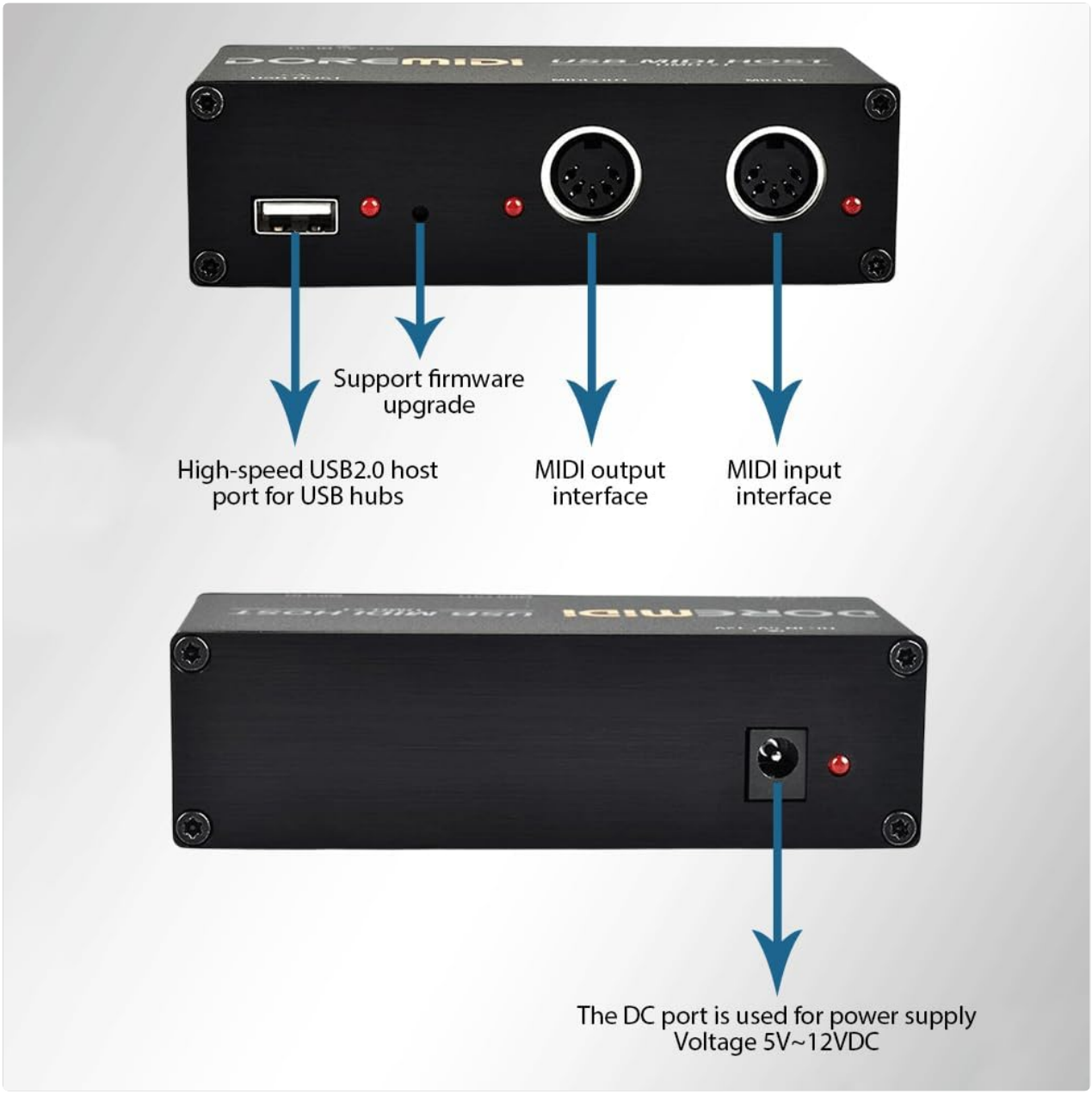

Figure 3.2: Port Diagram. This diagram provides a clear overview of the summina UMH-21's ports. The front panel includes a high-speed USB 2.0 host port for USB hubs, a MIDI output interface, and a MIDI input interface. The rear panel shows the DC port for power supply, accepting 5V-12V DC.

Port Descriptions:

- **DC IN (5V-12V):** Power input port. Connect the provided USB power cable or a compatible 5V-12V DC power adapter here.
- **USB HOST:** USB-A port for connecting USB MIDI devices (e.g., MIDI keyboards, controllers). Can connect to a USB hub to support multiple devices.
- **MIDI OUT:** 5-pin DIN MIDI output port. Connect this to the MIDI IN port of your MIDI instrument or device.
- **MIDI IN:** 5-pin DIN MIDI input port. Connect this to the MIDI OUT port of your MIDI instrument or device.

