

POINTER

A networked situational awareness, C2 and weapon-cueing system that provides critical tactical information directly to the user, enabling control, cutting reaction times, increasing momentum, and reducing casualties.

POINTER is a situational awareness tool that links ISTAR sensors, weapon systems, and individual warfighters to display fused layers of information in an easily assimilated manner. The base station user interface is capable of displaying standard military maps, air photographs, and other graphical representations of the battlespace. The software module behind the user interface communicates with a wide range of systems, from electronic warfare sensors and gunshot detection systems, through to remote weapon stations (RWS).

The POINTER interface is able to display the following critical information:

- Blue force locations
- Known threat locations
- Range and bearing of threat positions
- Arcs of fire for blue force weapon systems

In addition, it allows threats and targets to be handed between sensor and effector as required, either automatically or by the commander. It links effectors, sensors, and a suite of ISTAR assets so that all can be displayed to the commander in an easy-to-use format and then employed to best effect.

The weapon operator uses the POINTER Optical Sight (POS), which incorporates augmented reality technology, similar to that used in a fighter pilot's head up display (HUD), by injecting targeting information into the optical chain of the gun sight. The POS displays a pointer indicating the direction to traverse if the target is outside the field of view (FoV), and then a 'hollow diamond' hovering on the target when within the field of view. A target ID and current range to target is also displayed within the FoV. As it is not a camera-based system, the user retains the high fidelity human eyesight enhanced by high quality optics.

POINTER has been integrated with infantry direct fire crew served weapon systems, either on tripods and mounted on light vehicles, ships' 30mm cannons, RWS, and numerous different sensors.

POINTER can also be used in conjunction with remotely operated, robotic and autonomous systems to provide an integrated command and control function for widely distributed assets delivering a variety of effects – from reconnaissance to direct fire support.



POINTER - land base station display



POINTER Specifications

Technical

Transmit time from sensor detection to visual cue	<1 Sec
Sight weight:	<0.4kg
Operating temperature	-40°C to +70°C ambient

Base station runs on any standard PC running Windows

Radio data transfer rates are small so can be integrated with most data radios

IP67

Key Features

POINTER capabilities

Simultaneously connects to sensors that can give a point in space:

- Acoustic gunshot detectors
- Muzzle flash detectors
- Retro reflective detectors
- thermal imaging and CCTV cameras with laser range finders
- Hand-held laser range finders
- Radars (including ship and airborne systems)
- Remote ground sensors
- Acoustic mortar location systems

Plots targets on map and air photo interface

Can receive multiple targets from multiple sensors, allowing management of complex situations to reduce confusion

Allows automatic and immediate passage of targets to weapons for ambush and surprise attacks

Multiple targets can be sent to multiple or selected weapons

Cues multiple weapons systems onto multiple targets silently

Tracks friendly call-signs and can reduce fratricide

Shows where their the unit's/platforms'/ship's weapons are currently pointing, allowing efficient use of combat power

Facilitates calls for indirect fire

Produces electronic '9 Line' for handoff to AH

Can use Falcon View mapping

POINTER Optical Sight

Gives precise visual indication of target location

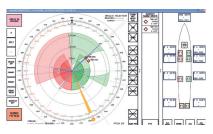
Gives precise target position, range and bearing to target, facilitating call for indirect fire

Simple and intuitive, with minimal training burden

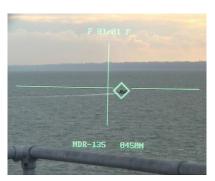
Can be integrated with all crew-served direct fire weapons and light vehicles



POINTER Optical Sight integrated with General Purpose Machine Gun



POINTER - display screen in maritime configuration



POINTER - maritime weapon display

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