DOREMiDi
www.doremidi.cn

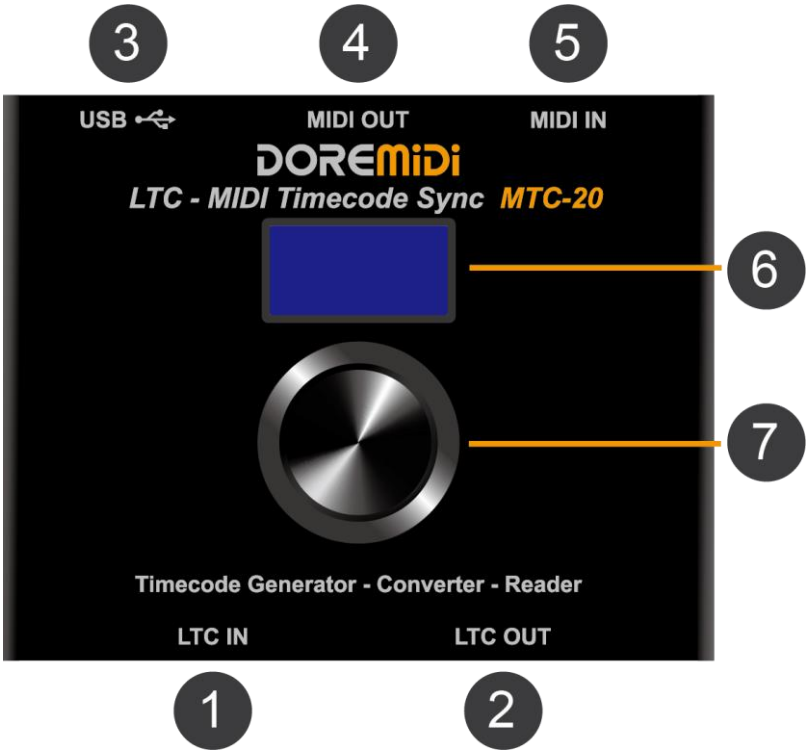
LTC-MIDI Timecode Sync
MTC-20

Instructions

1. Introduction

LTC-MIDI Timecode Sync (MTC-20) is a device designed by DOREMiDi to synchronize MIDI timecode and SMPTE LTC timecode. It has the functions of timecode generation, timecode conversion and timecode reader. MTC-20 has standard USB MIDI interface, MIDI DIN interface and LTC interface, which can be used for time code synchronization between computers, MIDI device and LTC device. At the same time, MTC-20 has a display screen that can display the current time code information.

2. Appearance



❶ LTC IN: Standard 3Pin XLR interface, through the 3Pin XLR cable, connect the device with LTC output**. (Note: The new version has an analog potentiometer to adjust the LTC input gain, counterclockwise to decrease and clockwise to increase.)**

❷ LTC OUT: Standard 3Pin XLR interface, through the 3Pin XLR cable, connect the device with LTC input. **(Note: The new version has an analog potentiometer to adjust the LTC output audio amplitude. Turn counterclockwise to reduce and clockwise to increase.)**

❸ USB: USB-B interface, with USB MIDI function, connected to a computer, or connected to an external 5VDC power supply.

❹ MIDI OUT: Standard MIDI DIN five-pin output interface, output MIDI time code.

❺ MIDI IN: Standard MIDI DIN five-pin input port, input MIDI time code.

❻ Display screen: OLED display screen, showing the working status of MTC-20.

❼ Knob: Knob with button function, configure the work of MTC-20 by rotating and clicking.

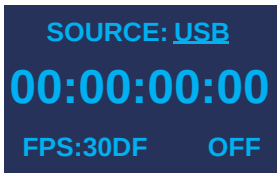
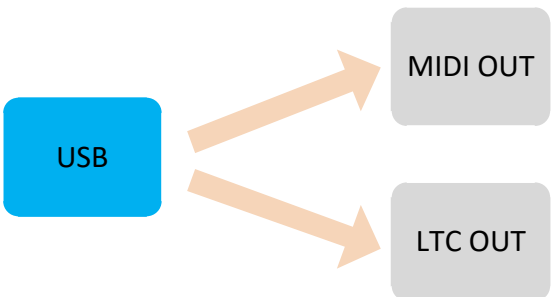
3. Product Parameters

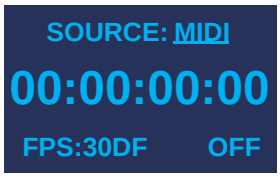
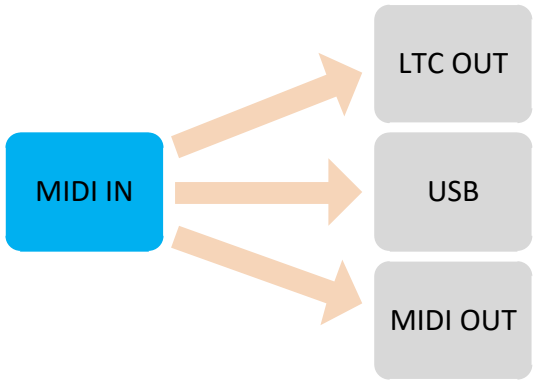
Name	Description
Model	MTC-20
Size (L x W x H)	88*79*52mm
Weight	180g
Timecode Generator	Supports generating timecode in 24, 25, 30DF, 30 frame formats
LTC Compatibility	Compatible with SMPTE LTC standard audio signal
USB Compatibility	Compatible with Windows, Mac, iOS, Android and other systems, plug and play, no driver installation required
MIDI Compatibility	Compatible with all MIDI devices with MIDI standard interface
Operating Voltage	5VDC, supply power to the product through the USB-B interface
Working current	About 40mA
Firmware upgrade	Support firmware upgrade