Indicator Lights:

- **Power Indicator:** Illuminates when the device is powered on.
- **USB Working Indicator:** Illuminates when a USB MIDI device is connected and active.
- **MIDI IN/OUT Indicators:** Flash when MIDI data is being transmitted or received through the respective MIDI ports.

4. Setup

Follow these steps to set up your summina UMH-21:

1. **Power Connection:** Connect the provided USB power cable to the DC IN port of the UMH-21. Connect the other end of the USB cable to a 5V USB power adapter (not included) or a USB port on a computer for power. The Power Indicator LED should illuminate.
2. **Connect USB MIDI Device(s):** Plug your USB MIDI keyboard, controller, or other USB MIDI device into the USB HOST port on the UMH-21. If you need to connect multiple USB MIDI devices, use a powered USB hub (not included) and connect the hub to the UMH-21's USB HOST port. The USB Working Indicator LED should illuminate when a device is connected and recognized.
3. **Connect 5-pin DIN MIDI Device(s):**
    - To send MIDI data from your USB MIDI device to a traditional MIDI instrument, connect a 5-pin DIN MIDI cable from the **MIDI OUT** port of the UMH-21 to the **MIDI IN** port of your MIDI instrument.
    - To receive MIDI data from a traditional MIDI instrument to your USB MIDI device, connect a 5-pin DIN MIDI cable from the **MIDI OUT** port of your MIDI instrument to the **MIDI IN** port of the UMH-21.

Figure 4.1: Connecting Multiple USB MIDI Devices. This image illustrates the summina UMH-21 connected to a USB hub, which then connects to several USB MIDI instruments like keyboards and drum pads. This setup demonstrates the ability to connect up to four USB MIDI instruments simultaneously via a hub.

Figure 4.2: Example Connectivity. A close-up view of the summina UMH-21 with a USB cable connected to the USB HOST port and MIDI cables connected to the MIDI IN and MIDI OUT ports. This highlights the device's connectivity and its built-in high-speed optocoupler isolation for reliable data transmission.

5. Operation

Once connected, the UMH-21 operates automatically as a transparent MIDI router between your USB MIDI devices and 5-pin DIN MIDI devices.

- **USB MIDI to 5-pin DIN MIDI:** MIDI data generated by your USB MIDI device(s) will be routed to the UMH-21's MIDI OUT port.
- **5-pin DIN MIDI to USB MIDI:** MIDI data received at the UMH-21's MIDI IN port will be routed to your connected USB MIDI device(s).

- **Indicator Feedback:** Observe the MIDI IN/OUT indicator lights. They will flash in real-time as MIDI data is transmitted or received, confirming active communication.

Firmware Update:

The UMH-21 supports firmware updates to enhance compatibility or add new features. Please visit the official summina website or contact customer support for instructions on how to perform a firmware update, if available.

6. Maintenance

To ensure the longevity and optimal performance of your UMH-21, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Do not use liquid cleaners or solvents, as they may damage the finish or internal components.
- **Storage:** Store the device in a cool, dry place away from direct sunlight and extreme temperatures when not in use.
- **Handling:** Avoid dropping the device or subjecting it to strong impacts. The robust metal casing is designed for durability, but excessive force can cause damage.
- **Power Supply:** Always use a compatible 5V-12V DC power supply. Using an incorrect voltage or current can damage the device.

