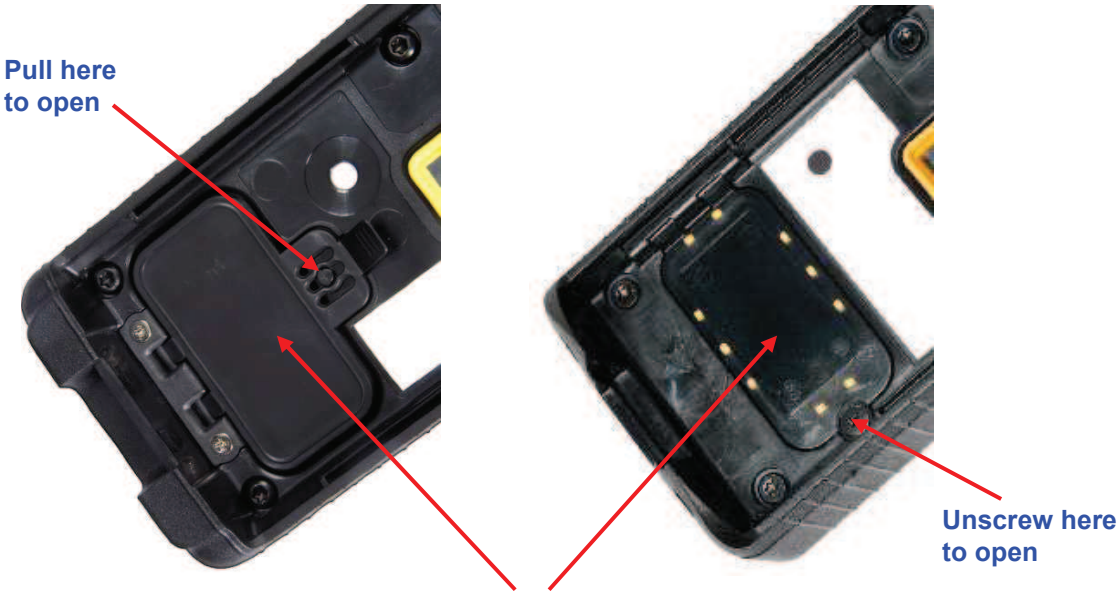
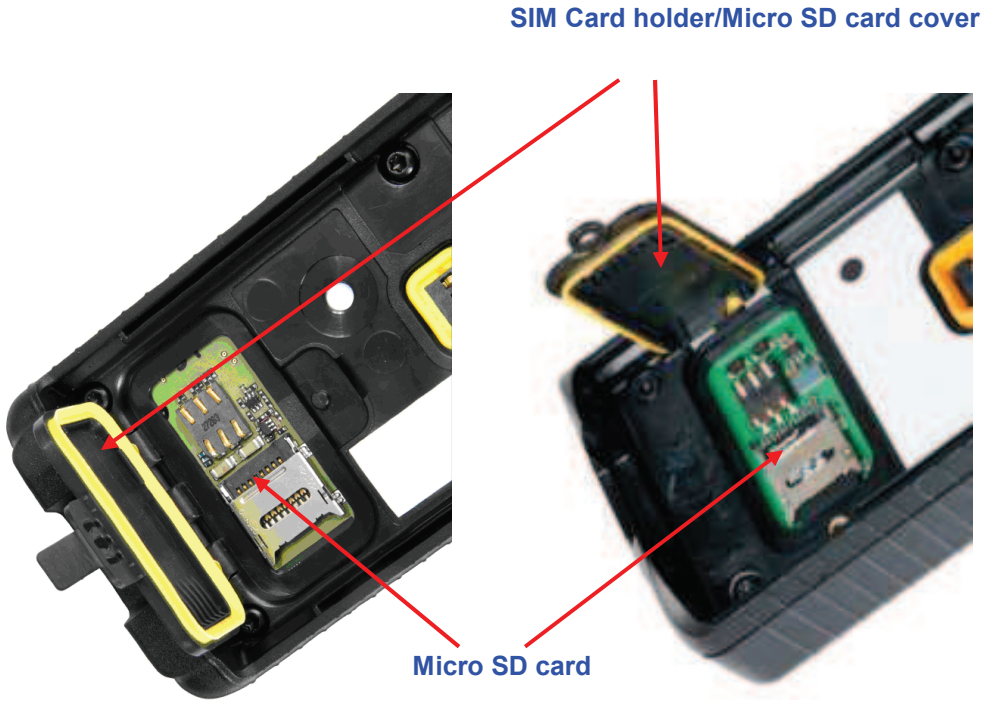
STP8000, STP8100, STP8200
REAR WITH BATTERY REMOVED

