

M03 series 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

Product Overview

This product is a high-precision signal distribution device designed specifically for collaborative testing of multiple oscilloscopes. It can provide clocks and trigger signals for 4 oscilloscopes simultaneously, achieving 16 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 16 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 as shown in Figure 1.
2. Clock synchronization (Figure 2-3)

Connection:

Connect the Clock Out of MOS4 to the 10MHz clock in/out interface of the MO3 series oscilloscope using an SMA cable. Supports up to 4 oscilloscopes sharing clock.

Clock In Settings:

Switch on: allow external clock signal input; Switch off: use built-in clock.

3. Trigger synchronization

Connection:

Connect the Trigger Out interface of MOS4 to the Trigger In interface of the MO3 series oscilloscope using an SMA cable. Supports up to 4 oscilloscopes can be connected simultaneously.

Trigger In Settings:

Input impedance: supports 50Ω or Hi-Z by sliding the switch.

4. After checking the connection, turn on the oscilloscope and start testing. (Figure 4)

Clock Synchronization Operation Guide



Figure 1
Powered by the standard 12V DC adapter.



Figure 2
Clock synchronization connection.



Figure 3
Cascade connection.



Figure 4
In the Userset interface of the oscilloscope, choose Aux Out--Clock In

* If you want to synchronize the external trigger, you could choose Aux Out -- Trigger In in the Userset interface of the oscilloscope after connecting the oscilloscope and the synchronizer correctly.

Standard Accessories

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



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