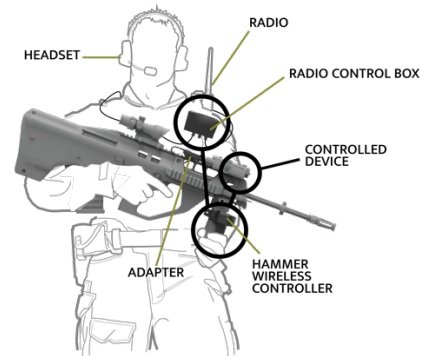




RACU HAMMER RIFLE ACCESSORY CONTROL UNIT (RACU) SYSTEM



The RACU Hammer System consists of a finger/thumb operated Controller (the Hammer) attached to a GPS Grip-POD foregrip on the weapon, and a Radio Control Box (RCB) and cable assembly worn on the body. The Hammer sends commands either by cable or wirelessly to weapon-mounted and body-worn electronic devices.

Wireless control on the weapon is enabled by the use of a Bluetooth Low Energy (BLE) Adapter. The RACU provides operators with a fast (instinctive) and simple way of operating the key functions of their devices without the need to take either eyes off the target or hands off the weapon, thus maintaining situational awareness.

➤ TECHNICAL SPECIFICATIONS

SIZE

Controller: (Hammer)	110mm x 86mm x 75mm (length x width x height)
Radio Control Box: (RCB)	100mm x 60mm x 35mm
BLE adapter:	50mm x 35mm x 20mm

WEIGHT

Controller:	127g – including battery (on the weapon)
RCB:	265g – including battery and body worn cable assembly
BLE adapter:	35g – including battery, cable and connector
SYSTEM:	Total: ca. 427g (15ozs)
	Net: ca. 88.4g (3.1ozs)

POWER

Controller:	1 x CR123A (lithium) (field replaceable)
RCB:	1 x CR123A (lithium) (field replaceable)
BLE adapter:	1 x CR2032

BATTERY LIFE

(all figures assume above 0°C operating conditions and for a 'typical cycle'*)

Controller:	>1 year (typical cycle)
RCB:	>2 weeks (typical cycle)
BLE adapter:	>6 months+ (typical cycle)

MATERIAL / FINISH

External casing: glass filled nylon 66
 Switches: silicon over-moulded
 Colour: matt black, non-reflective

ERGONOMICS

- Designed to fit foregrip: two thumb and three finger switches
- Operated with standard issue gloves
- Left or right handed operation
- Over-moulded switches with tactile feedback

OPERATION

- Wired or wireless
- Single or multiple presses (chords)
- Programmable/configurable via PC User Interface
- Eyes-free operation
- Normal device controls can still be used
- Training conducted using Smartphone or PC-based software

EXTERNAL INTERFACES

Weapon-mounted: 2 x switched loads; RS232
 Body-worn: SPI
 Two wire Bus (I²C compatible)
 USB

ENVIRONMENTAL

Internal Protection: IP68

TEMPERATURE

Operating: -30°C to +52°C
 Storage: -40°C to +70°C
 Humidity: 95% non-condensing
 Thermal: MIL-STD-810G Method 505.5
 Shock: 1.5m onto hard packed earth
 Vibration: MIL-STD-810G Method 514.6
 Altitude: -400m to +4,570m
 Immersion: Operable – 1m (3.2ft) for 2hrs

Chemical and fluid resistant

*A 'typical cycle' is defined as 1x command/minute/slave for 12 hrs/day with a system comprising an Adapter and RCB (two slaves).

 eyes on, hands on®  head up, eyes on target,
hands on weapon®

CIRCUITRY

Low power re-programmable micro-controller
 Built-in self-test and diagnostics
 Boot time: 3s

TRANSMISSION CHARACTERISTICS

Radiated power: 200µW
 Connection rate: 10Hz
 Tx time: 1-3ms
 Data transfer latency: 1-100ms
 Data throughput: 2kb/s
 Range (freespace): 20m

Australia/NZ: AS/NZS CISPR22:2009 (B)
 AS/NZS 61000.6.3:2007 (B)
 North America: FCC Part 15
 Europe: CISPR22:2009

OPERATING VOLTAGE

Vcc: 1.8 – 3.3V

ELECTROSTATIC DISCHARGE

Operable: 50V/m from 2 MHz to 18 GHz

CONNECTION TO DEVICES

Weapon mounted: BLE to adapter (cabled from adapter) or fully cabled (no adapter)
 Body worn: BLE to RCB or cabled via an Intelligent Sling

ATTACHMENT

Design: Screw clamp for controller /adapters Velcro/ MOLLE
 Strap for RCB
 Compatibility: MIL-STD-1913 picatinny rail or STANAG 4694 NATO rail

CONNECTORS

Fischer Mini-max series

ACCESSORIES

Data Logging Module
 User Configuration Package
 Computer Training and Competency Testing Software