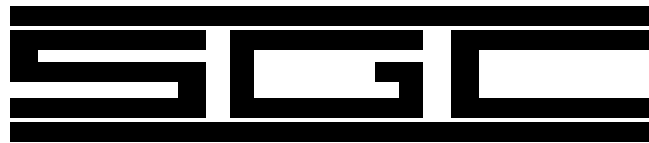


SG-2020 PortaPak

USER MANUAL

SGC catalog number: 05-32

Document number: N80100533•D



“No Compromise Communications”





SGC — The SSB People

SGC develops, manufactures, and sells high performance single sideband (SSB) communications equipment. Since 1971, the company has sold to the marine, military, aviation, and industrial markets world wide. Over these years, SGC has earned an outstanding reputation for product reliability and for service after sale.

The company keeps pace with equipment options, engineering developments, and design requirements. Its products are the most competitive in the entire long distance communication market. SGC equipment is presently being used by the United Nations for inter-communications in developing countries throughout the world. Many competitive racing vessels, as well as fishing boats, tugs, and commercial craft are equipped with SGC equipment. In fact, an SGC radiotelephone provided the only communications available on a past Polar expedition by the National Geographic Society.

SGC also supplies U.S. government agencies, several foreign governmental agencies, and major petroleum companies through Asia and latin America.

All SGC equipment is designed and manufactured in the USA. SGC has qualified people ready to provide technical information, assistance in selecting equipment, and recommendations for any installation.

SGC welcomes your call to discuss your SSB requirements.



SGC 2020 Staff



A. Contents:

Description

Schematic

Picture

B. Product description

The SG-2020 PortaPack is designed to provide a built-in portable power supply for SG-2020 radio transceiver. The PortaPack configuration allows the popular SG-2020 to be used in remote areas, and for backpack and mobile applications.

When used in mobile applications, PortaPack units can be loaded with either 10 "D" size ordinary dry cell batteries , or with 10 "D" size rechargeable batteries, such as nickel-cadmium (NiCad) cells.

Following are length of operation estimates when using dry cells and rechargeable batteries. Note that these times are approximate and will depend on the charge of the battery as well as other factors.

Mode	Dry Cell 12 AH	Rechargeable 4 AH
Receive	20 to 30 hrs	4 to 10 hrs
Receive/ transmit	6 to 10 hours	2 to 5 hours

Note: Rx/Tx ratio is 1/10 at 5 Watts transmit power output.



Depending on the transmit/receive ratio specific to each field application, the PortaPack will, in most cases, provide continuous radio communication operations. An additional feature of the PortaPack is a connector, provided with the system, which allows rechargeable batteries to be charged while the unit is in operation.

Batteries and a charger are not supplied with this product.

A battery charger for the PortaPack can be purchased from SGC. Any other charger used for this purpose should meet the following characteristics:

- DC out: 15 V
- Current out: Minimum 1.0 Amps
- PortaPack's charging connector has the central pin connected to "+" and the outside pin to chassis. A charger must match this configuration.

B. Test for proper operation with battery system.

This is a quick test to determine that the system is operational.

Requirements: 10 'D' batteries either dry cell or rechargeable NiCad (NOT included)

1. Loosen the three thumb screws on the battery container.
2. Slide and remove the locking plate from the container.
3. Lift the top battery PCB / Spring assembly up and to the side of the container. Note that this assembly is attached to the container.
4. Install 10 'D' size batteries. These may be NiCad or dry cell.
NOTE: DO NOT MIX DRY CELL WITH NICAD.
5. Replace the top PCB assembly (from step 3).
6. Replace the locking plate (from step 2).
7. Tighten the three thumb screws.
8. Connect the antenna cable from the battery container to the



- radio antenna connector.
9. Connect the power cable from the battery container to the radio power connector.
 10. Turn on the radio.
 11. Press and hold the 'CMD' and 'SPEED' buttons to activate the Voltmeter Display.
 12. The radio LCD should display:
 - 16 to 18 volts if you are using new dry cells
 - or
 - 12.8 to 14 volts for fully charged NiCads.

