

REMOTE TRIGGER MODULE 3

FOR SEISMIC SOURCES AND SEISMOGRAPHS



Now Featuring: **Autonomous Mode**

**No Radios
No Repeaters
No Problem!**



RTM 3 Features Include:

- SSC Compatible – Operates seamlessly with UE 3, Force 3, & Boom Box 3 units
- Equipped with internal memory – can operate autonomously without radio contact
- Integrated Radio Interface – RTM 3 can be used with almost any radio
- Integrated GPS Interface – RTM 3 sends source location back to recording system
- Integrated Ethernet – Control RTM3 directly with SourceLink software
- WiFi Option – Setup and operate RTM3 unit with web browser from phone or tablet
- Dual-purpose design, can be used as Encoder or Decoder

Advanced Acquisition Electronics

The Remote Trigger Module 3, or RTM3, is a new generation of seismograph timing device. It is designed to synchronize start times from a seismic source unit operating with a single seismograph. It can also be used to synchronize multiple seismic recorders. The RTM3 units use an internal high accuracy oscillator that is disciplined with GPS information. Each RTM3 unit requires an external GPS receiver with valid satellite information to control its internal clock. Once the internal clock is synchronized the RTM3 can be used without any GPS signal for up to 10 minutes.

Advanced Acquisition Techniques

This GPS and high accuracy timing benefits the crew in multiple ways. With integrated mode, the RTM3 transmits source location and hit times directly to the recorder for logging and verification. In autonomous mode, the RTM3 stores this information in its internal memory.

In integrated mode, the observer controls the acquisition process, organizing multiple source units and monitoring their production. In autonomous mode, without any radio communications, each source drop operates in its "Time Slot". These are allocated in advance to prevent multiple sources from starting at the same time. Then, all of the source information is saved on a non-volatile CF card for later download and analysis.



Small Scale Hammer



Medium Scale EWG



Large Scale AWD

Remote Trigger Module 3 (cont.)



Compatible with Most Seismic Sources



Recommended for use with SSC's Universal Encoder 3

All-Purpose Source Trigger System

The Remote Trigger module 3 can be used anywhere a start signal needs to be sent from sources to seismographs. One source can start several seismographs, or multiple sources can start a single recording system.

WiFi Option for Setup and Acquisition

The WiFi option includes an internal transceiver unit. This WiFi unit is low power and is used for local setup and display of the RTM3 parameters and settings. A standard internet browser is used to connect to the RTM3 unit, so most cell phones, tablets or notebook computers can be used. The Web interface allows viewing and changing of parameters.

Basic Two-Unit Operation

For "Hammer Switch" operation, basically any source that uses a hammer switch to capture hit times, the switch is connected to the RTM3 "Decoder" unit at the source. The "Encoder", which is connected to the seismograph, can be a second RTM3 unit or else a Universal Encoder 3

When the seismograph is ready to acquire data a message is sent to the source, via the radio, so the source operator can press the "Ready Button" to start the acquisition sequence. Once a hit is detected by the Decoder it returns a message to the Encoder with the GPS-based location and microsecond-accurate time of the hit.

After the message is received by the Encoder, it sends a pulse to the seismograph with an exact one second delay. The Decoder also stores the location of the source and the Time Break in its internal memory.

Sample RTM 3 System Configuration for Accelerated Weight Drop

