

2. Copy batteries are available for many products, particularly mobile phones and more recently TETRA radios, including those made by Sepura. These may be cheaper than approved batteries, but may not include protection features used in the approved battery, so may be less safe and should not be used.
3. Use only Sepura approved chargers for charging Sepura products. Non-approved chargers may incorrectly charge the battery, leading to premature failure, or render the battery potentially unsafe.
4. Sepura batteries are designed to be rugged and to give good service. However, as is the case for all Li-ion batteries, it is possible for extreme mechanical damage to weaken the internal structure of the cells within the battery. Therefore, if the battery casing shows signs of severe damage (not the minor scratches and bumps of everyday use), or has been subjected to major mechanical abuse, do not continue to use the battery.

MOBILE / GATEWAY RADIO RANGE

SRG3000 Series Transceivers

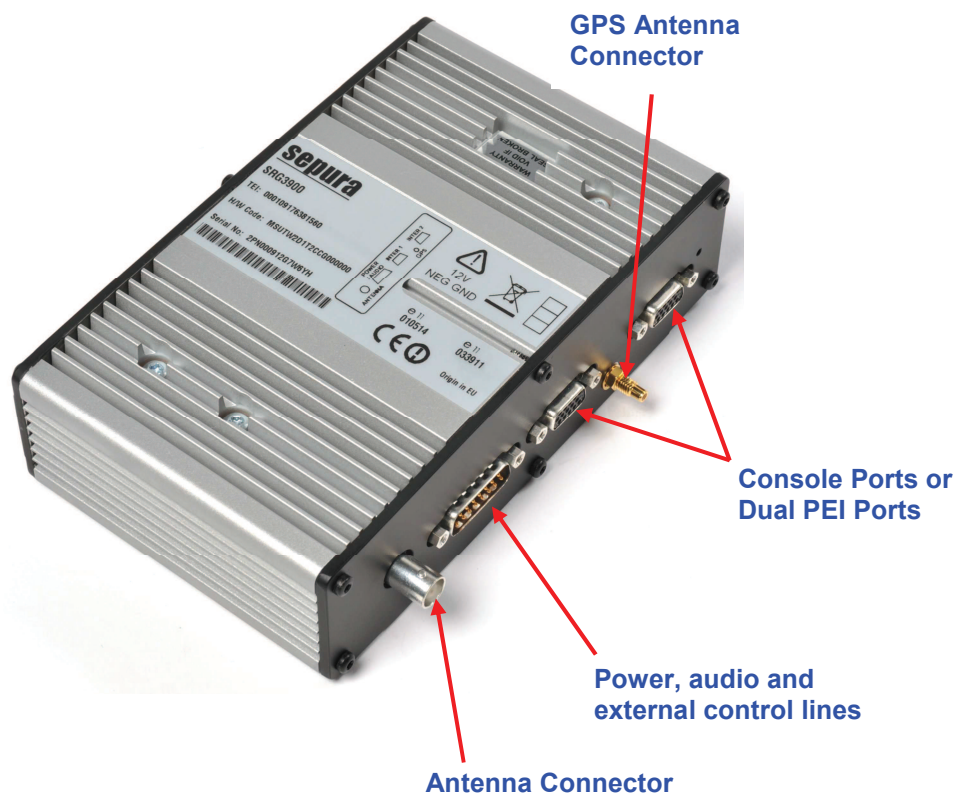


SRG3000 Series Consoles



Applications Interface Unit



SRG3000 MOBILE / GATEWAY TRANSCEIVER

The finish on the SRG3000 transceivers may vary.

In order to operate the following components are required:

- TETRA Mobile / Gateway Transceiver Unit
- Power Cable Assembly
- An Antenna

Optional accessories that may be included:

- Colour Console, Standard Console or Handset Based Console Unit
- Applications Interface Unit

The Mobile or Gateway Radio should be installed by following the instructions in the Installation Guide.

