MREL
BLASTING INSTRUMENTATION

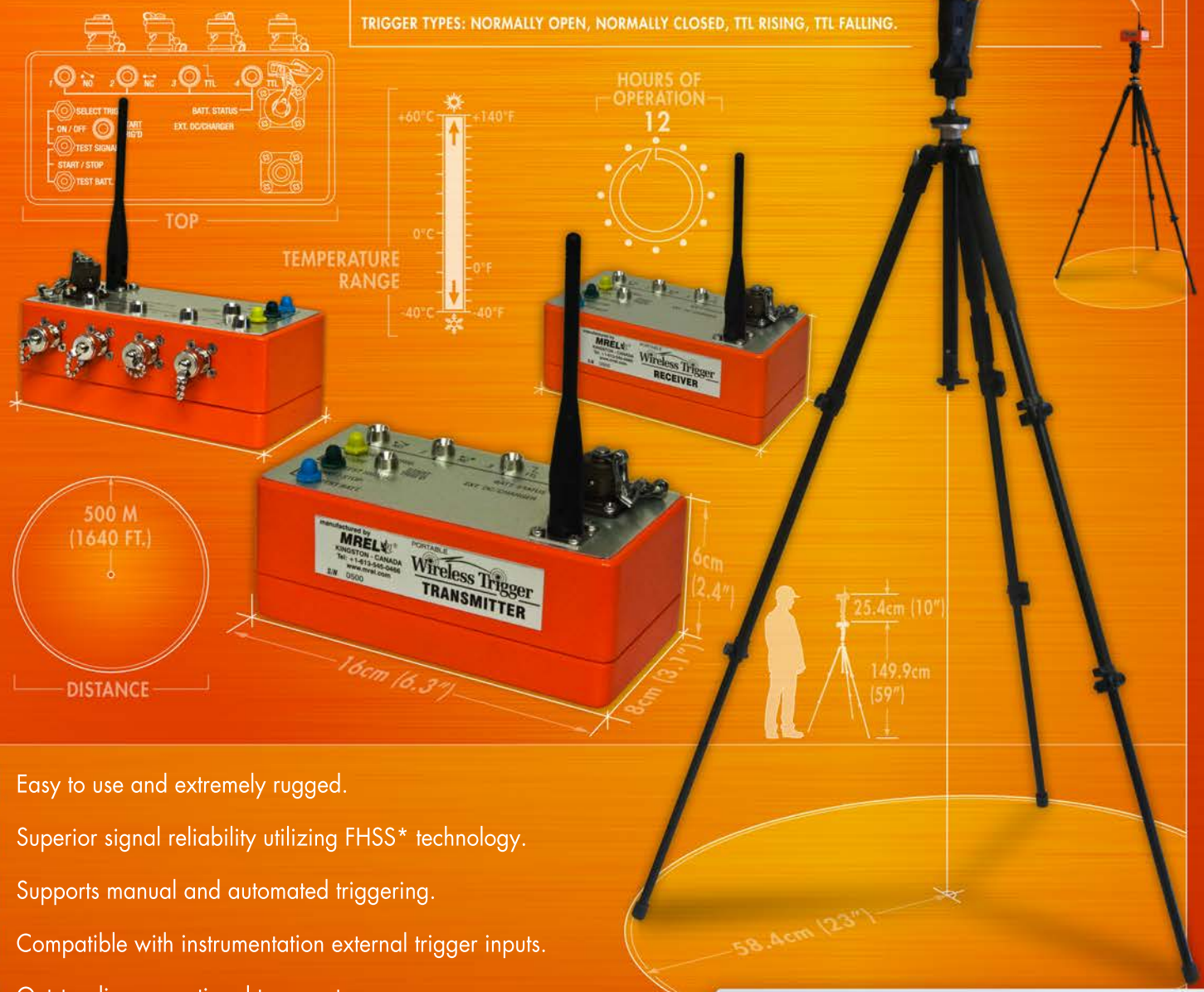
PWT™ PORTABLE WIRELESS TRIGGER

TRANSMISSION RANGE: 500 M (1640 FT.) LINE OF SIGHT.

FREQUENCY: 2.4 GHZ, APPROVED FOR USE WORLDWIDE.