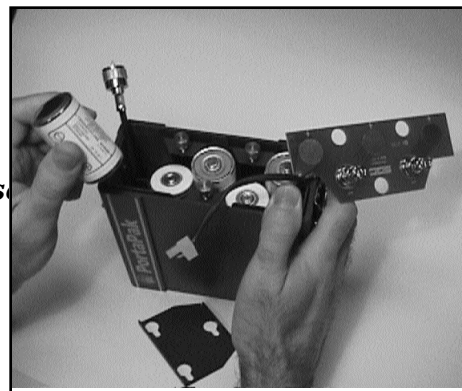
End of test

NOTE: Replacing the locking plate may be difficult; the unit has been designed with a tight fit so that the batteries are not subject to movement. This provides reliable and durable battery contact.



Battery Case

Placing batteries into the case





This is the correct way to store the microphone

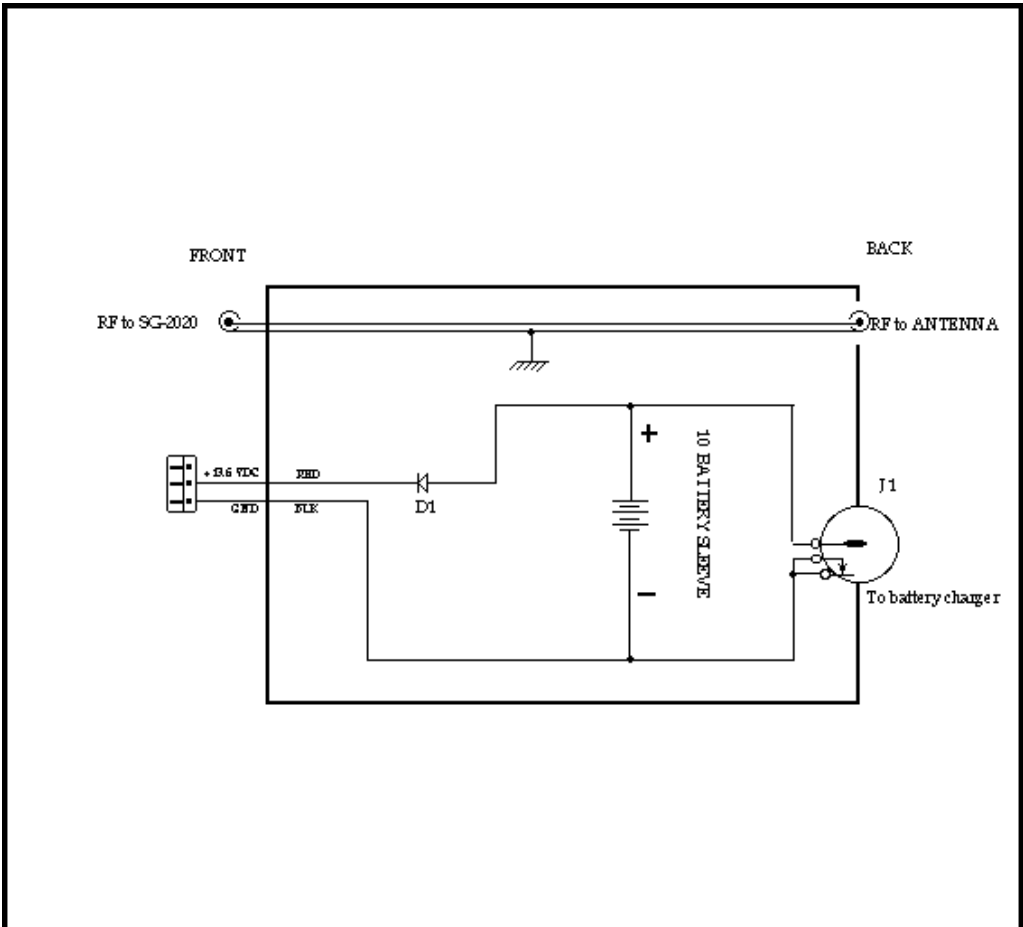
The PortaPak has an adjustable nylon strap, and can be easily carried over the shoulder or ...



... it can also be carried by hand.

Professional, high quality stainless steel latches provide reliable and secure connection of the battery pack and front cover. The cover provides protection of the front of the radio and storage for the microphone.





NOTE 1. Use charger only with rechargeable batteries

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