STANDARD CONSOLE



COLOUR CONSOLE



HANDSET BASED CONSOLE

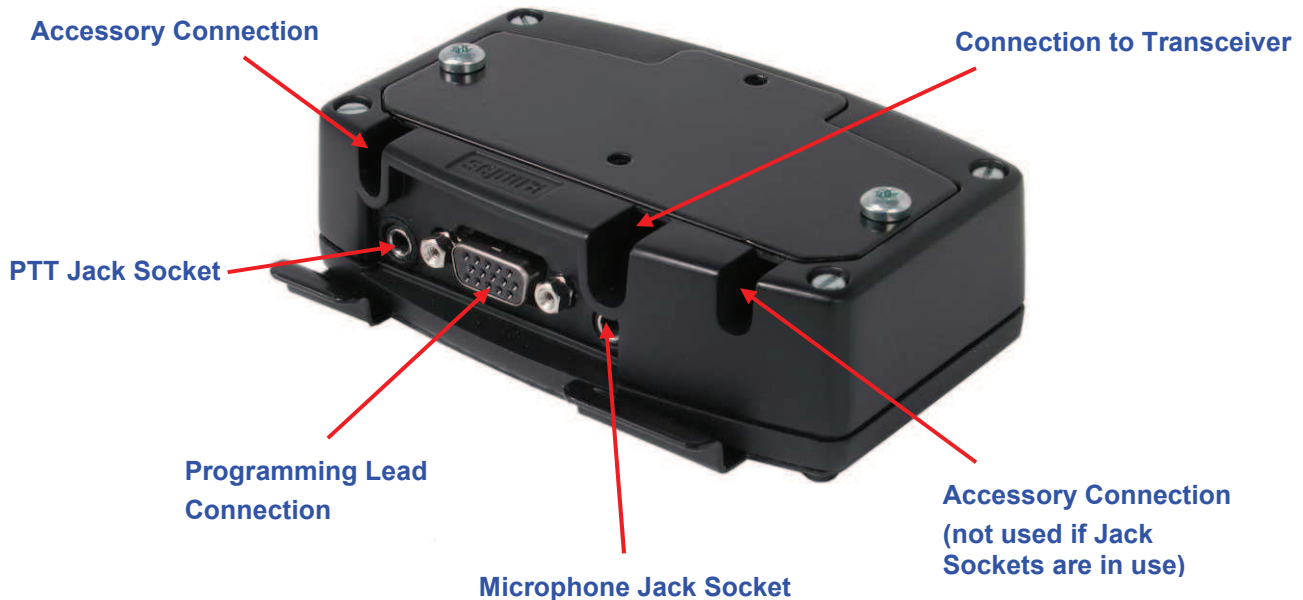
Front



Rear



APPLICATIONS INTERFACE UNIT



MOBILE / GATEWAY RADIO ACCESSORIES

CONSOLE AND APPLICATIONS INTERFACE UNIT

The Mobile/Gateway radio supports the connection of up to two console units. Each console unit can be a Standard Console, Colour Console or a Handset Based Console, complete with keypad and display, or an Applications Interface Unit, which is similar to a console but which does not have a keypad and display. This enables the mobile to support the connection of up to 6 audio accessories.

If two consoles are fitted, they both display the same information. This makes it possible for a user to move from one console to another without having to take any special action. If two users are using the same Mobile/Gateway radio, operational procedures are required to ensure that the actions of the two users do not conflict.

On some configurations it is possible to have a hands-free kit attached to each console. If this is the case, only one of the remote microphones is live during a call. The remote microphone which is live is the one attached to the console which accepted or made the call or switched the call to hands-free.

AUDIO ACCESSORIES

The Mobile/Gateway radio supports up to 6 audio accessories, which can be any combination selected from:

- Standard Console, Colour Console, Applications Interface Unit:
 - none to two hands-free kits
 - none to four standard handsets
 - none to four standard fist microphones
- In addition to the above, the Colour Console also supports:

- none to two VAC handsets
- none to two VAC speaker microphones (which may be configured as fist microphones)
- Handset Based Console:
 - built-in handset
 - none to one hands-free kit

MOBILE / GATEWAY RADIO AUDIO CONTROL

The Mobile/Gateway radio supports the concept of a single controlling audio accessory for a call. The controlling audio accessory is the one in control of the call, and the only one on which the microphone becomes active.



When a fist microphone or hands-free kit is used, the received audio is directed to the loudspeaker connected to the mobile unit. When a handset is used, the received audio is directed to the handset earpiece.