STP8X REAR WITH BATTERY REMOVED



The SIM Card holder/Micro SD card cover in the STP8000, STP8100 and STP8200 is opened by pulling the flap, and in the STP8X radios a small jewellers screwdriver is needed to remove the screw.

On the STP8X radio when closing the SIM / SD plastic cover tighten the screw to 0.1 Nm. This ensures that a seal is maintained.



The SIM card or Micro SD card must not be removed or fitted while in a hazardous environment because this would require removal or fitting of the battery in a hazardous environment which would compromise the safety ratings.

In STP8000, STP8100 and STP8200 radios the SIM Card holder/Micro SD card cover should be left open while in storage and latched closed under normal use.

The STP8200 does not support a Micro SD card. The connections and cover for the card are not present on the radio

ANTENNA

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.

Please see section on Health and Safety in this document for further health and safety information about the antenna.

STP8000, STP8100, STP8200 FACILITY CONNECTOR

PEI
Car adapter
Charger connection

STP8X BASE

There is no facility Connector in the base of the STP8X

Attaching an Accessory to a STP8000, STP8100 or STP8200

When attaching an accessory ensure that the 'Sepura' name faces up:

STP8000, STP8100, STP8200 Rugged Accessory Connector

STP8X Rugged Side Connector (RuSC)

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

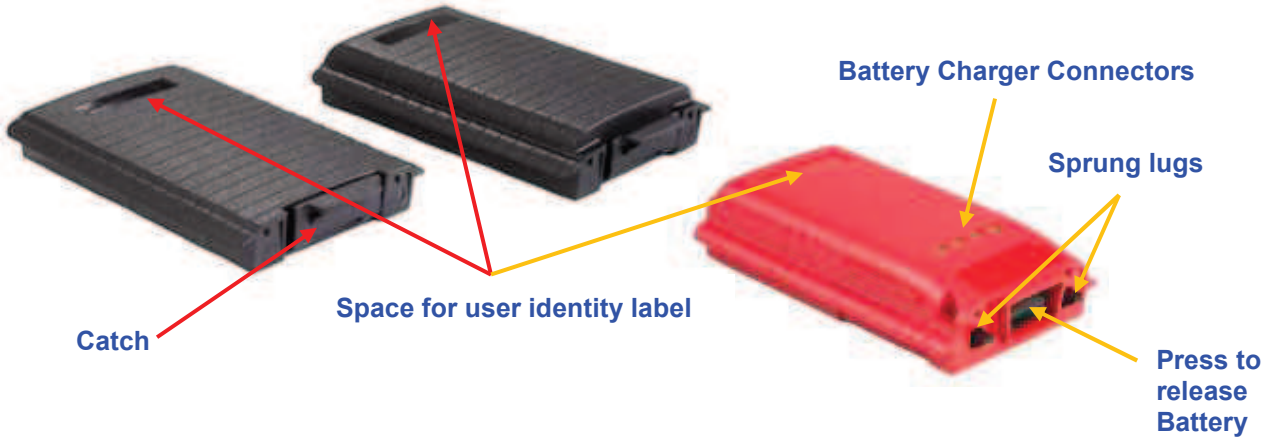
The radio **must not** be operated unless an accessory is attached or the RuSC Cover is screwed in place and Accessories and the RuSC cover **must not** be fitted, or removed or replaced while in a hazardous environment.

