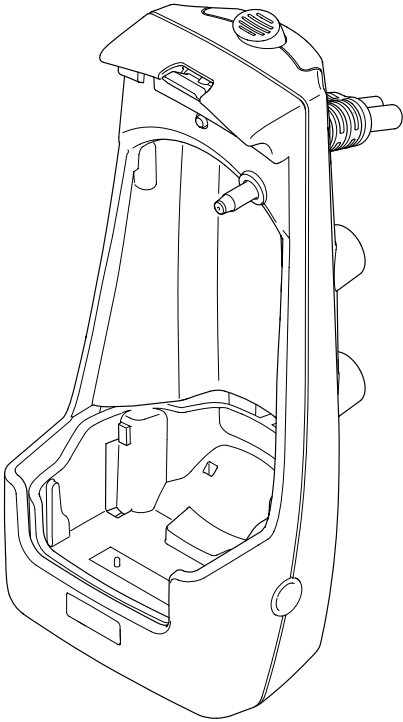


Installation & User Guide

SC20 Car Kit

Part no. 300-01958 SC20 Car Kit - Power
300-01985 SC20 Car Kit - Power + RF



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SPR-DOC-04304 4.0 (English)

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Handle the device with care. The following will help you protect the device and protect your warranty coverage: Do not attempt to dismantle or modify this product. There are no user-serviceable parts inside. Unauthorised modifications could cause the product to become non-operational and will invalidate the product safety ratings and product warranty.

Risk of fire! Do not cover. Only operate this product in a well ventilated area away from combustible materials. Never operate the product if it shows signs of damage. Never attempt to charge a battery that shows signs of damage.

Only use Sepura radios and Sepura approved batteries with this product. The use of non-approved batteries may damage the product, will result in the non-compliance with regulatory requirements, compromise the product safety ratings and invalidate the product warranty.

Do not exceed operating and storage temperature limits.

Do not expose to direct sunlight or direct heat. Prolonged exposure to extreme temperatures (over 55 °C or 131 °F), for example behind glass in direct sunlight, may damage the product.

Do not immerse into water or expose to moisture.

Use original packaging for storage and transportation.

NOTE: For additional information about your Battery Charger please contact customer.support@sepura.com

Battery Use Guidelines

Always follow the warning information on the battery label and in the user manual provided with the charging device.

NEVER use or attempt to charge a battery that shows signs of damage or swelling, or has been dropped or received a 'heavy blow'. Damage to the battery may not always be obvious.

Take care when handling and charging batteries. Do not short-circuit batteries. Avoid deep discharge of batteries.

Do not open or disassemble batteries.

Do not incinerate batteries or expose to temperatures above 85 °C (185 °F).

Do not immerse batteries into water or expose the battery contacts to moisture.

Do not swallow batteries.

Rechargeable batteries have a limited number of charge cycles and may eventually need to be replaced. We recommend replacing batteries every two years or after 500 charge cycles.

Sepura recommends that charging is only performed at an ambient temperature between +5 °C and +35 °C (41 °F and 95 °F).

Charging will be suspended when the internal battery cell temperature is below +5 °C (41 °F) or above +45 °C (113 °F).

The overall charge capacity of a new battery will depend on its age and how it has been stored prior to operational use.

Use original packaging for storage and transportation of batteries. Storage of unpacked batteries can cause short circuit and heat generation.

Do not store near heating devices. Avoid direct sunlight. Storing at higher temperatures may reduce the electrical performance of the battery.

Storage of unpacked batteries can cause short circuit and heat generation.

To achieve best battery performance, store batteries in a cool dry place below +20 °C/68 °F. Store at temperatures listed below:

Up to 1 month:-20 °C to +45 °C (-4 °F to +113°F)

Up to 3 months.....-20 °C to +35 °C (-4 °F to +95 °F)

More than 3 months:-20 °C to +25 °C (-4 °F to +77°F)

Do NOT store fully charged batteries. After 6 (six) months storage, charge batteries for 36 minutes. Thereafter, recharge for 36 minutes every 6 months. Failure to store batteries correctly could lead to reduced capacity and reduced battery life and in extreme circumstances damage to or complete failure of the battery.

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Clean the connectors periodically using a cotton bud, a soft brush or a lint free antistatic soft cloth. Do not use liquids.