The controlling audio accessory is normally the Remote Microphone used in conjunction with the Loudspeaker, i.e. the hands-free kit or 'Public' mode. If the user requires that a different accessory should become the controlling accessory this may be achieved by pressing the PTT key on that accessory or by taking that accessory off hook. If the new controlling accessory has an earpiece then normally this is used for received audio instead of the Loudspeaker ('Private' mode).

When in 'Private' mode the user can switch to 'Public' mode by pressing the hands free soft key if configured. Taking a handset off hook, or using its PTT will return to 'Private' mode.

While the controlling accessory is not the Remote Microphone, the user may switch to another accessory by pressing the PTT key on that accessory. Taking that accessory off-hook does not change the controlling accessory. This allows a second user to listen to received audio on another accessory.

If the controlling accessory is placed on-hook this clears the call unless customised differently. Other accessories can be put back on-hook without clearing the call in progress.

All earpiece audio is left on all the time in order that multiple users may listen to the received audio.

The audio presentation for duplex calls depends on the capability of the controlling accessory. With a duplex controlling accessory, duplex calls have a duplex presentation. With a half duplex accessory, duplex calls are controlled using the PTT key.

RADIO OPERATION

See the Sepura TETRA Radios User Guide for information regarding the user operation of the radios.

HEALTH AND SAFETY

USER INFORMATION



The STP8X radio must not be used in environments exceeding those listed in the Regulatory statements section of this user guide.



Please review the STP8X conditions for safe use in the Regulatory section of this user guide. Always ensure that the STP8X radio is in good operational condition before entering any hazardous environment.

CARE OF YOUR RADIO

Use only a slightly damp soft cloth for cleaning all exterior surfaces. Do NOT use chemical aerosol or abrasive cleaners.

To ensure efficient operation, clean the battery contacts periodically with a soft, dry cloth.

Never leave the radio in extreme temperatures (over 55°C), for example behind glass in very hot, direct sunlight.

BATTERIES

Safety

Please observe the following before handling batteries:

To prevent injury, do not allow metal objects to contact or short circuit the battery radios.

Make sure that the battery radios do not become dirty.

Do not immerse in water or incinerate.

If you need to replace the battery, use the Sepura plc approved battery types.



For **STP8X** radios a Sepura approved ATEX/IECEx battery **must** be used.

The battery must **not** be removed or replaced in a hazardous environment and the battery must **not** be charged in a hazardous environment.

Disposal

Batteries must be disposed of in the correct manner according to Sepura environmental policy. If in any doubt, refer to your supplier or local Sepura plc representative.

ACCESSORIES

Only accessories supplied or approved by Sepura plc are recommended for use with the radios. Any accessory used that is not supplied or approved by Sepura plc could cause damage to the radios and may invalidate the warranty. For safety reasons Sepura plc do not recommend that accessories be used with a radio without first gaining approval from Sepura plc to do so.



For **STP8X** radios Sepura approved ATEX/IECEx Accessories **must** be used.

The radio **must not** be operated unless an accessory is attached or the RuSC Cover is screwed in place.

Accessories and the RuSC cover **must not** be fitted, or removed or replaced while in a hazardous environment.

When attaching the RuSC cover and accessories, to ensure that a seal is maintained, tighten the screw to 0.15 Nm and 0.25Nm respectively.

When an accessory is connected to any STP radio, the accessory is tested to check that it is an approved Sepura accessory. If a non-Sepura accessory is detected one of the following warning messages is displayed:

- Accessory Invalid
- Accessory Unsupported
- Accessory Unapproved

STP8000, STP8100, STP8200



If the screen displays 'Accessory Invalid', 'Accessory Unapproved' or 'Accessory Unsupported': a non Sepura approved accessory has been attached to the radio which may compromise the safety ratings. The user may, however, continue operation of the radio with the accessory connected.

If "Accessory Invalid" is displayed there is an accessory connected to the radio but the radio cannot determine what it is. It is likely that the accessory's software or configuration is corrupted. Continued safe operation cannot be guaranteed. It is recommended that the accessory is disconnected as soon as possible.

If "Accessory Unsupported" is displayed the installed radio software may not be able to fully support the connected accessory. If the accessory is a Sepura approved accessory that is new to the market a radio software upgrade may solve the issue. If the accessory is an unapproved 3rd party accessory the radio may be able to provide partial accessory support but safe operation cannot be guaranteed.