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.

BATTERIES

STP8000, STP8100, STP8200 BATTERIES

STP8X BATTERY



STP8000, STP8100, STP8200 BATTERIES

Fitting and Removing the Battery

Before fitting a battery please ensure that the SIM Card holder/Micro SD card cover is latched shut. To fit, unpack the battery and slot it into the rear of the radio. Push the battery down until the catch clips into the bottom of the case. The battery is fully secure when this catch has clipped into position. To remove, push the catch upward towards the top of the radio. The battery pack unclips and can then be removed.

Battery Charging

New battery packs must be fully charged before they are used. The battery should only be charged using Sepura plc approved battery chargers. Failure to use an approved battery charger may invalidate the warranty of the battery and the radio.

A range of battery chargers is available that allow the battery to be charged while fitted to, or removed from, the radio (depending upon the charger model selected). When the battery is fitted to the radio, the battery can be charged via the facility connector located at the base of the radio. If the battery is charged with the radio switched on, the time remaining to charge the battery to its full capacity is shown on the radio's display.

When charging, the colour of the tri-colour LED on the radio indicates the progress of battery charging: flashing amber shows waiting to charge, amber shows charging in progress, green shows charging complete and red shows charging failure. A fully discharged battery may not provide enough power to support the display during the initial phases of charging. However, when sufficient power is available, the display will operate.

Safety Precautions

Many professional and consumer products from cycle lamps to mobile phones and laptop computers now use rechargeable lithium polymer cells because of their small size and high energy density. When charged and used correctly these are reliable and safe. There are some simple precautions that should be observed when charging and using Lithium polymer packs. The precautions below apply to most/all Lithium polymer battery packs and chargers.

1. Properly designed Lithium polymer batteries and chargers contain effective protection circuitry to safeguard the pack during charging and use, but in some very rare circumstances of internal cell failure during charging, the protection circuits may be

ineffective and the pack may overheat. To minimise the chance of this causing further damage, Lithium polymer battery chargers should be used in well ventilated areas away from combustible material. For example, charging of a TETRA battery, mobile phone battery or laptop battery should not be carried out with the battery and charger very near to curtains, soft furnishings, paper or other combustible material.

2. Copy batteries are available for many products including TETRA radios 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.

   When the radio is switched on the battery is tested to check that it is an authentic Sepura battery. This information may be viewed on the Battery card in the Radio Information menu. Please see section on Radio Information in the Sepura TETRA Radios User Guide. If a non-Sepura battery is detected in a STP radio, depending on the customisation of the radio, a warning message is displayed ("Unidentified battery – Powering Down") and the radio switches off, or a warning message is displayed ("Unidentified battery - charging suspended") which may be cleared by any key press and if charging of the battery is attempted no charging will occur.

   Depending on the customisation of the radio, if a Sepura battery is identified, the percentage of charge remaining is then displayed.

3. Use only Sepura approved chargers for charging Sepura products and Sepura approved batteries.

   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 Lithium polymer 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, the battery should be safely discarded immediately.

STP8X BATTERIES

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

Fitting and Removing the Battery

For **STP8X** radios: The battery must **not** be removed or replaced in a hazardous environment.

Before fitting a battery please ensure that the SIM Card holder/Micro SD card cover is screwed shut. To fit, unpack the battery and slot it into the rear of the radio. Push the battery down until the two black lugs lodge into the bottom of the case. The battery is fully secure when the lugs have locked into position. To remove, push the black button in the base of the battery upward towards the top of the radio. The battery releases and can then be removed.

Battery Charging

For **STP8X** radios: The battery must not be charged in a hazardous environment. Do not use the charger in a hazardous environment.

