BSC-5000 Instruction Manual

Introduction

The **BSC-5000** allows base station operation of the Vertex Standard **VX-4000/5500/6000** Mobile Transceivers.

Supplied Items

You should find the following items shipped with the **BSC-5000**:

- AC Fuse 8 A (100V Type) or 6.3 A (200V Type) ..... 1 pc
- DC Fuse 30A ..... 2 pcs
- 2P DC Cable (VX-4000/-5500)* ..... 1 pc
- 4P DC Cable (VX-6000) ..... 1 pc
- AC Cable ..... 1 pc
- MIC Cable ..... 1 pc
- Speaker Cable* ..... 1 pc
- DSUB 25-pin Accessory Cable* ..... 1 pc
- Mounting Screw ..... 4 pcs

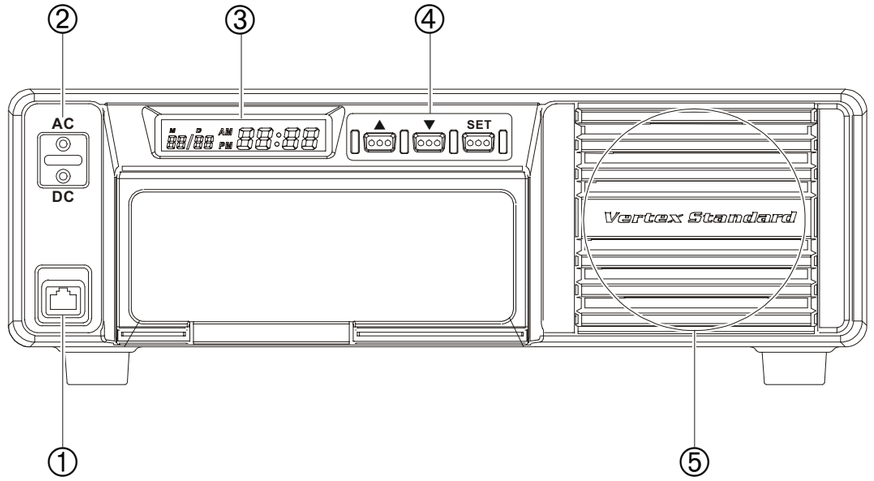
**: One end of each of these cables is connected (at the factory) to the BSC-5000.*

If any items are damaged or missing, contact your dealer at once.

Options

MD-11B8J	Desktop Microphone
FAN-1	Cooling Fan
CT-103	VEGA Tone-Remote Interface Cable SET

Front Panel Controls & Connectors



① MIC jack

Connect the microphone plug to this jack.

② LED Indicators

AC - This LED glows green during AC operation.

DC - This LED glows orange during Backup DC operation.

③ Clock Display

The time is displayed here, in either 12- or 24-hour format.

④ Clock Function Key

▲ - This increments the digit upward.

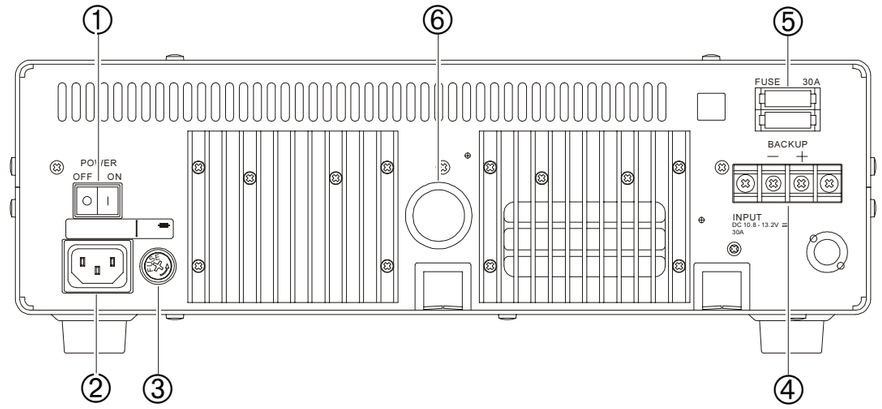
▼ - This increments the digit downward.

SET - This sets time.

⑤ Speaker

The internal speaker is located here.

Rear Panel Connectors



① POWER(O/I) Switch

This is the main power switch of the **BSC-5000**.

② AC

This receptacle accepts the AC power cord, which should be connected to the AC Main supply or wall outlet. The AC line voltage must match that for which the **BSC-5000** is wired.

③ Circuit Protection Fuse (Main)

An 8-Amp (6.3-Amp: 200V Type) fuse, for the "Mains" power source, is installed here.

④ Backup Power Source Terminals

The terminal posts accept 10.8 ~ 13.2 V DC for operating the **BSC-5000** from a battery or other DC source. A battery rated for 12 volts, 55 Ah (minimum) is recommended for short-term emergency /backup operation.

⑤ Circuit Protection Fuse (Backup)

Two 30-Amp blade fuses, for the "Backup" power sources, are installed here.