RESPONSE TIME: TYPICALLY 50 MILLISECONDS.

TRIGGER TYPES: NORMALLY OPEN, NORMALLY CLOSED, TTL RISING, TTL FALLING.



- Easy to use and extremely rugged.
- Superior signal reliability utilizing FHSS* technology.
- Supports manual and automated triggering.
- Compatible with instrumentation external trigger inputs.
- Outstanding operational temperature range.
- Long operational battery life.
- MREL's 1 year Comprehensive Parts & Labour Warranty

PORTABLE

Wireless Trigger

An external trigger signal is often the only way to inform an instrument of the correct time to begin recording an event of interest. Many situations make transmission of the trigger signal by cable to the instrument virtually impossible.

If you want to transmit trigger commands to your instrumentation either manually from your remote location, or automatically from the event being recorded, over long distances, or across difficult terrain, then the most practical triggering solution is the PWT™ Portable Wireless Trigger.

MANUAL TRIGGERING

Typically the PWT™ Transmitter is located close to or with the Operator. The PWT™ Push Button Switch is attached to the Normally Open (NO) connector on the PWT™ Transmitter. The PWT™ Receiver is located at a remote location from the Operator near the instrument and connected to the external trigger input of the instrument. When the Operator pushes the PWT™ Push Button Switch the PWT™ Transmitter sends a coded trigger signal wirelessly to the PWT™ Receiver which relays the trigger signal to the instrument.

AUTOMATED TRIGGERING

Typically the PWT™ Transmitter is located close to the event being recorded. A short trigger line or TTL signal line is connected between the event and the PWT™ Transmitter. The PWT™ Receiver is located at a remote location from the event near the instrument and connected to the external trigger input of the instrument. When the trigger signal is received at the PWT™ Transmitter it sends a coded trigger signal wirelessly to the PWT™ Receiver which relays the trigger signal to the instrument.

*FHSS = Frequency Hopping Spread Spectrum

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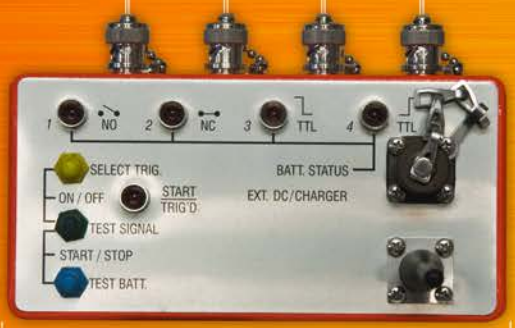
MREL
GROUP OF COMPANIES

TRIGGER INPUT

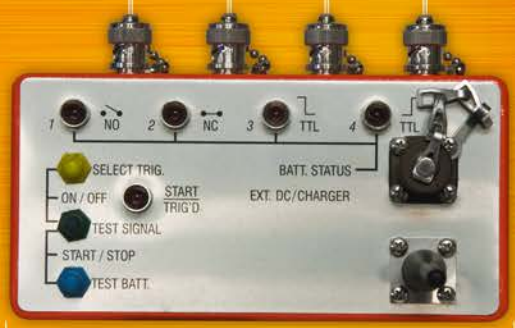
PWT™ PUSH BUTTON SWITCH (NO)
NORMALLY OPEN CIRCUIT (NO)
NORMALLY CLOSED CIRCUIT (NC)
TTL FALLING (TTL ⅃)
TTL RISING (TTL ⅂)



PWT™ TRANSMITTER

TRIGGER OUPUT

NORMALLY OPEN CIRCUIT (NO)
NORMALLY CLOSED CIRCUIT (NC)
TTL FALLING (TTL ⅃)
TTL RISING (TTL ⅂)



PWT™ RECEIVER

PWT™ TRANSMITTER OPERATION:

Turn the power ON or OFF by simultaneously pressing the SELECT TRIG and TEST SIGNAL buttons. Press the TEST BATT button to display the internal battery strength on the four LEDs. Press the SELECT TRIG button to select one of the four trigger input types as indicated by the four LEDs. Press the TEST SIGNAL button to determine whether or not communications have been established with matching PWT™ Receivers as indicated by the LED marked with the PWT™ Receiver's serialized number 1, 2, 3 or 4. Press the TEST SIGNAL and TEST BATT buttons simultaneously to START or STOP the PWT™ Transmitter and matching PWT™ Receivers waiting actively for trigger signals as indicated by the START/TRIG'D LED. This can also be accomplished from a PWT™ Receiver. The START/TRIG'D LED flashes when the wire connected to the PWT™ Transmitter sends a trigger signal to the PWT™ Transmitter and the PWT™ Transmitter conveys the trigger signal wirelessly to the matching PWT™ Receivers.

