Technical Datasheet

Radio-Controlled Shocktube Initiator
Model STI-3

Features

- The STI-3 case consists of a Transmitter Model STI-3T, a Radio Controlled Shocktube Initiator Model STI-3R, 5 Shocktube Electrodes and keys to arm each unit.
- The STI-3T and STI-3R, both operate in the frequency range of 433MHz - 434.79MHz over the range of 1000m (line of sight).
- Each STI-3T/STI-3R pair is individually coded by the manufacturer using KeeLoq encryption. This ensures security of the system and prevents false triggering in case more than one set of STI-3T/STI-3R pair is used in close proximity.
- The STI-3 can directly fire Shocktube. The Shocktube must be inserted into the Shocktube Electrode and the correct firing procedure must be followed.

Operation

- Ensure initiation area is cleared of all personnel.
- Arm the STI-3R by turning the key switch to ON.
- After turning the key switch on, the unit will not be able to blast for 5 minutes as a safety precaution.
- Connect the blasting circuit to the STI-3R.
- Using the STI-3T, when at a point of safety, press the FIRE button while operating the POWER key switch to fire.
- The STATUS light will double flash when the battery is low.

Notice and Maintenance

- All service work must be performed by authorised AEC Electronics personnel only.
- The STI-3R can be recharged using the supplied cable supplying 110-250V_{AC}.

Specifications

Model STI-3T

Operation Frequency		433MHz-434.79MHz.
Operation: STATUS light		Flashes at 1s intervals in PRE-ARMED mode. Flashes at 0.2s intervals in ARMED mode. ON during FIRING mode. OFF in SHUT DOWN mode.
Battery	Type	Rechargeable.
	Capacity	Over 100 firings. Recharge battery when the STATUS light double flashes.

Mechanical Data

Unit Mass	STI-3T	0.27kg.
	STI-3R	0.47kg.
	Units in Case	1.3kg.
Unit Dimensions	STI-3T	Without antenna: 102mm x 72mm x 34mm. Antenna length: 197mm.
	STI-3R	Without antenna: 120mm x 82mm x 45mm. Antenna length: 197mm.
	Case	325mm x 275mm x 55mm.
Temperature Range		-5°C to 45°C.

Model STI-3R

Firing Capacity		One length of Shocktube using the Shocktube Electrode.
Function		Provides line of sight firing at a distance of up to 1000m from the STI-3T.
Electrode Life		Approximately 350 blasts.
Sequence of Operation		PRE-ARMED: firing cannot take place for 5 minutes after POWER key is turned ON. ARMED: 15 minute interval during which the STI-3R can be remotely fired. FIRING: about 4s duration interval after which the STI-3R fires. SHUT DOWN: indefinite interval after FIRING or relapse of ARMED interval.
Operation: STATUS light		Flashes at 1s intervals in PRE-ARMED mode. Flashes at 0.2s intervals in ARMED mode. ON during FIRING mode. OFF in SHUT DOWN mode.
Battery	Type	Rechargeable.
	Capacity	Approximately 100 firings depending on standby time. Recharge battery when STATUS light double flashes.

Safety

Encryption	KeeLoq code encryption technology.
Control	STI-3T and STI-3R only operate in coded pairs. Ensure that the serial numbers correspond between units.

Warning and Disclaimer

The information and recommendations in this document are provided for reference purposes only and should not be construed as advice to cover every application of the product or variation of conditions under which the product may be used.

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