

# Multiple Instrument Synchronization with Sync-Link

In some time-critical applications it is necessary to synchronize multiple instruments with a common reference clock and a common trigger in order to compare data acquisitions across multiple devices. The TraNET Sync-Link box takes care about these two important tasks.

All TraNET devices that need to be synchronized are connected to the Sync-Link box with a shielded standard LAN cable (note, only the connectors and cables are LAN type components, the signals are Elsys-proprietary). A maximum number of eight TraNET devices can be synchronized with the TraNET Sync-Link box.

As soon as one of the devices detects a trigger on an internal trigger source or the external trigger source, this

signal is sent to the Sync-Link box. The Sync-Link box then distributes the trigger signal to all devices to assure that these devices trigger at the same time.

In addition to the trigger signal the TraNET Sync-Link box distributes also an external reference clock to phase lock all clocks within the measurement system.

The controller PC is connected over an Ethernet Switch, a device that re-directs the Ethernet traffic to the corresponding device. All TraNET devices of the same system are connected to the Ethernet Switch. In case the system needs to be hooked up to a network, the network is also connected to the Ethernet Switch.

Synchronize multiple TranNET for expanded channel counts