Care and cleaning

The battery charges whether the radio is powered on or off and terminates automatically when the battery is fully charged. During charging the tri-coloured LED on the radio indicates the charging progress: Refer to the radio user guide for further information.

Radio battery charging

Lower the radio into the cradle and push down lightly to fully engage with the facility socket at the bottom of the cradle.

The charging LED on the radio will illuminate when the radio is correctly seated on the facility connector.

Push the front of the radio towards the back of the cradle until the latch operates.

The car kit powers on automatically when the radio is inserted.

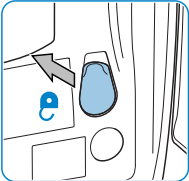
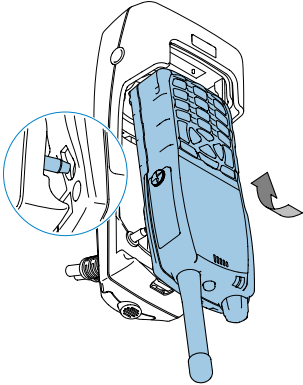
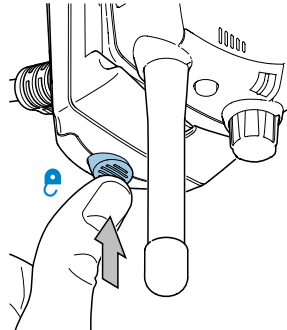
Note: To maintain reliable antenna operation, clean the cradle antenna connector regularly using an aerosol can of clean air.

Press the release button at the top of the cradle and remove the radio.

The car kit powers off automatically when the radio is removed.

When powered off, the car kit draws negligible power from the vehicle's battery.

Removing the radio from the cradle



Insert the radio into the cradle

Operation

The SC20 Car Kit provides secure retention of the SC20 Series radio within a cradle. The car kit features battery charging and optional external antenna connection using the Power + RF variant (300-01985).

Introduction

Thank you for purchasing the Sepura SC20 Car Kit. This product should reach you in good condition. Should you notice any defect or experience any problems with this product, please contact Sepura or your Service Provider immediately.

Parts List

- SC20 Car Kit Cradle variant:
 - Power Only (300-01958)
 - Power + RF (300-01985)
- User & Installation Guide (SPR-DOC-04304)
- Product Safety Guide (SPR-DOC-00170)

Installation guidelines and recommendations

THIS PRODUCT IS DESIGNED FOR USE WITH SEPURA SC20 SERIES RADIOS ONLY. DO NOT USE THIS PRODUCT WITH ANY OTHER RADIO.

The installation of this product must be performed by a suitably skilled and technical competent person such as a qualified vehicle installation technician.

READ ALL INSTRUCTIONS before attempting to install the product. If you do not understand the instructions STOP and contact your service provider or Sepura for assistance. This product can be installed into various makes and models of vehicles and therefore these instructions are not a definitive guide to installing the product. Always read the vehicle manufacturer's handbook before starting to install the product. Contact the vehicle manufacturer if you are not certain if it is safe to install this product.

CAUTION! This equipment is suitable for 12/24V negative earth vehicles only. Installation using other supply systems will damage the product.

CAUTION! 12/24V supply leads and antenna cables must be routed as far away as possible from gas or fuel lines. This reduces the risk to safety in the event of a leak.

CAUTION! Prolonged operation of the car kit with the vehicle engine powered OFF may drain the vehicle's battery. Disconnect the vehicle's battery before commencing installation.

CAUTION! Do not expose product to liquids or moisture.

Do not attempt to dismantle this product. Servicing and repairs to this product must be performed by trained service technicians at Sepura approved service centres. Unauthorised modifications could cause the product to become non-operational and will invalidate the product safety ratings and product warranty.

Ensure that the installation does not impede the normal operation of the vehicle, including the operation of any safety device, such as airbags and seatbelt tensioners.

Electronic control mechanisms within a vehicle can be affected by the use of RF energy such as ABS and transmission controls. Always refer to the vehicle manufacturer's instructions and technical information relating to electronic modules and their wiring harnesses before installing an RF wireless device into a vehicle.

