



MSO3000 / TS3000 Cascading



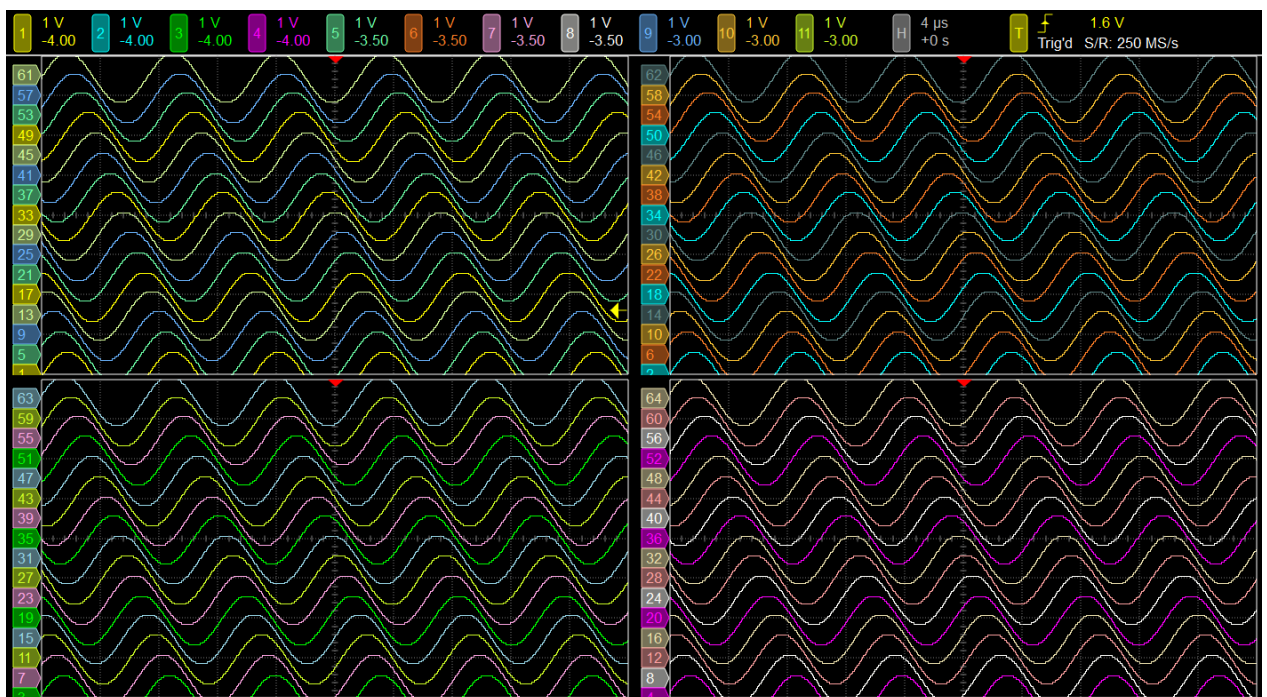
Acute MSO3K / TS3K Cascading

One of the key features of the Acute MSO3K/TS3K oscilloscope is its multi-unit stacking capability, allowing for the stacking of up to 16 devices, achieving a maximum measurement capability of 64 channels at 250MS/s or 16 channels at 1GS/s simultaneously. In terms of its chassis design, the MSO3K/TS3K is specifically designed for stacking applications, featuring carefully designed positioning grooves that allow the oscilloscope to be perfectly aligned when stacked. Additionally, the oscilloscope's thermal performance has been thoroughly considered and includes dual-side heat vents to ensure there are no overheating issues during extended operation.

