

REMOTE TRIGGER MODULE 3

FOR ALL IMPACT SOURCES

**Now Featuring:
Autonomous Mode**

- ✓ **No Radios**
- ✓ **No Repeaters**
- ✓ **No Problem!**



RTM 3 Features Include:

- SSC Compatible – Operates seamlessly with UE 2, Force 3, & Boom Box 3 units
- Integrated Radio Interface – RTM 3 can be used with almost any radio
- Integrated GPS Interface – RTM 3 sends source location back to recording system
- Equipped with internal memory – can operate autonomously without radio contact
- Integrated WiFi – Setup and operate RTM3 unit with web browser from phone or tablet
- Integrated Ethernet – Control RTM3 directly with SourceLink software
- 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 impact timing device. It is designed to synchronize hit times from a single seismic source unit with multiple seismic recorders. 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. In legacy 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 legacy mode, the observer controls the acquisition process, organizing multiple weight drop units and monitoring their production. In autonomous mode, without any radio communications, each weight drop operates in its "Time Slot". These are allocated in advance to prevent multiple sources from hitting at the same time. Then, all of the hit information is saved on a non-volatile CF card for later download and analysis.



Small Scale Hammer



Medium Scale EWG



Large Scale AWD



Compatible with All Impact Sources

High-Productivity solutions from Seismic Source

Includes Legacy Mode:

- ✓ Compatible with Standard Radios
- ✓ Compatible with Standard Timing
- ✓ Compatible with Standard Crews

Internal WiFi for Setup and Acquisition

The RTM3 also includes an internal WiFi 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.

Simple Two-Unit Operation

For "Hammer Switch" operation, basically any source that uses a hammer switch to captures 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 2.



Recommended for use with SSC's Universal Encoder 2

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.

Two-Unit RTM 3 System Configuration