Regulatory compliance

This installation should comply with local radio communications authorities and/or Health and Safety regulations. Installations in the UK must comply with the *FCS1362 CODE OF PRACTICE for the installation of mobile radio and related ancillary equipment in land-based vehicles* (see [http:// www.fcs.org.uk](http://www.fcs.org.uk)).

Location considerations

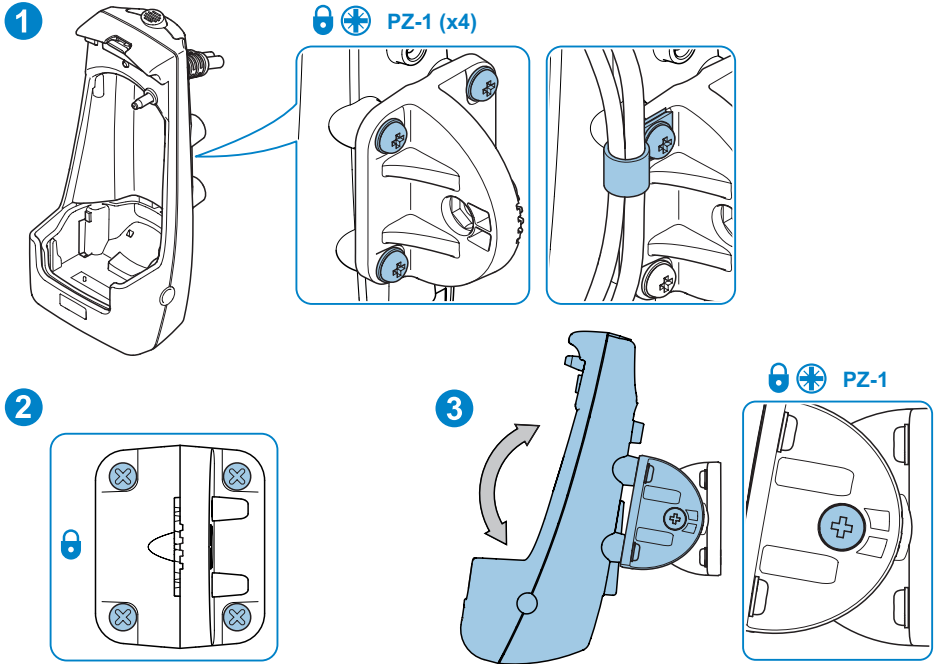
Do not install the product within the air bag deployment area. In the event of the air bag inflating, the radio could be propelled at great force potentially causing serious injury. The cradle should be positioned so that it does not obstruct or become at risk of damage from any occupant or carried items. The operator should have unrestricted access to the radio's controls and the display should be visible but not distracting whilst the operator is driving. The cradle must not prevent the operator from driving the vehicle safely.

Radio Software

For correct operation of the radio with this car kit, the radio must have radio software version SC1.5 or later installed.

Mounting the cradle

The cradle should be attached to the vehicle's interior in a convenient position using the AMPS mounting bracket supplied. Ensure fixing screws of an appropriate length are used (some installations may require different screws).



Troubleshooting

- Check that the radio functions correctly when installed and removed from the car kit.
- If the car kit or radio fails to function, check the following:
- The radio is properly engaged in the cradle.
 - The radio battery has charge (the radio requires battery power to transmit). Recharge the radio battery (or allow to charge in the cradle).
 - The in-line fuse to the vehicle battery is of the correct rating and the fuse holder is fitted correctly.
 - The vehicle battery has not discharged during installation.
 - The antenna and its connections are functional.

If the problem persists, contact your service provider or Sepura.

Installation

CAUTION! This product is designed for 12 and 24 volt negative earth systems.

