

MULTIPLE INTEGRATED LASER ENGAGEMENT SYSTEM (MILES) MK-19 SIMULATION PLAYER UNIT (SPU)

NSN 6920-01-543-0355



MK-19 Simulation Player Unit (SPU)

DVC 23-98/1 Smart Controller Gun (SCG)



Smart Controller Gun (SCG)

Training Category/Level Utilized:

Combat Arms/Level 3

Logistic Responsible Command, Service, or Agency:

PEO-STRI, Orlando FL

Source and Method of Obtaining:

Available through local TSC

Purpose of Trainer:

The MK-19 SPU system supports realistic combat training exercises without using live ammunition. It provides a common approach for the Stryker Remote Weapon Station, M113 pintle mount, AAV, HMMWV and ground mount. The MK-19 SPU system consists of a Laser Module, Operator Module, Audio Cue Device (ACD), and Trigger Assembly. The MK-19 Simulation Player Unit incorporates a modular design resulting in an interoperable solution simulating the firing and actual effects of a MK-19 in a MILES environment.

The SCG provides MILES equipment control and set-up. It allows the Observer Controller to kill, reset, and resurrect individuals or vehicles that have been "killed" during an exercise. The SCG also provides the controller with selectable features: four ammo types along with their unique ballistic characteristics, accurate time of flight (TOF) simulation based on range and ammo type selected, compensation for super elevation due to ammo ballistics, and an integrated detection system for casualty assessment.

Functional Description:

MK-19 SPU: The Laser Module emits visible flash cues and an invisible (infrared) laser beam toward a target. A blue LED Laser Firing Indicator located on the rear of the Laser Module provides the gunner with a visible indication the laser has fired. A target is outfitted with a detector assembly that senses the laser beam from the Laser Module to cause a target KILL or NEAR MISS.

The SCG sends laser codes to the detector module on MILES equipment. It also lets the Observer Controller reset MILES equipment, configure players, and verify operational status of MILES equipment. The SCG is easy to use and ergonomically friendly. The shape resembles a 9mm handgun. User controls consist of a finger activated trigger for quick laser firing and simple switch panel with three keys; Up, Down and Enter for quick MILES code selection.

Physical Information:

The MK-19 SPU has the following features: independent casualty assessment, programmable lethality using the smart controller gun, rechargeable battery for power source, built-in optical alignment, easy boresight verification, 20 hrs of alignment retention and a lighted display for real time information to the user.

The SCG has the following features: MILES laser encoding/decoding functions, 904 nm laser operating frequency, Pre-aligned sights, Blue LED at the back of SCG indicates transmission of code or firing of the device, Backlit LCD shows laser transmission status and MILES code data received from laser transmitter, Laser detector for incoming MILES codes detection, Rugged aluminum housing for all-weather use, Single 3.6 V AA battery power source for easy replacement (approx 1 year operating life

with normal use), Sleep mode after 10 second non-use for power saving, and IRDA port for software reprogramming and player download.

Equipment Required, Not Supplied:

None

Special Installation Requirements:

None

Power Requirements:

(Information not available)

Applicable Publications:

(Information not available)

Reference Publications:

(Information not available)

Training Requirements Supported:

(Information not available)