PWT™ RECEIVER OPERATION:

Turn the power ON or OFF by simultaneously pressing the SELECT TRIG and TEST SIGNAL buttons. Press the TEST BATT button to display the internal battery strength on the four LEDs. Press the SELECT TRIG button to select one of the four trigger output types as indicated by the four LEDs. Press the TEST SIGNAL button to determine whether or not communications have been established with matching PWT™ Transmitter as indicated by the LED marked with the PWT™ Receiver's serialized number 1, 2, 3 or 4. Press the TEST SIGNAL and TEST BATT buttons simultaneously to START or STOP the PWT™ Transmitter and matching PWT™ Receivers waiting actively for trigger signals as indicated by the START/TRIG'D LED. This can also be accomplished from a PWT™ Transmitter. The START/TRIG'D LED flashes when the wireless trigger signal from the PWT™ Transmitter is received by the PWT™ Receiver and the PWT™ Receiver conveys the trigger signal to the instrument that is connected to the PWT™ Receiver.

PWT™ PORTABLE WIRELESS TRIGGER SPECIFICATIONS:

Frequency Range: 2.4 GHz - this radio frequency is approved for use worldwide. Utilizes Frequency Hopping Spread Spectrum technology to provide superior signal reliability.
Transmission Power and Range: 50 mW, 500 m (1640 ft.) line of sight between the PWT™ Transmitter and its matching PWT™ Receivers.
Capacity: One PWT™ Transmitter can communicate with up to four matching PWT™ Receivers.
Trigger Response Time: It typically takes 50 ms from the time the PWT™ Transmitter first begins transmission of the trigger signal to the time the PWT™ Receiver transmits that trigger signal to the instrument.
Trigger Modes: The BNC input on the PWT™ Transmitter and the BNC output of the PWT™ Receiver can be set independently to Normally Open (triggering occurs on a short circuit "push button"), Normally Closed (triggering occurs on an open circuit "break wire"),TTL Falling (triggering occurs on the falling edge of an external TTL signal), TTL Rising (triggering occurs on the rising edge of external TTL signal).
Power: PWT™ Transmitter and PWT™ Receiver have internal rechargeable NiCad battery packs which provide 12 hours of active operation on a full charge. Can be operated for extended times from external 6 VDC power sources. Chargers and 6 VDC Battery Adapters are provided.
Size and Weight: PWT™ Transmitter and PWT™ Receiver are 16 x 8 x 6 cm (6.3 x 3.1 x 2.4 in.), 1.5 kg (3.3 lbs.) each without PWT™ Tripod.
Environmental: Fully operational at -40 to +60 °C (-40 to +140 °F). Snow, rain, dust and sand proof.
System Components Provided: PWT™ Transmitter, one matching PWT™ Receiver (additional matching PWT™ Receivers are available as an optional accessory), two PWT™ Tripods, PWT™ Push Button Switch, two 120 or 230 VAC Battery Chargers, two 6 VDC Battery Adapters, two RG-58/U coaxial patch cables, padded carry case, colour Operations Manual.
Warranty: MREL's 1 year Comprehensive Parts and Labour Warranty.
Technical Support: MREL's Unlimited Technical Support Program by secure customer portal, email, and telephone.

ACCESSORIES:

PWT™ ADDITIONAL RECEIVER: PWT™ Receiver which is programmed and serialized to match an existing PWT™ Transmitter. A maximum of four PWT™ Receivers can be matched to one PWT™ Transmitter. Supplied with PWT™ Tripod, 120 or 230 VAC Battery Charger, 6 VDC Battery Adapter, RG-58/U coaxial patch cable, and padded carry case.

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