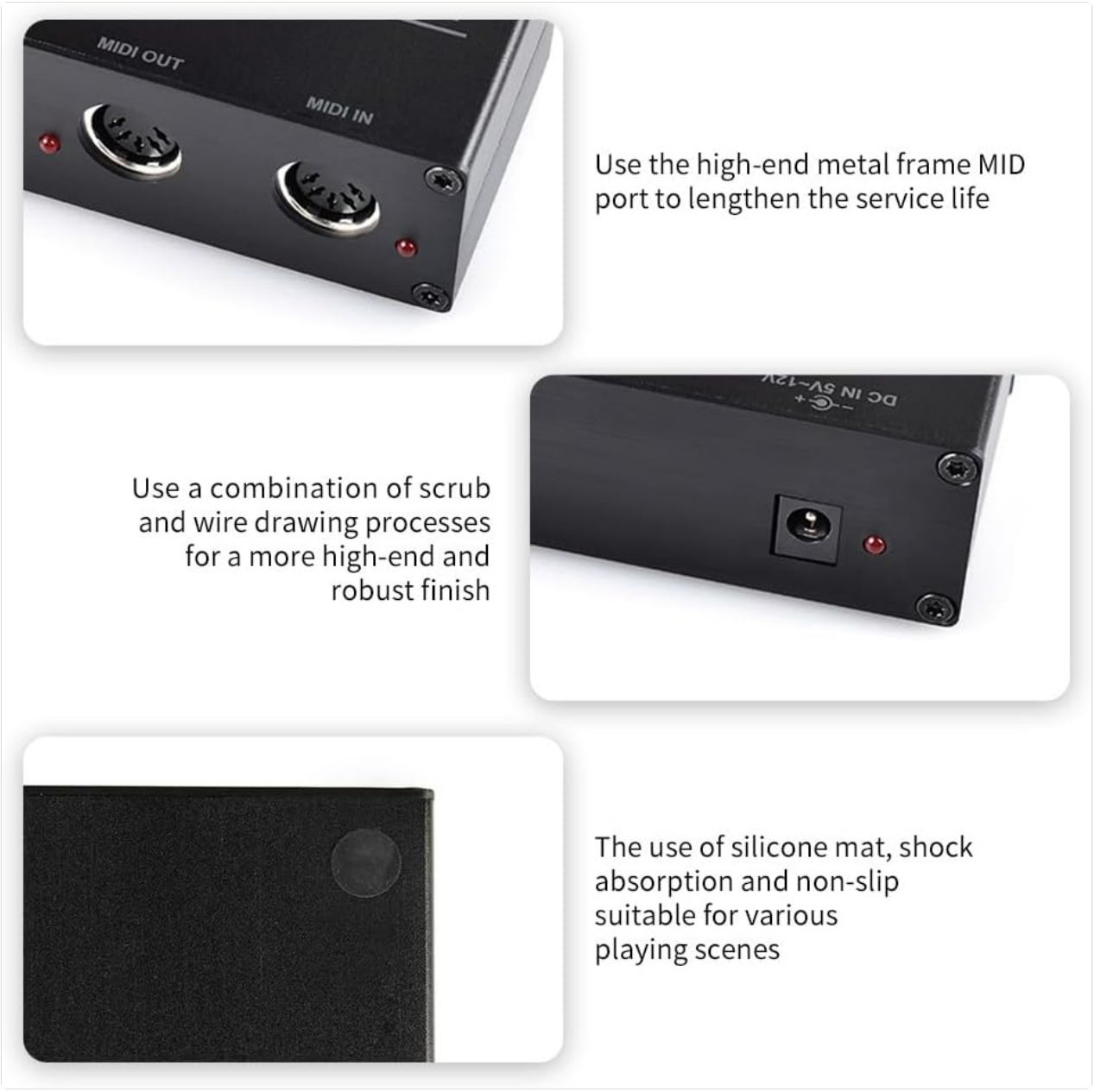

Figure 6.1: Durable Design Elements. This image showcases the premium design elements of the summina UMH-21. It highlights the high-end metal frame MIDI ports for extended service life, the combination of scrub and wire drawing processes for a robust finish, and the silicone mat for shock absorption and anti-slip stability.

7. Troubleshooting

If you encounter issues with your UMH-21, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No power (Power LED off)	Incorrect or no power supply connected.	Ensure a 5V-12V DC power supply is correctly connected to the DC IN port. Check the power adapter and cable.

Problem	Possible Cause	Solution
USB MIDI device not recognized (USB Working LED off)	USB MIDI device not properly connected or incompatible.	Ensure the USB MIDI device is fully plugged into the USB HOST port. Try a different USB port or cable. If using a hub, ensure it is powered. Verify the USB MIDI device is class-compliant.
No MIDI data transmission (MIDI IN/OUT LEDs not flashing)	Incorrect MIDI cable connection or device settings.	Check that MIDI cables are connected correctly (MIDI OUT to MIDI IN, and vice-versa). Ensure your MIDI instruments are powered on and configured to send/receive MIDI data on the correct channels.
Intermittent MIDI connection	Loose connections or power fluctuations.	Secure all cable connections. Ensure a stable power supply. Avoid placing the device near sources of strong electromagnetic interference.

8. Specifications

Product Power Consumption	50 mA @ 5V
USB Host Communication Speed	480 Mbps (60 MB/s)
USB HOST Standard	High-speed USB MIDI HOST standard (USB2.0)
USB Host Support	Compatible with all USB MIDI devices on USB 2.0/USB1.0/USB1.1
USB Host Power Output	Max 5V/2A
MIDI Interface	16-channel 1-in-1-out high-performance FTP processing MIDI interface with built-in high-speed optocoupler isolation
MIDI Compatibility	Compatible with all instrument devices with standard MIDI interfaces
Power Source	DC interface for power supply, 5V-12V DC
Indicator Lights	Product power indicator, USB working indicator, MIDI In/Out indicator
Firmware Update	Supports firmware updates
Product Dimensions	11.5 x 5.3 x 3.3 cm (4.5 x 2 x 1.3 inches)
Product Weight	150 g (0.33 lbs)

Figure 8.1: Product Dimensions. This image displays the physical dimensions of the summina UMH-21. The device measures 11.5 cm (4.5 inches) in length, 5.3 cm (2 inches) in width, and 3.3 cm (1.3 inches) in height.

9. Warranty and Support

Information regarding product warranty and customer support is not available in the provided product details. Please refer to the retailer's return policy or contact summina customer service directly for warranty claims or technical assistance.