New battery packs must be fully charged before they are used. The battery must only be charged using Sepura plc approved battery chargers. If an attempt is made to use a non-approved battery charger the ATEX/IECEx safety rating will be invalidated and the radio will switch off. This may also invalidate the users' insurance.

The Sepura battery charger allows the battery to be charged either while fitted to or removed from the radio.

Safety Precautions

Many professional and consumer products from cycle lamps to mobile phones and laptop computers now use rechargeable lithium polymer cells because of their small size and high energy density. When charged and used correctly these are reliable and safe. There are some simple precautions that should be observed when charging and using Lithium polymer packs. The precautions below apply to most/all Lithium polymer battery packs and chargers.

When the radio is switched on the battery is tested to check that it is an authentic Sepura battery and, if so, information about the battery may be viewed on the Battery card in the Radio Information menu. Please see section on Radio Information in the Sepura TETRA Radios User Guide. If a non-Sepura battery is detected in a STP radio, a warning message is displayed ("Unidentified battery – Powering Down") and the radio switches off.

If a Sepura battery is identified, the percentage of charge remaining is then displayed.

Use only Sepura approved chargers for charging Sepura products and Sepura approved batteries

Sepura batteries are designed to be rugged and to give good service. However, as is the case for all Lithium polymer 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, the battery should be safely discarded immediately.

STP8000, STP8100, STP8200, STP8X

The following warnings and information apply to all STP radios:

The mechanism for measuring the remaining charge in the battery may become inaccurate over time. To avoid this, periodically run the battery flat in normal use (so that the radio automatically switches off) and then re-charge the battery fully without disconnecting it from the charger.

If a battery has been stored for a long time it may go flat and will not be able to power a radio until it has been recharged. In extreme cases it may be necessary to restart the charging by disconnecting and reconnecting the charger (or switching the charger off and then on) as charging will stop after twenty minutes if the battery has not recovered enough charge in that time to power the radio.

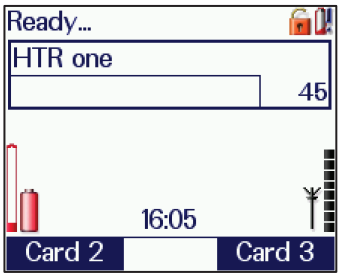
The battery includes circuitry to protect against damage caused by accidental shorting of the contacts. Once the battery has protected itself, it will not operate again reliably until it has been removed from the radio and been fully re-charged. If the battery is not fully re-charged the battery meter and time-to-charge indication on the radio may give an inaccurate reading.

The amount of charge in a battery, shown as a percentage, is displayed on the Battery card in the Radio Information menu. Please see section on Radio Information in the Sepura TETRA Radios User Guide.

Low Battery Warning.

The radio warns the user when less than 12% of the charge is left by displaying the Low Battery Icon on the top line of the screen and repeatedly flashing the red LED for one second at one second intervals. The Battery Level indicator at the left hand side of the screen is displayed in red on the STP8000, STP8100 and STP8X radios.

When the battery is flat there is an audible alert just before the radio switches off.



As with all batteries, charging cycles reduce the cell capacity. The battery is specified to have retained a nominal 80% of its original fully charged capacity after 500 charge cycles. Charging should be conducted using a Sepura approved charger.

Batteries have a finite life; they deteriorate if they are not charged on a periodic basis. Batteries should not be left for more than 6 months without recharging as the cells will deteriorate and the batteries will not be recoverable.

STP8000, STP8100, STP8200 and STP8X Belt Clip and "Klick Fast" Stud

Belt Clip

"Klick Fast" Stud

STP8X

When using the STP8X radio, the Belt Clip and "Klick Fast" Stud **must not** be attached or removed in a hazardous environment as this would require also removing and fitting the battery which is not permitted in a hazardous environment.

STP8000
STP8100
STP8200

The Belt Clip and "Klick Fast" Stud are both attached at the carrying aid attachment recess on the rear of the radio. When attaching or removing the belt clip or stud please first remove the battery.