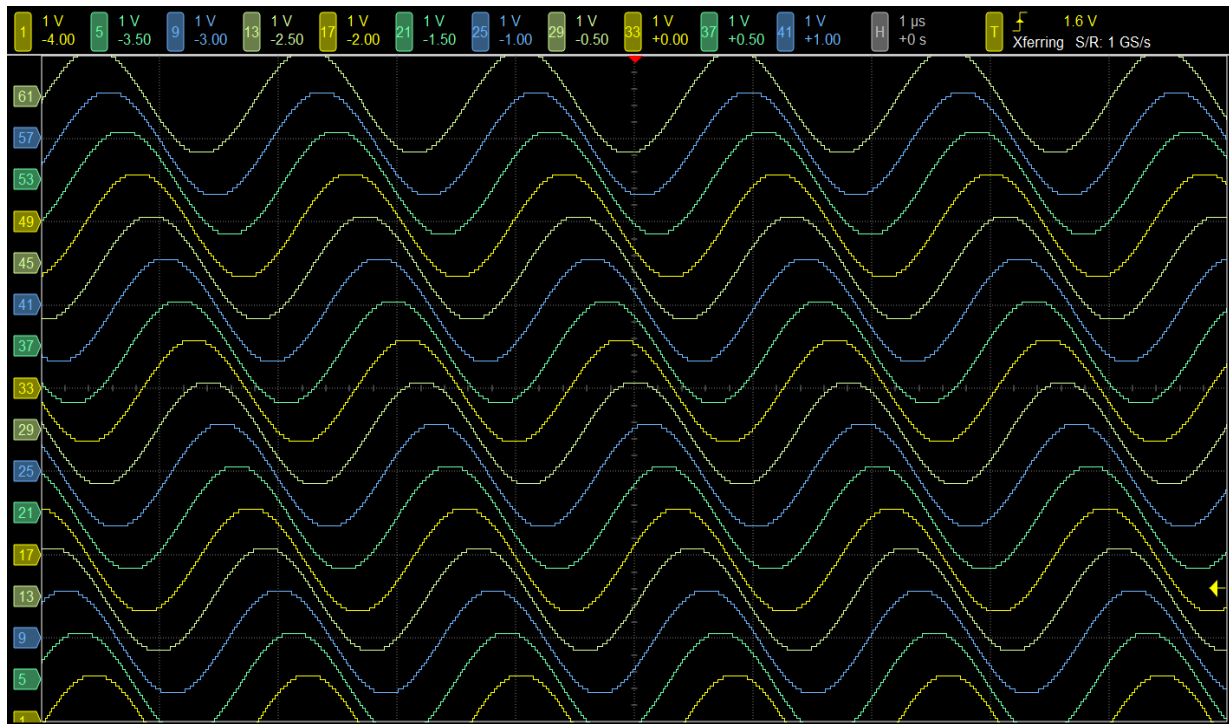
Regarding signal connections, users have the option to directly connect the test signal to the oscilloscope through standard BNC connectors or use passive probes or differential probes for more extensive measurements. Furthermore, Acute also offers a BNC to Probe Tip Adaptor, which can improve common measurement quality issues associated with traditional probes, ensuring users obtain the most accurate measurement results.

