

Remote Initiation System



RDS-6725



RDS-6725 is a closed-loop UHF Radio control system designed for the reliable and secure remote initiation of munitions and explosives. This initiation System is specially designed for EOD/IEDD operations with removable batteries. The system has a hand-held Master Control Unit (MCU) and multiple Remote Firing Units (RFUs). MCU can command its slave RFUs, individually or initiate them in a programmed sequence. For installation with an IED disruptor an appropriate mounting of the RFUs is provided.

Key features

- **Secure & Encrypted Communication:** Ensures protected data transmission between units to prevent unauthorized access or interference.
- **Long Operational Range:** Provides a line-of-sight (LOS) operational up to 10 Km and works in urban terrain for more than 2,000 meters.
- **Robust & Rugged Design:** Housed in IP67-rated aluminum enclosures, making the units waterproof, dustproof, and capable of withstanding harsh conditions.
- **Extended Battery Life:** Offers a long battery autonomy of up to 7 days in sleep mode for the Receiver Units, with user-replaceable batteries.
- **Galvanic Isolation:** Protects the system from ground loops and voltage spikes, enhancing safety and reliability.
- **Multi-Channel Operation:** Features 10 factory-adjusted radio channels for flexible and interference-free operation in the field.
- **Integrated Continuity Tester:** The Receiver Unit includes a built-in continuity tester for on-site system checks.



Frequency	UHF (414.92 MHz to 453.92 MHz)	Modulation	FSK
Range Urban	2 to 3 Km	Range Line of sight	7-10 Km
Ops Temperature	-10°C to +50°C	Store Temperature	-20°C to +55°C
Humidity	95% RH at 40°C	System Sealing	IP-67
Body material	Aluminum	Antennas	50 Ohms
Configuration	1x MCU 1 or up to 20 RFUs	Self-test	Both in MCU & RFUs
Battery (MCU & RFUs)	Removable 4 lithium batteries CR123	Max. TX power	2 watts
RX Sensitivity	-119 dBm	Transit Case	Hard 47 x 36 x 21 cm (for 1 MCU+5 x RFU)
Hand held Master Control Unit (MCU)			
The MCU has a waterproof Aluminum housing having the UHF transceiver. It has micro controller-based control circuitry with digital communication which enables encryption. It can fire individual RFU or can be programmed to fire multiple RFUs in a sequential firing of preset delays.			
MCU weight Kg	850 g	MCU Size mm	150 x 100 x 50 mm
Battery life	minimum 10 h at 20°C		
Remote Firing Unit (RFU)			
The Remote Firing Units have waterproof aluminum housing. It has a matched UHF transceiver with the MCU. The RFUs decode and execute the commands received from MCU and also can report its status for the battery and the continuity of connected detonator or the EOD cartridge's bridge.			
Weight RFU	850 g	RFU Size	150 x 100 x 50 mm
Firing Circuit	Capacitive discharge	Bridge Firing energy	350 to 400 Volts with up to 10 Joules
Battery life	175 hours (7 days) min at 20°C, in sleep mode		
Safety features <ul style="list-style-type: none">Two hands MCU's firing command.Cancellation of firing command within the specified time.Arming delay safety timer. Minimum 1 minuteReliable isolation of charging capacitor from firing circuit.Unique serial numbers and use of encrypted system.			