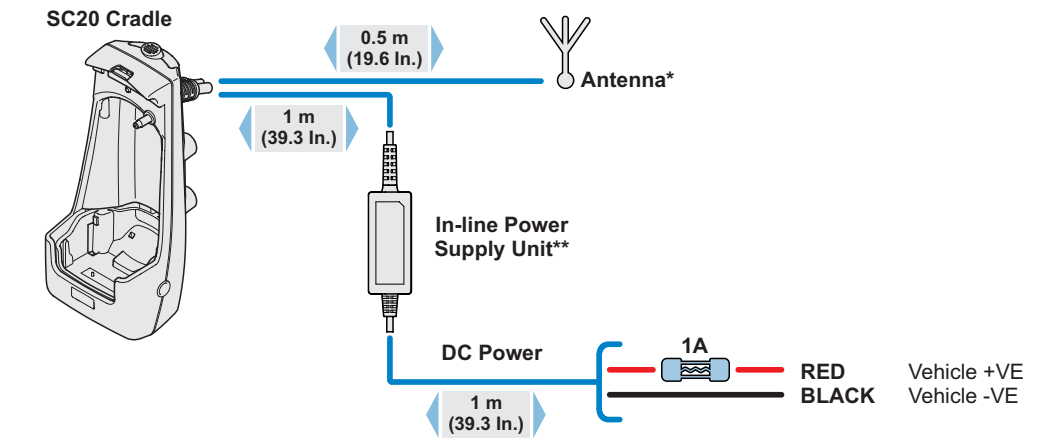
Cabling

CAUTION! All cabling should be hidden and not left loose. Ensure the cables do not rub or press against sharp edges. Cables must be routed with sufficient slack to eliminate the risk of strain damage on the cables or the connection joints. All connectors must be correctly seated and fully secured.

Details of the wiring of the vehicle harness is shown below:

Wire colour	Electrical Parameters	Fuse
RED	Vehicle positive (24V max)	1A
BLACK	Vehicle negative (vehicle chassis)	None

Connections and Wiring



*Power + RF (300-01985) version only
**For dimensions of the in-line power supply, refer to Technical Information on page 6.

Power Connection (red and black wires)

The positive power line must include a fuse as close as possible to the power source. A fuse and fuse holder are included in the installation kit. The negative power line must be connected close to the battery-to-vehicle-body connection (not directly to the battery) and must not include a fuse. It is recommended that the power cable runs are kept as short as possible. A splicing connector is also provided (if required). A fuse must always be fitted close to where the wire is connected.

Fuse Rating:

Positive supply 1A

The wired charger lead includes an integral power supply unit fitted to the cable. See the section "Technical Information" for dimension details.

Antenna Installation - Power + RF Variant Only

On Power + RF variant cradles (300-01985), an antenna must be installed. When the radio is inserted into the cradle the radio's antenna is disabled. Follow the manufacturer's instructions supplied with the antenna. Connect the antenna to the BNC socket on the flying lead from the cradle.

Technical Information

Input Voltage: 10.8 – 30V DC
Input Power: 10W
Input Current (no radio in cradle):<1.0mA
Output Voltage 9.5V DC
Ambient Temperature Range:-25 °C to +75 °C (-13 °F to +167 °F)
Storage Temperature Range:-40 °C to +85 °C (-40 °F to +185 °F)
In-Line Power Supply Unit Dimensions:.....66 x 28 x 22 mm (2.6 x 1.1 x 0.9 in.)

FCC Supplier's Declaration of Conformity (SDoC)

	SC20 Car Kit - Power - 300-01958
	SC20 Car Kit - Power + RF - 300-01985
FCC Compliance Statement 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.	
Responsible Party Americas Compliance consulting, LLC dba iCertifi FCC FRN: 0033399411 Address: 1001 SW Disk Drive, Suite 250, Bend, Oregon 97702 Contact Person: Paul Preston Tel: 866-885-4575 Email: fccagent@icertifi.com	

Waste Electrical and Electronic Equipment disposal information

This symbol on the product or its packaging indicates that this product must not be disposed of as household or commercial waste. Some countries have set up collection and recycling systems for waste electrical and electronic products. By ensuring that this product is disposed of correctly, you will help prevent potentially negative consequences for the environment and human health, and help conserve natural resources. Please dispose of your waste product according to your national and local regulations. Contact your service provider or Sepura for information on how to return this product for waste disposal.

Certified Antennas

The SC20 radios are certified for use with an external 7 dBi (max) TETRA antenna and integrated 2.5dBi Bluetooth and Wi-Fi antenna. Higher gain antennas shouldn't be used to ensure compliance with RF field strength limits. Minimum distances from radio to users are given in the following table:

Region	Occupational Minimum Distance
Canada	0.3 m
USA	0.3 m
EU / UK	0.3 m