

Dtronics Nano Sync Manual

Document version v1.1

V1.00 : Initial document

V1.10 : Changed sync1 / sync2 parameter for PPQ speed

INTRODUCTION

Congratulations on your purchase of the Dtronics Nano Sync.

The Dtronics MS-06 converts midi timing signals to adjustable DIN-sync and Jack-sync outputs.

Features:

- Midi to sync converter with programmable clock dividers/multipliers.
- Din sync output and Jack sync output can be set to different clock speeds.
24 / 48 or 96PPQn
- Jack sync output for 1:1 to 1:127 of the clock input.

Led that shows the current clock speed (1/24 of clock frequency). And RUN status.

Power input: 9 to 12V DC, max 100mA. + on center pole.

Latency: <350uS

Clock edge difference between dinsync out1 and dinsync out2: 60nS

This product has been carefully engineered and thoroughly tested to guarantee optimum performance and user satisfaction for many years to come.

Please read these instructions carefully!

Operating instructions

When you apply power to the converter the led will blink a few times.
The unit is now ready to use

As soon as you connect a midi timing signal to the midi-input, the LED will flash ON in a 1/24 clock rate.

When a midi RUN command is received, the LED will invert (the LED will flash OFF in a 1/24 clock rate)

PROGRAMMING

The NANO sync can be programmed to your needs.

These settings are stored and will be used the next time you will turn on the unit.

Each DINSync output can be programmed from 24 / 48 or 96PPQn

The JACKSync output can be programmed from 1/1 to 1/127 of the input clock.

After sending the correct midi Sysex string, the LED will blink a few times and the converter will operate with the new settings. The settings are stored in memory and will be used until you reprogram them again.

Data format: <start sysex> <mfg ID> <model ID> <data 1>...<data 4> <end sysex>

F0 00 20 41 40 jack sync1 sync2 store F7

Jack = 0x01 to 0x7f (sets jack divider)

Sync1 = 0x00 for 24 PPQn

0x01 for 48 PPQn

0x02 for 96 PPQn

Sync2 = 0x00 for 24 PPQn

0x01 for 48 PPQn

0x02 for 96 PPQn

Store = 0x01 to store settings

Any other value will not store settings (settings will be used until power turns off or unit is reprogrammed)

Example:

F0 00 20 41 40 18 01 02 01 F7

Jack sync = 0x18 (24 decimal) jack output will be clock in divided by 24 (= 1 PPQn)

Sync out1 = 0x01 = 24PPQn

Sync out2 = 0x02 = 48PPQn

Store = 0x01 Settings will be stored