



LORIS (Long-Range Initiation System) the next generation radio firing system utilising state of the art technology to provide a comprehensive and fully effective remote control military engineering capability.

LORIS is a securely coded two way communication RF firing system allowing multiple receivers to be paired to a Hand Held Controller (HHC) device and a unique digital safety key. The HHC can then remotely interrogate the paired RIDs (Remote Initiation Devices) for arming status, battery and signal strength indications and subsequently selectively arm and fire each RID.

LORIS has an operating range in excess of 20km line of sight with excellent penetration in complex urban environments.

LORIS can be utilised for a wide range of military engineering applications including demolitions/disposal and safe/reliable initiation of remote EED/pyrotechnic devices.

FEATURES

Fully Flexible User Kit Configuration

The kit setup is fully-configurable (prior to usage) by pairing up to ten Remote Initiation Devices with the system Hand Held Controller and a digital safety key. There is no need to define kit quantities at the point of procurement. Increasing the number of RIDs in any field deployed kit, or replacing items sacrificed during usage, can be easily accommodated by the user through the set up and pairing functions.

Firing Energy Output (Wire Device)

Increased firing circuit energy output with the wired RID (up to 8 Joules) allows use of insensitive (safety) detonators and/or multiple ignition events.

Radio Technology

LORIS utilises state of the art, spread spectrum digital radio architecture for two way communication between the HHC and RIDs. This technology enhances system immunity to operate in complex and demanding EM environments. The system can be configured to operate in a number of VHF or UHF bands

Secure coding

The data communication protocol is extremely secure with multiple data validation checks, cyclic redundancy checks and AES128 encryption to prevent inadvertent initiation.

Intuitive User Interface

The HHCs intuitive user interface and menu driven controls, coupled with a simple icon based status display screen simplifies language aspects usage and training requirements.

Wire and Shock Tube Firing Devices

LORIS offers both wired and shock tube RID variants. The standard RID-W has wire output terminals delivering a high energy capacitive discharge pulse of up to 8 Joules. The shock tube RID-ST delivers a high voltage spark to directly initiate shock tube based firing circuits.

System Safety Key & Safe Time Delay

The LORIS HHC is supplied with a system safety key which inhibits the transmission of all arming and firing commands until it is inserted. Removing the key from the HHC ensures the system is rendered safe whilst deploying the RIDs and associated energetic materials.

The HHC can be paired with up to ten circuit RIDs, which can include any combination of wired or shock tube variants. RIDs can be selected, armed and fired individually, in groups (1-10) or globally (ALL) from the system's HHC.

To maximise user safety no RID can be armed or fired during a preset safety delay period. This delay can be increased during set up if an extended safety delay is required.



SPECIFICATION

LORIS System	Value
RF Mode	Spread Spectrum - TDM
Available Frequency Bands	VHF - 137 to 175MHz UHF - 410 to 460MHz
Typical Range (line of sight)	>20km
Number of paired firing devices	Up to ten - user configured
Transmission Inhibit	Removable safety key on HHC
Data Coding	CRC, FEC, AES-128

Hand Held Controller	Value
Display type	OLED & LED secondary indication
Approx dimensions	100mm x 195mm x 50mm
Approx weight	700g
Immersion	IP67 (1m, 1hr)
Operating / Storage Temp range	-40 to +63°C / -40 to +71°C
Power	1 Watt (nominal)

Remote Initiation Device	RID-W/ST
Circuit Identity	Set by HHC during pairing (1-10)
Nominal Energy Output (wire version)	<8 Joules
Safety timer	1 minute minimum (User Adjustable)
Dimensions	95(dia)x75mm
Approx weight	(W) 570g / (ST) 610g
Immersion	IP67 (1m/1hr)
Operating temperature range	-40 to +63°C
Storage temperature range	-40 to +71°C
Power Source	COTS "123" type batteries/ external USB power pack option
Range	>20km

ORDERING

HHC: Hand Held Controller

Stock Number: 800-3524

NSN: 1375-99-846-3118

RID-W: Remote Initiation Device Wire

Stock Number: 800-3527

NSN: 1375-99-959-5034

RID-ST: Remote Initiation Device Shock Tube

Stock Number: 800-3529

NSN: 1375-99-671-3465

MOTD - Multi-Output Terminal Device

Stock Number: 800-3785

NSN: 5940-99-616-0497

TFD - Training Flash Device

Stock Number: 800-3787

NSN: 6920-99-868-0614

STH224/3 Shock Tube Firing Head (3mm)

Stock Number: 800-0746

NSN: 1385-99-241-8804

STH224/3 Shock Tube Firing Head (2mm)

Stock Number: 800-0747

NSN: 1385-99-154-9039

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