

**INTERTEK TESTING SERVICES**

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**EXHIBIT 11  
INSTRUCTION MANUAL**

## INTERTEK TESTING SERVICES

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### 11.0 **Instruction Manual**

Attached is a preliminary copy of the Instruction Manual.

Please note that the required FCC Information to the User can be found at the front of this manual.

This manual will be provided to the end-user with each unit sold/leased in the United States.

Cat No. 21-1702

Please read before using this equipment  
40- Channel CB Mobile Transceiver

### Features

Your RadioShack TRC-\*\*\* 40-Channel CB Mobile Transceiver is a breakthrough in CB design technology.

Your CB also has these advanced features:

**Phase-Locked Loop (PLL) Frequency Synthesizer**-provides highly accurate and stable tuning.

**Two Built Ceramic Filters**-ensure superior channel selectivity and freedom from adjacent channel interference.

**Automatic Modulation Control**-prevents the transmitter signal from over-modulating and distorting.

**Automatic Noise Limiter**-reduces impulse-type noise while receiving.

**Universal Mounting Bracket**-lets you mount your CB securely in your vehicle or on a table or shelf in your home.

Note: To use this CB, you must connect a mobile or base station antenna. Your local RadioShack store has a widevariety of antennas. For more information, see "Connecting an antenna".

We recommend you record your CB's serial number here. The number is on the CB's back panel.

### FCC INFORMATION

The Federal Communications Commission ( FCC ) does not require you to have a license to operate this CB radio. However, you must know part 95 of FCC Rules. It explains the proper operation of a Class D citizen's band transceiver. We enclosed a copy of Part 95 with your CB radio.

Warning: Do not open the CB radio to make any internal adjustments. A CB radio is set up to an assigned frequency. It is against the law to alter or adjust the settings inside the unit to transmit a regulated signal on exceed these limitations.  
Any adjustments to a CB radio must be made by a qualified technician using the proper test equipment.

To be safe and sure:

- . Never open your CB radio's case.
- . Never change or replace anything in your CB radio.

Your CB radio might cause TV or radio interference even when it is operating properly. To is causing the interference, turn off your CB radio. If the interference goes away, your CB is determine whether your CB radio causing it. Try to eliminate the interference by:

- . Moving your CB radio away from the receiver
- . Contacting your local RadioShack store for help

If you can not eliminate the interference, the FCC requires that you stop using your CB radio.

This device complies with Part 95 of FCC Rules. Operation is subject to the following two conditions:

- 1) this device may not cause harmful interference
- (2) this device must accept any interference received, including interference that may cause undesired operation.

### Attaching the Microphone Holder

You can connect the microphone holder to either side of the transceiver or to another location in your vehicle. To attach the holder to either side of the transceiver, secure the holder to the side using the supplied screws and lock washers. To attach the holder to another location in the vehicle, such as dashboard, follow these steps:

1. Using the holder as a template, mark the positions for the mounting screw holes at the desired location.
2. At each mark position, drill a hole slightly smaller than the supplied mounting screws.
3. Attach the holder at the mounting location using the supplied 3mm machine screws, spring washers, plain washers and nuts.

**Note:** If you can not reach behind the mounting surface to attach the nuts on the machine screws, use the supplied 3mm plain washers and self-tapping screws.

### Mounting the transceiver

The most common mounting location for this CB is under a vehicle's dashboard. However, if you use the TRC-\*\*\* as a base station, you can place it on a desk, shelf, or table.

If you are mounting the CB in a vehicle, choose a location where:

- . You can easily reach the CB
- . Wires and cables are clear of the vehicle's pedals or other moving parts.
- . The CB is not directly in front of heating vents.
- . All wires and cables can reach their connection point.

**Caution:** If you use the CB in a vehicle, mount it securely to avoid damage to the CB or vehicle or injury to anyone in the vehicle during sudden starts or stops.

Follow these steps to mount the CB using the supplied hardware.

1. Using the mounting bracket as a template, mark the positions for the screw holes on the mounting surface.

2. In each marked location, drill a hole slightly smaller than the supplied mounting screws.

**Caution:** Be careful not to drill into objects behind the mounting surface.

3. Mount the bracket to the mounting surface with the supplied 6mm bolt, spring washers, plain washers, and nuts.

**Note:** If you cannot reach behind the mounting surface to attach the nuts on the bolts, use the supplied 6mm self-tapping screws and plain washers to secure the bracket.

