

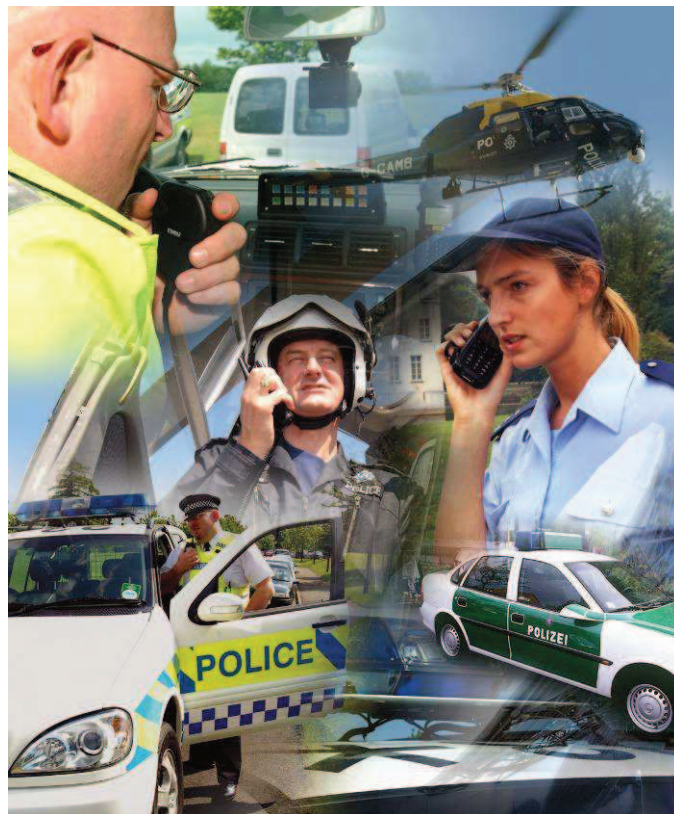


# TETRA Terminals

## Product Guide

MOD-10-1164

Issue 8






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## CONVENTIONS

This guide uses the following formatting and graphical conventions.

Convention	Description
	Note icon. Emphasises related, reinforcing, or important information.
	Tip icon. Suggests alternative methods for accomplishing tasks or procedures.
	Caution icon. Indicates actions or processes that require caution from the user.

## REGULATORY STATEMENTS

### COMPLIANCE WITH STANDARDS

#### RADIATION PROTECTION

The radios fully comply with the NRPB specification EN50360 (EN50361) and the ICNIRP guidelines for exposure to electromagnetic fields mandated for mobile phones (2W per kg over a 10g sample).

#### ELECTRO MAGNETIC COMPATIBILITY

The radios meet the EMC requirements specified by the ETSI specifications:

- ETSI EN 301 489-1,
- ETSI EN 301 489-18

#### TYPE APPROVAL

The radios have been self-certified against the R&TTE Directive EN 303 035-1 and are CE marked accordingly.

#### ENVIRONMENTAL

The radios fully comply with the following environmental regulatory requirements:

- The MIL STD 810E standard for Salt Fog:
- The MIL STD 810E standard for Driving Sand (SRH3000 radios only)

The radios have been self-certified to fully comply with all environmental aspects detailed by ETSI EN 300 019. These include mechanical and climatic tests covering such things as drop, vibration, bump and shock as well as temperature and humidity.

#### STP8X SPECIFIC ENVIRONMENTS

The STP8X radio is designed to work in the following hazardous environments...

##### GAS ENVIRONMENT


The STP8X radio complies with the following specifications for operation in a gas environment  
International IECEx Specifications: Ex ib IIC T4 Gb (-20°C ≤ Ta ≤ +55°C)

European ATEX Specification  II 2G Ex ib IIC T4 Gb (-20°C ≤ Ta ≤ +55°C)

##### DUST ENVIRONMENT

The STP8X radio complies with the following specifications for operation in a dust environment:

International IECEx Specifications: Ex ib IIIC T90°C Db (-20°C ≤ Ta ≤ +55°C)

European ATEX Specification  II 2D Ex ib IIIC T90°C (-20°C ≤ Ta ≤ +55°C) Db IP6x

**STP8X CONDITIONS FOR SAFE USE**

The equipment has been impact tested according to the low risk of mechanical danger. Care should be taken to avoid mechanical impact.