Software User Interface

1. 64Channel @ 250MS/s



2. 16Channel @ 1GS/s



Connection

1. Connect with BNC to BNC Probe



2. Connect with Passive Probe



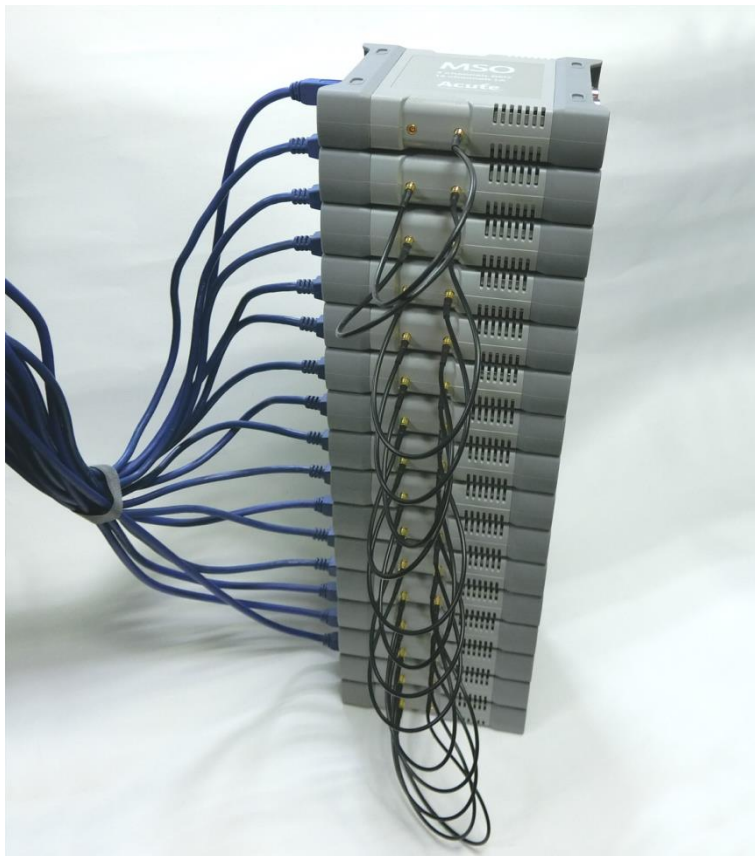
3. Connect with Passive Probe & BNC to Probe Tip Adaptor