⑥ Antenna

Connect the 50-Ohm coaxial feedline from the antenna through this port to the transceiver's Antenna jack.

Clock Set

The **BSC-5000** includes a clock with a calendar function. The clock may be set up for either 12-hour or 24-hour display format.

To set the clock:

1. Press the [SET] key to enter the Set mode.
2. Press the [▲] or [▼] key to select the "**month**" setting.
3. Press the [SET] key, then press the [▲] or [▼] key to select the "**day**" setting.
4. Press the [SET] key, then press the [▲] or [▼] key to select the "**hour**" setting.
5. Press the [SET] key, then press the [▲] or [▼] key to select the "**minute**" setting.
6. Press the [SET] key, then press the [▲] or [▼] key to select the "**12H**" or "**24H**" setting.
7. Press the [SET] key to start the clock from "00" seconds.

There is no leap year function for this clock, so please reset the date manually after February 29th during leap years.

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Installation

AC Power Connection / Voltage Confirmation

The power supply in the BSC-5000 is capable of operation from 100 ~ 235 VAC at 50 or 60 Hz. The power supply in the BSC-5000 does not require any transformer re-wiring, nor any changing of a switch position; the power supply will operate from either 220 or 117 Volt line voltages without configuration changes. This should be indicated by a label near the AC jack on the rear panel. If no label is present, or if the AC voltage on the label is different from the local AC line voltage, please examine the fuse which is located near the AC jack for 100-117 V, use an 8 A fuse; for 200-240 V, use a 6.3 A fuse.

Backup Power Supply

For uninterrupted operation during power failures, a 12 Volt rechargeble type battery (55-Ah or more recommended) may be connected to the BACKUP terminal posts on the rear panel. When AC power is interrupted, the automatic power control circuit will automatically switch the **BSC-5000** to the backup battery, and operation will not be interrupted.

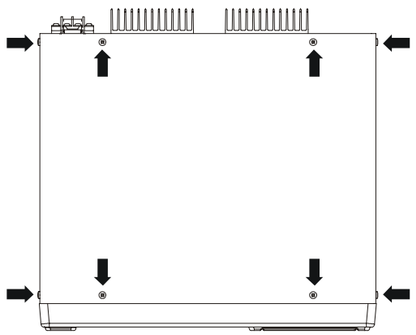
After prolonged operation from the battery, it should be disconnected from the **BSC-5000** and recharged separately before reconnecting, as the trickle charge is not sufficient for recharging a completely discharged battery.

Never reapply AC power to the BSC-5000 with a discharged battery connected, as the DC start-up current can damage the BSC-5000 and battery.

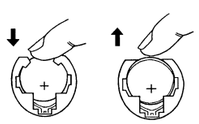
Lithium Battery Replacement

The **BSC-5000**'s clock is run by a lithium battery. When the display becomes weak or clock operation ceases, it is time to replace the battery. The 3-Volt Lithium battery (P/N Q9000564) is located on the top circuit board (RELAY Unit) of the **BSC-5000**.

1. Remove the 8 screws affixing the top cover, then remove the top cover. Using your finger, slide the battery inward (you will feel slight pressure by the mounting spring) then slightly pry it up and outward so that it ejects freely through the slots in the battery holder.



2. Carefully note the battery polarity; the positive (+) side (which includes the battery model number) must be facing up. Install the replacement battery with the same polarity as when you removed it.

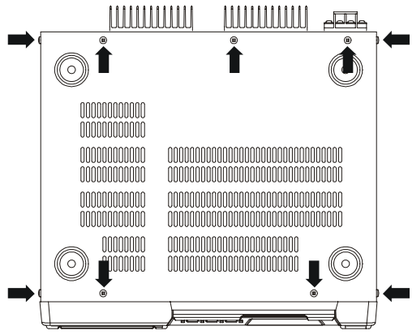


The Lithium Battery must be recycled or disposed of properly.

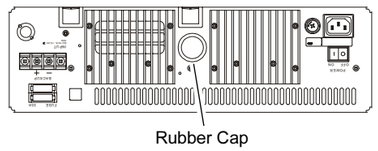
Transceiver Installation

The **VX-4000/5500/6000** Mobile transceivers are all compatible with the **BSC-5000**. Installation is simple and straightforward.

1. Remove the 17 screws affixing the top and bottom covers of the **BSC-5000**, then remove the covers.

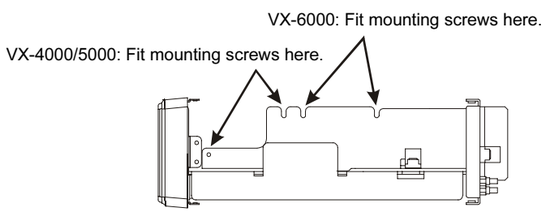


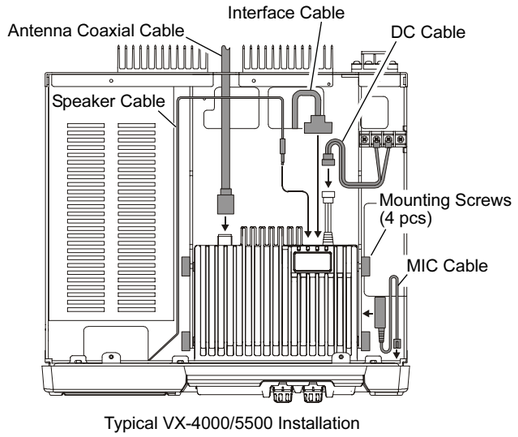
2. Turn the **BSC-5000** upside down.
3. Use a sharp knife to make an "X" cut in the rubber cap, so as to allow insertion of the antenna's coaxial cable.