4. Steps for usage

1. Power supply: Power MTC-10 through the USB-B interface with a voltage of 5VDC, and the power indicator will light up after the power is supplied.
2. Connect to the computer: Connect to the computer through the USB-B interface.
3. Connect the MIDI device: Use a standard 5-Pin MIDI cable to connect the MIDI OUT of the MTC-10 to the IN of the MIDI device, and the MIDI IN of the MTC-10 to the OUT of the MIDI device.
4. Connect LTC devices: Use standard 3-Pin XLR cable to connect LTC OUT of MTC-10 to LTC IN of LTC devices, and LTC IN of MTC-10 to LTC OUT of LTC devices.
5. Set the timecode input source

By clicking the knob, you can select different setting items, and rotating the knob to change the parameters of the setting items. When MTC-20 is used as a time code converter/reader, please select the correct time code input source "USB/MIDI/LTC" according to the time code input port. When the MTC-20 is used as a time code generator, please select "GEN". The following are descriptions of the 4 timecode input sources:

Souce	Display	Description
USB		Timecode input from USB, MIDI OUT will output MIDI timecode, LTC OUT will output LTC timecode. 

<table>
<tr>
<td>MIDI</td>
<td> 
</td>
<td>The time code is input from MIDI IN, USB and MIDI OUT will output MIDI time code, and LTC OUT will output LTC time code.
 
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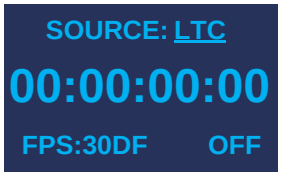
<td>LTC</td>
<td> 
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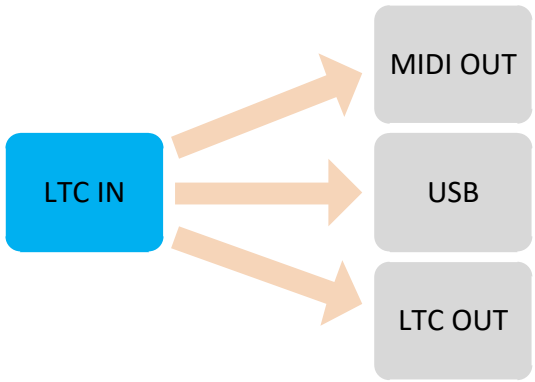
<td>Timecode input from LTC IN, USB and MIDI OUT will output MIDI time code, and LTC OUT will output LTC time code.
 
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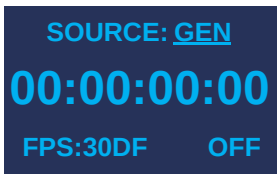
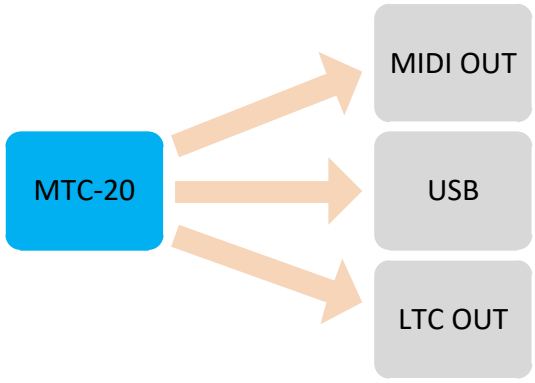
<tr>
<td>GEN</td>
<td> 
</td>
<td>Timecode is generated by MTC-20, MIDI OUT, USB and LTC OUT output timecode.
● Hours, minutes and seconds can be set;
● Time frame format can be set: support 24, 25, 30DF, 30
 
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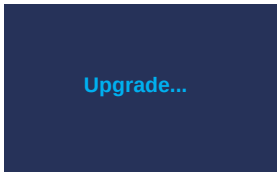
(Note: When the timecode input source is "USB/MIDI/LTC", the timecode will be input externally, so the timecode and time frame cannot be set.)

5. Firmware upgrade operation

Press and hold the knob to power the product, then release the knob, the product will enter the upgrade mode, please use the official firmware upgrade tool to upgrade the product. (If there is a firmware update, please pay attention to the official website notification)



6. 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.

6. Q&A

Question: LTC time code cannot be converted to MIDI time code.

Answer: Please make sure that the format of the LTC time code is one of 24, 25, 30DF, and 30 frames; if it is of other types, time code errors or frame loss may occur.

Question: Can MTC-20 generate time code?

Answer: Yes, please select "GEN" as the timecode input source.

Question: USB cannot be connected to the computer

Answer: After confirming the connection, whether the indicator light flashes.

Confirm whether the computer has a MIDI driver. Generally speaking, the computer comes with a MIDI driver. If you find that the computer does not have a MIDI driver, you need to install the MIDI driver.

Installation method: https://windowsreport.com/install-midi-drivers-pc /

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

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Post Code: 518105

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