Use only Sepura approved batteries, antennas and accessories.

The battery pack must not be removed or replaced in the hazardous area.

The antenna must not be removed / replaced in the hazardous area.

The RuSC cover or RuSC connector must not be removed or replaced in the hazardous area.

**RADIO OPERATION**

The radios meet the requirements specified by the ETSI specification EN 300 394-1.

**SAFETY AND VEHICLE CERTIFICATION AGENCY (VCA)**

The radios fully comply with the User Safety specification EN60950, and the Automotive Directive detailed in 2006/28/EC.

**NORTH AMERICAN AND CANADIAN MARKETS**

The following regulatory statements apply to users in the North American and/or Canadian markets.

**SRG3900 RADIOS**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment (FCC rule part 15.21).

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. (FCC Rule Part 15.19(a)(3)).

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense (FCC Rule Part 15.105).

When used with the High Gain Tetra Modular Whip antenna (maximum antenna gain 7dBi), the antenna must be installed to provide a separation distance of at least 31 cm from all persons during normal operation to ensure compliance for RF Exposure.

When used with the rigid Tetra Modular Whip antenna (maximum antenna gain 2dBi), the antenna must be installed to provide a separation distance of at least 25 cm from all persons during normal operation to ensure compliance for RF Exposure.

When used with TETRA/GPS combined antenna (maximum antenna gain 0dBd) or a TETRA only antenna (maximum gain 2dBi) or a DMU antenna (maximum gain 0dBd), the antenna must be installed to provide a separation distance of at least 20 cm from all persons during normal operation to ensure compliance for RF Exposure.

This Class A digital apparatus complies with Canadian ICES-003.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication

This radio is intended for use in occupational/controlled applications where users have been made aware of the potential for exposure and can exercise control over their exposure. This radio device is NOT authorized for general population, consumer or similar use.

#### **STP80xx/STP81xx/STP82xx RADIOS**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment (FCC rule part 15.21).

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. (FCC Rule Part 15.19(a)(3)).

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense (FCC Rule Part 15.105).

This Class A digital apparatus complies with Canadian ICES-003.

The use of third-party belt-clips, holsters, and similar accessories should not contain metallic components in its assembly. The use of these accessories that do not satisfy these requirements may not comply with appropriate RF exposure compliance requirements, and should not be used.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication

This radio is intended for use in occupational/controlled applications where users have been made aware of the potential for exposure and can exercise control over their exposure. This radio device is NOT authorized for general population, consumer or similar use.

## OPERATIONAL REQUIREMENTS



All features and functions of Sepura radios are subject to network support of the TETRA Interoperability Specifications.

### OPERATING CONDITIONS

Sepura radios operate in a temperature range between -20°C and 60°C and a maximum humidity of 98%. They may be safely stored at a temperature within the range -40°C to 85°C.



The minimum and maximum temperatures for operation are -30°C to +70°C. However operating at temperature extremes may limit some aspects of operational performance.

### IP, IEC AND ATEX RATINGS

The Sepura radios are certified to the following IEC529 IP, Global IEC and European ATEX standards:

Product	IP Standard	IEC Standard	European ATEX Standard
STP8X	IP67	IEC 60079-0 and IEC 60079-11	EN 60079-0 and EN 60079-11.
STP8000, STP8100	IP55		
STP8200	IP54		
SRH3500, SRH3800, SRH3900	IP54		
SRG3500, SRG3900	IP54		



The STP8000, STP8100, STP8200 and STP8X radios have been tested for a full 8 hour shift in IP54 conditions. This is equivalent to 8 hours of constant rain.



The SRH3900 radio has been tested in IP54 conditions equivalent to 2 hours of driving rain.

## HANDHELD RADIO RANGE

### STP Series Radios



### SRH3000 Series Radios





STP SERIES RADIOS

STP8000, STP8100, STP8200

STP8000 FRONT



## STP8100 FRONT



## STP8200 FRONT



## STP8X FRONT



STP8000, STP8100, STP8200 Rear



## STP8X Rear



To ensure optimal performance from your radio during half duplex calls (individual or group) please hold the radio vertically, with the half duplex microphone situated approximately 5cm away from the mouth.