

MULTI SPECTRAL TEST SET

PTS 8000



KEY FEATURES

- FIRST LINE TESTING OF RADAR, UV, IR, LASER WARNING RECEIVERS
- PROGRAMMABLE OVER A WIDE RANGE OF PARAMETERS
- RECHARGEABLE BATTERY WITH BUILT IN CHARGER
- ROBUST WEATHER-PROOF CASE, CONTROLS AND DISPLAYS
- REMOVABLE MEMORY MEDIA

DESCRIPTION

The PTS 8000 is a modular multi-spectral flight line system designed to give maintenance technicians and aircrew confidence in the operation of their Defensive Aid Suite.

Modularity is provided in the form of a Common Control Unit (PTS 8000 CCU) and a number of specific test heads, used to stimulate the various DAS sensors found on modern military platforms.

Currently a C/D band RF head (PTS 8000CD), an EJ band RF head (PTS 8000EJ), a Ka band RF head (PTS 8000K), a UV head (PTS 8000UV) and a combined UV/LWR head are available. Being modular, the user only needs to purchase the CCU and respective test heads he needs, should changes be made to platform sensor suite, new low cost heads can be purchased separately at a later date without the need for the core unit to be returned for upgrade.

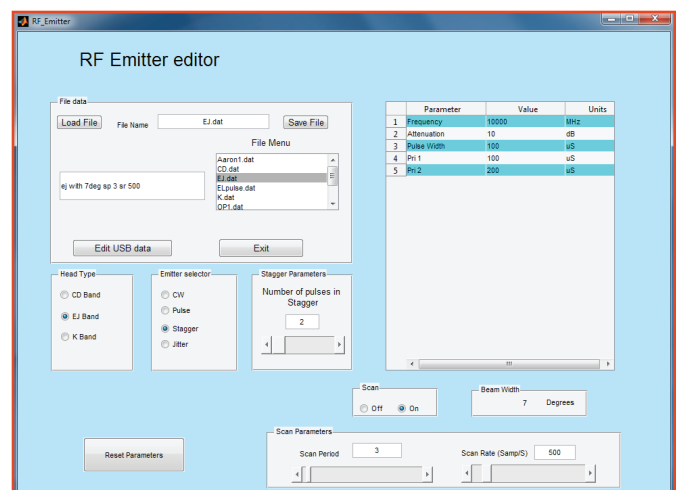
The PTS 8000 RF system consists of two ruggedised assemblies: the Common Control Unit (PTS

8000 CCU) and the Antenna head (PTS 8000 EJ). In use these 2 modules are normally connected via a control cable and free space radiating RF heads can reach up to 20m depending on RWR sensitivity, optional 20m extension cables are available whereby the control unit may be used in the aircraft cockpit allowing the technician to operate the unit and interpret the RWR display, whilst minimal skill level being needed at the antenna head.

The PTS 8000 (UV) is a battery powered, self contained,

lightweight ruggedised assembly which operates independent from the CCU and RF system, taking its threats from internal memory stimulating UV Missile and HFI Warning systems from up to 20m. A combined UV/LWR Head is now available which includes Laser Rangefinder, Laser Target Designator and Laser Beamrider threats and UV in a single EO head.

The respective units are programmed via an intuitive graphical user interface and threats downloaded via USB interface.



COMMON CONTROL UNIT

The PTS 8000 CCU provides the Interface to various RF heads. Large, easily activated controls and illuminated display allows operation in full NBC or foul weather clothing, at night or in poor visibility. Up to 6 selectable preset threats per RF head can be programmed in non volatile memory and adjusted locally at the CCU, whilst use of a pre programmed USB memory module provides virtually limitless additional threat capacity.

The unit is Mains/Battery operated with inbuilt auto sensing charger allowing operation from 115v/230v, or from 400Hz for aircraft or ship borne recharging. Typical battery duration is minimum 17 hours operational use at 20% duty cycle.

Built in test confirms battery charge state and comprehensive assessment of system functionality.

PTS 8000 (CD),(EJ), (K), RADAR WARNING TEST HEAD

The PTS 8000 (EJ) and optional (CD), (K) band RF heads are self contained, synthesised heads holding respective calibration data which allows for interchangeability with the CCU. Threats stored in either of the 6 presets or USB memory module are recalled, simply point and shoot at the sensor under test (SUT) which allows free space radiating signals up to 20m depending on RWR sensitivity.

The head (s) feature Built in Test which confirms RF output levels, pulse parameters and battery charge status. The individual heads and CCU can be changed without recalibration and the CCU automatically senses which RF head is connected.

Programming software with intuitive graphical user interface (GUI) is provided to generate complex emitters with stagger, Jitter and scan parameters, simply save and download to USB memory dongle for an enhanced test capability.

PTS 8000 CCU SPECIFICATIONS

- Internal power supply: 10.8v 4.5AH NiMH battery
- Recharge time from full discharge
 - 7 hours
- Charger inputs: 115v /230v 50/60Hz \pm 20% (auto sensing) or 40 Hz - 440 Hz
- Operating temperature -20°C to +55°C
- Storage temperature -40°C to +70°C
- Dimensions 220mm x 175mm x 255mm
- Weight Less than 4kg



PTS 8000(UV) MISSILE APPROACH WARNER TEST HEAD

The PTS 8000 (UV) utilises the latest UV Led technology and provides up to 8 generic (unclassified) threat profiles including HFI test patterns each typically lasting up to 10 seconds duration with Photon irradiance being programmable in 1 msec steps. The test profile is selected via switches on the rear of the unit.

