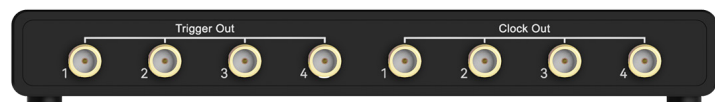


Oscilloscope Synchronizer MOS4



Impedance Adaptive

Switch between 50Ω and High-Z

Facilities Cascade

Up to 4 oscilloscopes can be synchronized

High Precision Clock Allocation

Time deviation < 100ps

Applicable Series

MHO6 Series, MO3 Series

Product Overview

This synchronizer is a high-precision signal distribution device specifically designed for multi-unit collaboration of MHO68 and MO3 series oscilloscopes. It can provide clocks and trigger signals for 4 oscilloscopes simultaneously, achieving 32 channel data synchronization triggering and acquisition. It is suitable for high-speed digital circuit timing analysis, mixed signal analysis and radar system verification.

Core functions

1. The synchronizer has a 10MHz inner clock and support external clock input, which can be changed by a switch. It can buffered the clock into 4 outputs to achieve clock synchronization for 4 oscilloscopes.
2. It supports external triggering and can also trigger 4 oscilloscopes simultaneously. Up to 32 channels can be synchronously collected.

Parameters

MOS4 Synchronizer		
Trigger out	Single pulse	Output range 1.55V-1.65V, typically 1.6V
Trigger in	Single pulse	Minimum input voltage 500mV, range -5V~5V, 50Ω or high-Z load
Clock out	10MHz square wave	Output range 430mV-470mV , typically 450mV
Clock in	10MHz square wave	Minimum input voltage 500mV, range -5V~5V, 50Ω load
Overshoot	< 10%	
Power	12V DC/1.5A	
Connector	SMA	
Operating Temperature	0°C - 45°C	
Storage Temperature	- 20°C - 70°C	
ESD	±8kV	
Weight	190g (±10g)	
L*W*H	132.4mm*77mm*18.7mm	

Instructions for Use

1. Connect the MOS4 to the standard 12V DC power adapter.

2. Clock synchronization

1) Configure the clock input source using the DIP switch on the synchronizer:

DIP Switch	
ON	Accept external clock signal input (Clock In)
OFF	Use the internal clock (provides a stable clock source)

2) Using SMA cables, connect the synchronizer's Clock Out to the 10 MHz Clock In on each oscilloscope.

- Supports clock sharing for up to four oscilloscopes simultaneously (4 parallel outputs)
- Keep all cable lengths as consistent as possible to minimize clock skew.

3. Trigger Synchronization

1) Connect the external trigger source signal to the synchronizer's Trigger In port. Use the DIP switch to select the appropriate input impedance.

DIP Switch	Impedance
50Ω	Low-impedance matching
1MΩ	High-impedance matching

2) Using SMA cables, connect the synchronizer's Trigger Out port to the Trigger In port on each oscilloscope. Up to 4 oscilloscopes can be connected to the trigger output simultaneously.

4. After verifying the connections, apply a signal to confirm that all oscilloscopes trigger and synchronize consistently with no timing deviation.

Clock Synchronization Operation Guide:



① Power the synchronizer using the supplied power adapter.



② Connect the synchronizer's Clock Out to the oscilloscope's Clock Input port using an SMA cable.



③ Synchronize Multiple Oscilloscopes.



④ Set the oscilloscope to use the external clock input.

Trigger Synchronization Operation Guide



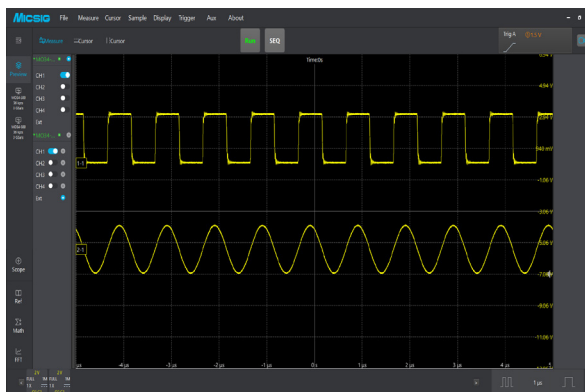
⑤ Connect the external trigger source signal to the synchronizer's Trigger In.



⑥ Connect the synchronizer's Trigger Out to the oscilloscope's Trigger In using an SMA cable.



⑦ Set the oscilloscope to use the external trigger input.



⑧ Apply the signal and verify trigger synchronization consistency.

Standard Accessories

Accessories	Quantity and Specification
SMA cable	×10, terminal male to male, 1m
Power adapter	×1, 12V DC, 1.5A
User manual	×1