If "Accessory Unapproved" is displayed the connected accessory is not a Sepura approved accessory. The accessory may still work with the radio but safe operation cannot be guaranteed.

STP8X



If the screen displays 'Accessory Invalid', 'Accessory Unapproved' or 'Accessory Unsupported': a non Sepura approved accessory has been attached to the radio which may compromise the safety ratings. To ensure continued safety, after a brief period of time the radio switches off.

SIM Card and Micro SD CARD



For **STP8X** radios do **not** insert or remove the SIM Card or Micro SD card in a hazardous environment. When closing the SIM / SD plastic cover tighten the screw to 0.1 Nm. This ensures that a seal is maintained.

TRANSMIT INHIBIT

The radio can be switched into Transmit Inhibit should the user enter a RF sensitive area (e.g. a hospital). This mode is indicated by the tri-colour LED rapidly flashing amber 4 times at approximately two second intervals and the display of the transmit inhibit icon in the top right



hand corner of the screen.

In this state, the radio does not transmit under any circumstances in either TMO or DMO, except when using the emergency key if customised to do so. The radio remains on the selected group and in some circumstances can still receive conversations from this talkgroup.

The radio can automatically send a status message to the customised destination when the radio enters Transmit Inhibit, and again when it leaves Transmit Inhibit.

Use of the emergency key whilst in Transmit Inhibit is supported; however, the time to set up the emergency call could be increased by a few seconds.

ANTENNA

When fitting the antenna, do not over-tighten. Do not use the radio without the antenna attached unless the radio is being used with an external antenna (e.g. on RSM).



For **STP8X** radios a Sepura approved ATEX/IECEX Antenna **must** be used.

The radio must not be operated without an antenna fitted. **Do not** fit, remove or replace the antenna in a hazardous environment!

To ensure that a seal is maintained between the antenna and the Radio, screw on antenna until contact is made and follow with a minimum ¼ turn.

ACOUSTIC SHOCK

Sepura plc has engineered an innovative audio solution for the radio. Duplex audio (for telephone type calls) and the half duplex audio (for radio calls) are directed to different loudspeakers.

Duplex audio is routed to the low power Duplex Earpiece on the front of the radio. A more powerful loudspeaker, situated behind the alpha-numeric keypad on the STP8000 radios, behind the panel on the lower front of the STP8100, STP8200 and STP8X radios and on the rear of the SRH3000 series radios, is used for half duplex audio. This loudspeaker directs the loud audio away from a user's ear should the user accidentally answer a half duplex call as though it were a duplex call.

WARNING: Hold the radio close to the ear only when making, or receiving, duplex calls.

WATER INGRESS

This section applies to the STP8000, STP8100, STP8200 and STP8X radios only



If the radio is used in extremely heavy rain it is possible that some water may seep behind the keys on the keypad. This will not harm the radio but may reduce the volume of the loudspeaker. If this occurs it may be easily remedied by holding the radio firmly and shaking it once or twice to remove the water.

COMPLIANCE WITH STANDARDS

Please see **Regulatory Statements** section in this User Guide for information on Compliance with Standards.

GLOSSARY

Term	Description
Gateway	A device which allows users working in Direct Mode to communicate with users in Trunked Mode. (This is often used to extend the working range of a radio)
Duplex	Duplex calls are telephone type calls in which both parties can talk simultaneously.
ETSI	European Telecommunications Standards Institute
Half duplex	Half duplex calls are when only one party can talk (transmit) at any time.
LED	Light Emitting Diode
Navi-knob™	A continuous rotating knob on the top of the radio that is used for talkgroup and status message selection, as well as controlling the volume.
NRPB	National Radiological Protection Board
PEI	Peripheral Equipment Interface
PTT	Press To Talk
RSM	Remote Speaker Microphone
TETRA	Terrestrial Trunked Radio

ACKNOWLEDGEMENTS

1) The Sepura STP8000 and STP8100 series radios contain iType™ from Monotype Imaging Inc.



2) The *Bluetooth*® word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Sepura plc is under licence. Other trademarks and trade names are those of their respective owners.

Bluetooth® Qualified Device ID : B013965

3) The Independent JPEG Group

The Radio software is based in part on the work of the Independent JPEG Group.

4) The SDA Group

Micro SD cards.



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