The Belt Clip

Attaching the Belt Clip to the radio

To attach the belt clip to the radio slide it into the carrying aid attachment recess as shown.

Detaching the Belt Clip from the Radio

To remove the belt clip from the radio first carefully pull or lift the bottom end of the belt clip away from the radio.

Use your thumb or thumb nail to compress the spring and release the belt clip. It is then possible to pull the belt clip so that it slides out of the carrying aid attachment recess.

The “Klick Fast” Stud

The “Klick Fast” Stud may be attached to the radio in the same way as the belt clip and detached in a similar way by compressing the spring (which may be plastic) with the thumb or thumb nail.

Attempting to remove the belt clip or stud without compressing the spring sufficiently may result in damage to the accessory or to the radio.

SRH3500, SRH3800, SRH3900

FRONT

REAR

FACILITY CONNECTOR

ACCESSORIES SOCKET

BATTERIES

Fitting and Removing the Battery

To fit, unpack the battery and slot it into the rear of the hand-held. Push the battery down until the catch clips into the bottom of the case. The battery is fully secure when this catch has clipped into position. To remove, push the catch upward towards the top of the hand-held. The battery pack unclips and can then be removed.

Battery Charging

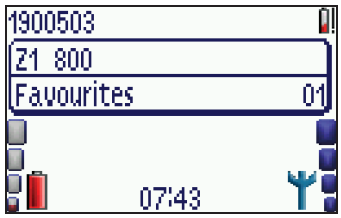
The battery should only be charged with Sepura plc approved battery chargers. Failure to use an approved battery charger will invalidate the warranty of the battery and the hand-held.

A range of battery chargers is available that allow the battery to be charged while fitted to, or removed from, the hand-held (depending upon the charger model and hand-held type selected). When the battery is fitted to the hand-held, the battery can be charged via the facility connector located at the base of the hand-held. If the battery is charged with the hand-held switched on, the time remaining to charge the battery to its full capacity is shown on the hand-held's display.

When charging, the colour of the LED on the hand-held indicates the progress of battery charging: orange shows charging in progress, green shows charging complete, red shows charging failure. A fully discharged battery may not provide enough power to support the hand-held display during the initial phases of charging. However, when sufficient power is available, the display will operate.

The battery includes circuitry to protect against damage caused by accidental shorting of the contacts. Once the battery has protected itself, it will not operate again until it has been removed from the hand-held and charged.

The hand-held warns the User of a Low battery condition by displaying the Low battery Icon and repetitively flashing the Red LED for 1 second at 1 second intervals. The Battery Level indicator at the left hand side of the screen is also displayed in red on the SRH3800 and SRH3900 radios.



As with all batteries, charging cycles reduce the cell capacity. The battery is specified to have retained a nominal 80% of its original fully charged capacity after 500 charge cycles. Charging must be conducted using a Sepura approved charger.

Batteries have a finite life; they deteriorate if they are not charged on a periodic basis. Batteries should not be left for more than 6 months without recharging as the cells will deteriorate and the batteries will not be recoverable.

Many professional and consumer products from cycle lamps to mobile phones and laptop computers now use rechargeable lithium-ion (Li-ion) cells because of their small size and high energy density. When charged and used correctly these are reliable and safe. There are some simple precautions that should be observed when charging and using Li-ion packs. The precautions below apply to most/all Li-ion battery packs and chargers.

1. Properly designed Li-ion batteries and chargers contain effective protection circuitry to safeguard the pack during charging and use, but in some very rare circumstances of internal cell failure during charging, the protection circuits may be ineffective and the pack may overheat. To minimise the chance of this causing further damage, Li-ion battery chargers should be used in well ventilated areas away from combustible material. For example, don't charge your TETRA battery, mobile phone battery or laptop battery with the battery and charger very near to curtains, soft furnishings, paper or other combustible material.