4. Install the transceiver into the compartment on the bottom side of the **BSC-5000**, using the four supplied mounting screws. Then connect the MIC Cable, Speaker Cable, DC Cable, DSUB 25-pin Accessory Cable, and Antenna Coaxial Cable to the transceiver.

Important Note: When installing the VX-6000 into the BSC-5000, be careful to utilize the correct mounting screw locations (see illustration below). Tighten the screws using pliers when installing a VX-6000.
Also, when installing the VX-6000, be sure to replace the 2-pin DC cable with the supplied 4-pin type.





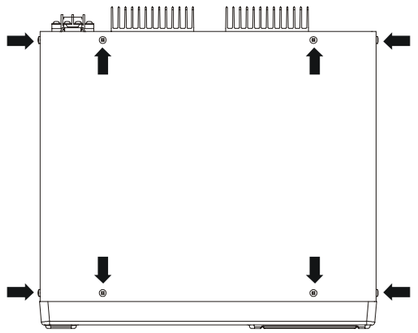
Typical VX-4000/5500 Installation

5. Transceiver installation is now complete. Replace the top and bottom covers.

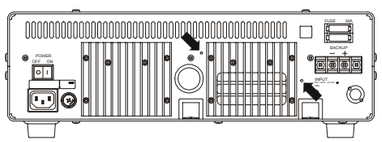
Option Installation

Cooling Fan (FAN-1) Installation

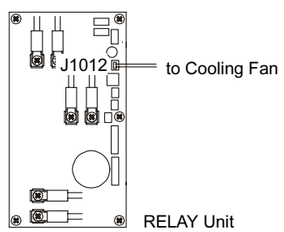
1. Remove the 8 screws affixing the top cover of **BSC-5000**, then remove the top cover.



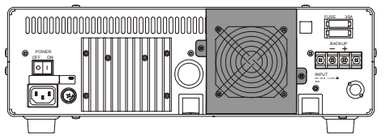
2. Pass the Cooling Fan's cable through the ventilation slot, and connect it to the 2-pin jack (J1012) on the RELAY Unit.



3. Mount the Cooling Fan to the rear panel of the **BSC-5000** using the supplied screws.

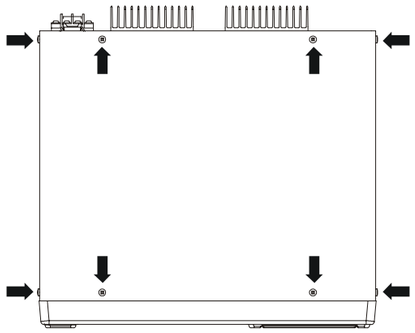


4. Cooling Fan installation is now complete. Replace the top cover.

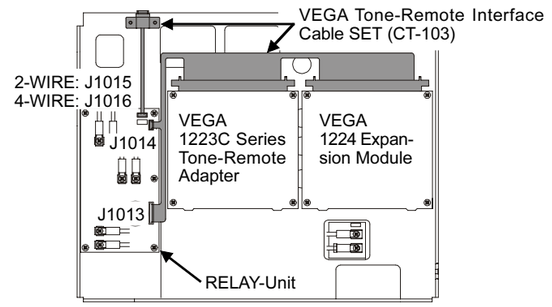


VEGA Tone-Remote Adapter Installation

1. Remove the 8 screws affixing the top cover of **BSC-5000**, then remove the top cover.



2. Remove the panel from the VEGA 1223C Series Tone-Remote Adapter and the VEGA 1224 Expansion Module.
3. Connect the VEGA 1223C Series Tone-Remote Adapter to the Edge Connector which has the 5-pin Connector Cable, then connect the VEGA 1224 Expansion Module to the other Edge Connector.
4. Mount the VEGA 1223C Series Tone-Remote Adapter and VEGA 1224 Expansion Module onto the chassis of the **BSC-500**0, using the eight screws supplied with the CT-103.
5. Connect the 5-pin Connector Cable to J1014 on the RELAY Unit, and connect the 12-pin Connector to J1013 on the RELAY Unit.



6. Mount the Modular Jack on the rear panel of the **BSC-5000** using the two supplied screws. You may choose either a 2-wire or 4-wire Modular Jack.
7. VEGA Tone-Remote Adapter installation is now complete. Replace the top cover.