4. Attach the CB to the mounting bracket using the supplied rubber washers and mounting knobs.

### Connecting an antenna

There are many different types of CB antennas for mobile CBs. Each type has its own benefits, so, choose the one that meets your needs. Your local RadioShack store sells a wide variety of antennas.

**Note:** If you are using a CB as a base station, see "Using the transceiver as a base station".

When you choose an antenna, keep in mind that, for the best performance, you should mount the antenna:

- . As high as possible on the vehicle

- . As far as possible from source of electrical noise
- . Vertically

Once you choose an antenna , follow its mounting instructions. Then route the cable to the transceiver and connect the cable to the ANT jack on the back of the transceiver.

#### **Cautions:**

- . Avoid routing the cable next to sharp edges or moving parts, which might damage the cable.
- . Do not run the cable next to power cables or other radio antenna cables.
- . Do not run the cable through the engine compartment or other areas that produce extreme heat.

To achieve your radio's maximum range, adjust the antenna's Standing Wave Ratio ( SWR) using an SWR meter.

Follow the instructions supplied with the SWR meter and antenna to adjust your antenna's SWR to the lowest possible value. SWR values of 2:1 are generally acceptable, with readings of 1.5:1 or lower being more desirable.

#### **Connecting the microphone**

1. Press the tab on the side of the supplied microphone's plug and insert the plug into the microphone jack on the side of the transceiver. Be sure the tab is aligned with the jack's notch.
2. Slide the microphone onto the microphone holder.

Caution: To disconnect the microphone from the transceiver, press the tab on the side of the plug. Then pull out the plug. Never pull on the microphone cable.

#### **Using vehicle battery power**

Follow these steps to connect the transceiver to vehicle battery power.

1. Connect the red wire ( with inline fuse holder) on the back of the transceiver to a point in your vehicle's fuse block that have power only when the ignition is in the ACC or ON position.
2. Connect the black wire to a metal part of the vehicle's frame.

Caution: Do not connect the black wire to a non-metallic part, or to any part insulated from the vehicle's chassis by non-metallic part.

#### **Using the transceiver as a base station**

Although this transceiver is designed mainly for mobile use, you can also use it as a base station with an AC power source.

For base station installation, you need these items:

- . 12-V DC power supply that can supply at least 1.5amps.

Caution: Most 12-V DC power supplies plug into a standard AC outlet to produce DC power.

Before connect you CB to a 12-V DC power, read and follow the instructions include the power supply.

- . Base station antenna
- . Coaxial antenna cable and connector

Note: Your local Radio Shack store carries coaxial antenna cable and connectors.

Follow these steps to install the CB as a base station.

1. Mount the base station antenna as described in its owner's manual.

Warning: Use extreme caution when you install or remove a base station CB antenna. If the antenna starts to fall, let it go. It could contact overhead power lines. If the antenna touches a power line, contact with the antenna , mast cable, or guy wire can cause electrocution and death. call the power company to remove the antenna . Do not attempt to do so yourself.

2. Connect the antenna to the ANT jack on the back of the CB.

3. Connect the transceiver's black power wire to the negative (-) terminal on the DC power supply.
4. Connect the transceiver's red wire to the positive terminal on the DC power supply.
5. Connect the DC power supply to a standard AC outlet.

Caution: To prevent damage to the CB, be sure you connect an antenna and the microphone before you use CB. Before you use your CB, you should know how to use it effectively and courteously. "Operational Hints" contains information that will help you get more enjoyment from your CB.

#### Receiving transmissions and adjusting squelch

1. Turn SQUELCH fully counterclockwise.
2. Turn on the transceiver by turning VOLUME clockwise until it clicks. The channel display lights and the channel appears.
3. Set OUT/CH/CH19 to OUT to select a channel other than emergency channels.
4. Rotate the channel selector until the display shows the desired channel.
5. Adjust VOLUME to a comfortable listening level.
6. To cut background noise between transmissions, wait until there is no signal, then slowly turn SQUELCH clockwise until the background noise stops.  
Note: To receive very weak signals, turn SQUELCH counterclockwise, you hear noise between transmissions, but you also hear weak transmissions.
7. To turn off the CB, turn VOLUME counterclockwise until you hear it click. The display and indicator turn off.

#### Transmitting

Note: We recommend you try receiving before you transmit.

1. Follow 1-5 steps in "Receiving Transmissions and Adjusting Squelch"
2. To transmit, press the talk button on the microphone. Hold the microphone 2-3 inches from your mouth and speak in a normal tone of voice, then release the talk button.
3. To turn off the CB, turn VOLUME counterclockwise until you hear it click. The display and indicator turn off.