SHRIKE MARINE

RANGE SAFETY SYSTEM

Designed to provide state-of-the-art range safety for test missile launching, Shrike Marine's Range Safety System places finger tip launch control under command of a Range Safety Officer. Missile aiming unit and trigger circuits, and laser transmitter circuits are remotely enabled or disabled by a Safety Officer to prevent or allow a gunner to initiate missile launching during practice firing sessions. The system also delivers the option to detonate a missile in-flight in the event of an unsafe condition or situation. Bi-directional voice and video communication channels are provided between the Equipment Safety Officer, located at the firing position, and Chief Safety Officer, located at a command position up to 500m away.

Chief Safety Officer Unit

The Chief Safety Officer Unit (CU) is the primary safety console enabling control and monitoring of up to eight firing positions. Status LEDs keep the Chief Safety Officer (CSO) continuously informed of missile launcher status. A rugged display with live video feed from the missile launcher/s provides visual appraisal to the CSO while an intercom system enables interference-free voice communication with the shooting point. This is achieved using a twisted pair wire to simplify set-up and system deployment.

Voice instructions may be issued to individual firing positions or broadcast to all positions by means of a local microphone or optional headset on the CU. A live video stream may also be sent to individual positions or broadcast to all.

A simple user interface allows the CSO to disable missile launching at any of the firing positions at any time during a launch. Manual override switches on the front panel also permit immediate emergency disabling of all firing procedures.

Power for the CU is supplied from AC mains voltage ranging from 100V to 240V or automotive DC voltage raging from 12V to 28V. Sophisticated circuitry guarantees an automatic and uninterrupted transition between the two supplies to ensure that the missile firing sequences are not disturbed by an unexpected mains power failure.

The CU may be adapted to control one to eight firing positions by means of plug-in interface modules that are configured via the LCD panel. Each firing position is linked to the CU by means of common twisted pair wire up to 500m in length. All control, video, and voice communications as well as power are transferred between the CU and firing positions via this cable link. An RF link (optional) is being investigated to replace the link cable.

A rugged, all-in-one enclosure houses the CU control equipment, LCD panel and firing position interface modules. When closed this enclosure is fully waterproof conforming to an IP67 rating.

Equipment Safety Officer Unit

The Equipment Safety Officer Unit (EU) is man-portable and designed to be strapped to the Equipment Safety Officer's belt or to stand alone on a level surface.

The EU incorporates a combined microphone and speaker allowing the CSO and Equipment Safety Officer (ESO) to converse. A headset with microphone is optional if the operating environment is unusually noisy.

A video feed from a local camera at the firing position routes to the EU for transmission to the CU via cable or RF link.

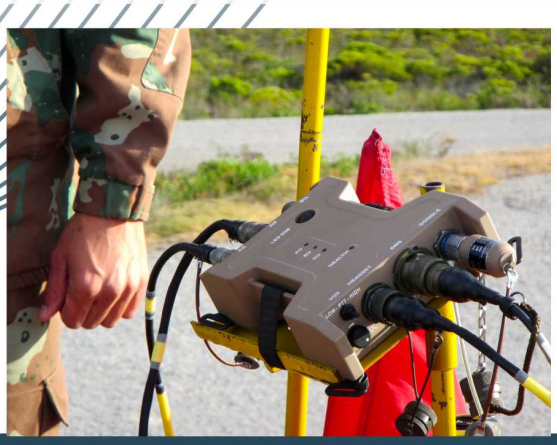
A deadman switch (DMS) built into the side of the EU enclosure enables initiation of the missile launch by the gunner. Releasing this switch disables the firing circuit and stops the launch sequence. An external DMS may also be connected to the EU if the EU is not strapped to the ESO.

The EU receives power, video, audio and control signals from the CU via the link cable. In the event of an RF link (optional), a local power supply is then required to power the EU.

Speakerbox

The speakerbox is an optional ruggedised equipment item designed to allow a number of personnel at the firing point to hear instructions issued by the CSO. The speakerbox incorporates a microphone enabling return communications to the CSO.

The speakerbox is powered from the link cable connected to the CU, or from the local power supply in the event that an RF link is utilised.



Shrike Marine • Unit 503 Tollgate Industrial Centre • 12 Ravenscraig Rd • Woodstock 7925 • South Africa
Tel +27 (0)21 447 6877 • Fax +27 (0)86 669 1187 • Mobile +27 (0)72 096 0854
sales@shrikemarine.com
www.shrikemarine.com