4. Connect with High Voltage Differential Probe

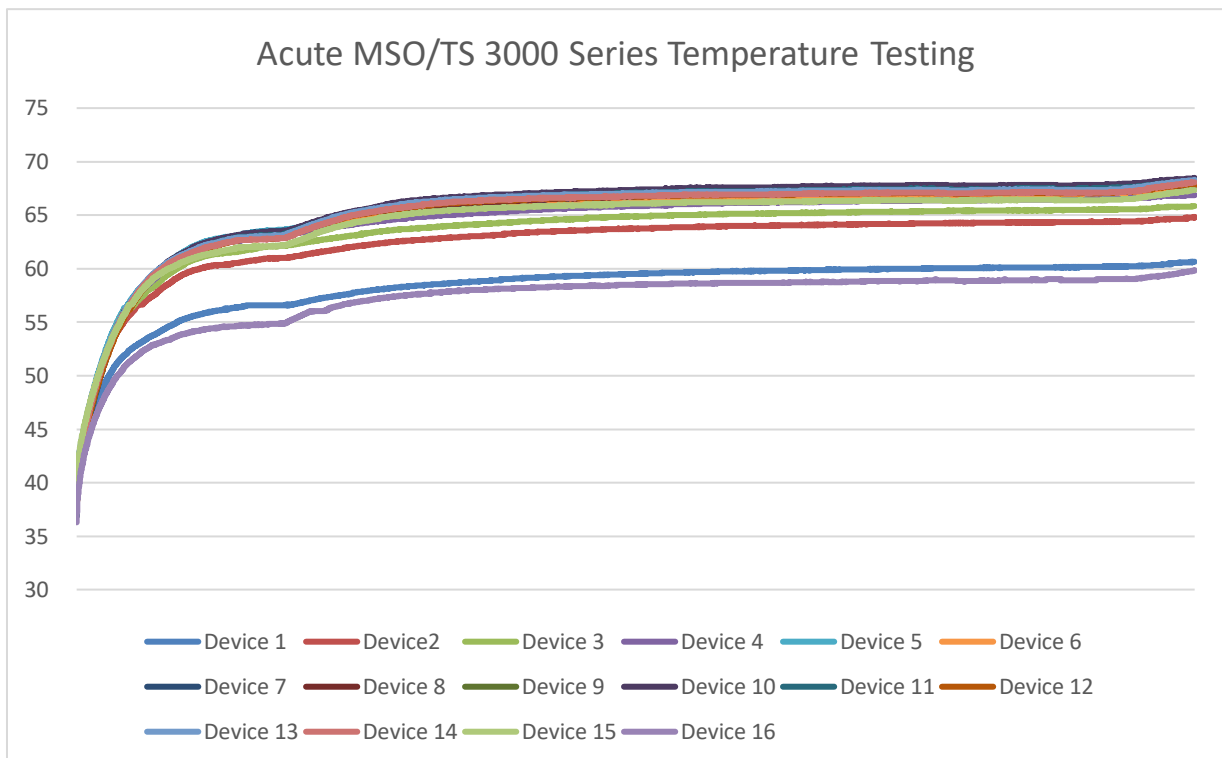


5. Cascading 16 Devices(64 Channels)



Cautions

1. The MSO3K/TS3K instrument operates on a USB 3.0 interface and consumes approximately 4.5 to 7.7 watts during operation. It is recommended to connect it to a USB 3.0 port at the rear of your computer or use a USB 3.0 hub with its own power supply to ensure optimal measurement quality.
2. The MSO3K/TS3K instrument has undergone internal testing and can operate for extended periods without overheating even in a stacked configuration. However, when using the instrument for an extended period in high-temperature or poorly ventilated environments, it is essential to monitor the operating temperature of the device and consider providing additional cooling measures if needed to prevent overheating (temperature exceeding 80 degrees Celsius) that could impact its operation.

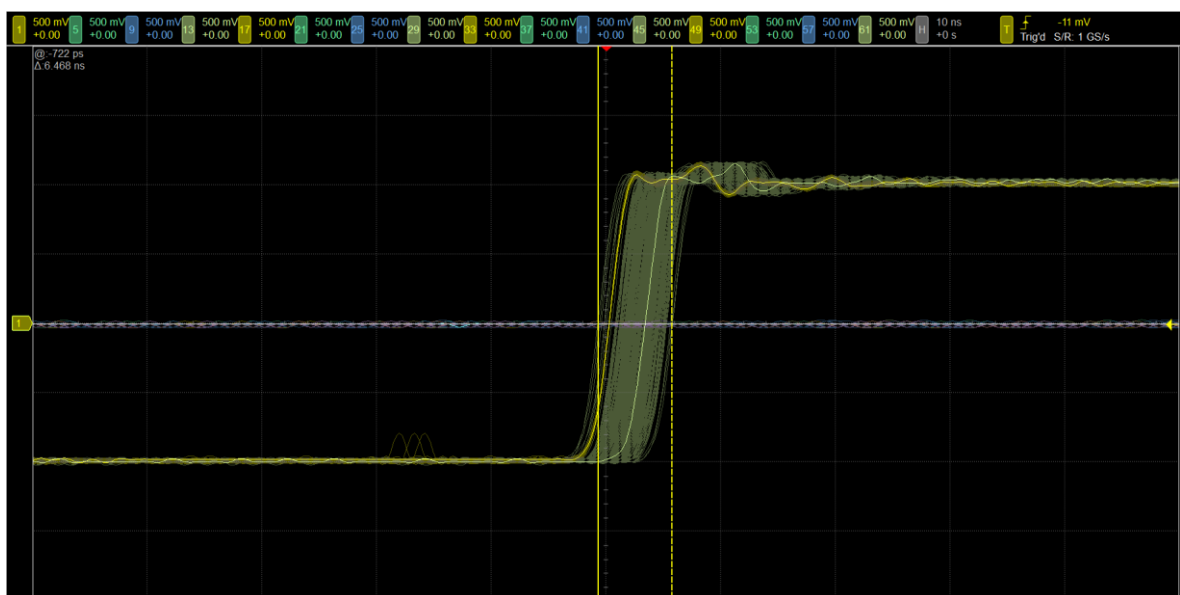


3. When multiple units are stacked, there will be some level of phase difference between them due to differences in sampling rates. For example, at a 1GS/s sampling rate, the phase difference between the master unit and the first slave unit is $< \pm 2\text{ns}$, and between the master unit and the last slave unit is $< \pm 3\text{ns}$.

Master & Slave (2nd Device) Phase Delay



Master & Slave (16th Device) Phase Delay



Information

Acute Official Website : <http://www.acute.com.tw>

E-Mail : service@acute.com.tw

Tel : +886-2-2999 3275

Fax : +886-2-2999 3276