The unit is programmed off line and threat profiles downloaded directly to the handset via USB. A Software GUI programme is provided to allow complex profiles to be easily generated.

PTS 8000 (UV) SPECIFICATION

- Wavelength: Solar Blind
- Operating Range: up to 20m
- Profile duration: up to 10 s in 1ms steps
- Profile stability: $< \pm 1\%$
- Power supply: 4 AA type battery > 100 firings per charge
- Dimensions: 103mm x 103mm x 210mm
- Weight: 1.5Kg



PTS 8000 COMBINED UV/LWR TEST HEAD

Incorporating the latest UV technology as above the integrated LWR module is fully programmable to replicate generic LRF, LTD and LBR threats. The combined capability is housed in a single EO Head with dimensions as above.

PTS 8000 UV/LWR SPECIFICATION

- Wavelengths: 525, 905 and 1550nm
- PRI: 0.018 - 2,000ms
- PW: 0.1-10,000us (525nm) 10-100ns (905/1550nm)
- Max Radiant Pwr/ Energy (Average): 11mw/1.1uJ (905nm)
- Laser Class: 3R (905nm), 1(1550nm)



The Ultra Electronics Group manages a portfolio of specialist capabilities, generating highly-differentiated solutions and products in the **DEFENCE & AEROSPACE, SECURITY & CYBER, TRANSPORT** and **ENERGY** markets, by applying electronic and software technologies in demanding and critical environments to meet customer needs.

Ultra businesses constantly **innovate** to create **solutions** to customer requirements that are **different** from and **better** than those of the Group's competitors. By applying these differentiated solutions to a **wide range** of international platforms and programmes, Ultra has built an exceptionally broad range of **specialist capability** areas. Where the Group has a number of complementary capabilities it can also combine these to offer wider solutions. Furthermore, the products, capabilities and the associated domain expertise uniquely position Ultra to be able to provide system and subsystem solutions. These solutions are underpinned by through-life management support offerings that ensure the capabilities are delivered and sustained in-service. The Group has an active programme of reinvestment of funds to strengthen its capabilities in its **specialist markets**.

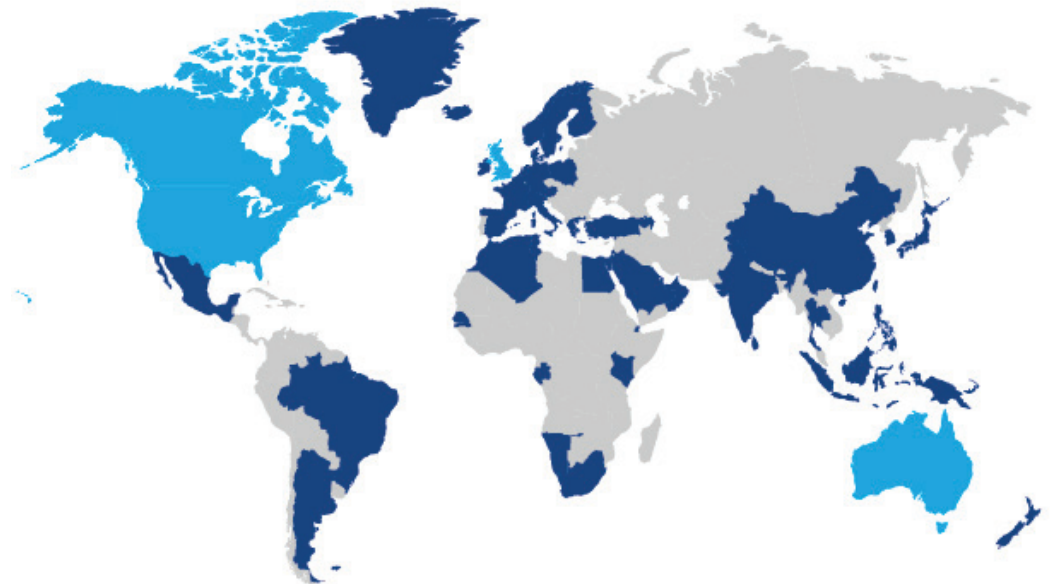
Ultra offers support to its customers through the **design, delivery** and **support** phases of a programme. Ultra's businesses have a high degree of **operational autonomy** so that they provide exceptionally **agile** and **responsive** support to customers and partners normally associated with a smaller business. These benefits of customer focus and agility are augmented by the access to wider and complementary **technology** and **expertise** that lies elsewhere in the Group and by Ultra's strong financial position.

Ultra's deep understanding of its specialist capability areas combined with knowledge of the customer environment is a key factor in delivering innovative solutions to meet the customer need.

GEOGRAPHIC REACH

Over the last two decades, Ultra has expanded and developed its international footprint and now has significant business in Europe, North America, the Middle East and the Asia Pacific.

Ultra has operations based in the countries shaded light blue on the map, and conducts business in the countries shaded in dark blue.



making a difference

Ultra Electronics

EWST
Building A8, Cody Technology Park
Ively Road, Farnborough
Hants GU14 0LX, England
Tel: +44 (0) 1252 512951
Fax: +44 (0) 1252 512428
www.ultra-ewst.com
www.ultra-electronics.com

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