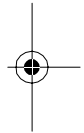
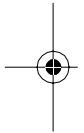


Cat. No. 21-1573  
**OWNER'S MANUAL**

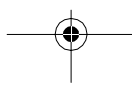
Please read before using this equipment.

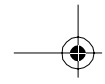
# TRC-445

## Deluxe 40-Channel Mobile CB Radio with Weather Alert



**RadioShack®**





## FEATURES

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Your RadioShack TRC-445 Deluxe 40-Channel Mobile CB Radio with Weather Alert is a high performance CB that also lets you tune to local and national weather service broadcasts. This CB is perfect for recreational, business, or emergency use. You can call other people who have CBs at home, in their vehicles, or at camp sites. You can also connect optional equipment to your CB, such as an external speaker to create a PA system, or a DC power supply and base station antenna to set up a base station in your home.

Your CB has these features:

**7-Channel WX Band Receiver** — lets you tune to seven national weather service frequencies so you can hear local weather conditions and forecasts.

**Built-In SWR Meter** — helps you tune your antenna system to optimize your CB's performance.

**PLL (Phase-Locked Loop) Frequency Synthesizer** — provides reliable and exact tuning using a precise frequency reference crystal.

**Two Ceramic Filters** — provide superior channel selectivity and prevent adjacent-channel interference.

**Hysteresis Squelch Circuit** — compensates for fading signals and eliminates signal chopping during reception.

**Rotary Tuning Control** — provides maximum convenience when selecting channels.

**LED Channel Display** — lets you see the selected channel (1–40).

**Last-Channel Memory** — the radio “remembers” the channel you previously tuned to when you turn on the radio.

**RF Gain Control** — lets you adjust reception to match the strength of the received signal.

**Lighted SWR/RF/Signal Meter** — lets you see the incoming and outgoing signal strength as well as the standing wave ratio (SWR).

**Noise Blanking** — lets you reduce the noise sometimes caused by nearby electrical equipment such as motors or automotive ignition systems.

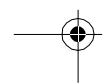
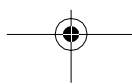
**Adjustable Brightness** — lets you set the meter's backlight and the LED channel display to dim or bright.

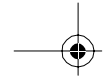
**CH-9/NOR/CH-19 Switch** — lets you quickly tune to Channel 9 or Channel 19 in an emergency without adjusting the rotary tuning control.

**CB/WX/PA Switch** — lets you quickly select the normal CB function, weather mode, or public address mode.

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**WX/Alert Indicator** — shows the CB is ready to receive a weather alert signal.

**RX/TX Indicator** — shows whether the CB is transmitting or receiving.

**S/RF/SWR/CAL Switch** — lets you quickly select the display for the RF/signal meter (radio input/output signal power strength, standing wave ratio of the antenna, or SWR calibration).

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

**Note:** To use this CB, you need a mobile or base station antenna. Your local RadioShack store has a wide variety of antennas. For more information, see "Installing an Antenna" on Page 6.

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

Serial Number \_\_\_\_\_

## FCC INFORMATION

The Federal Communications Commission (FCC) does not require you to have a license to operate this CB. However, the FCC does require that you read and know Part 95 of *FCC Rules*. These rules apply to the operation of a Class D CB. We have provided a copy of these regulations with your CB.

**Warning:** Do not open your CB to make any internal adjustments. Any internal adjustments can be made only by an authorized service technician.

Internal adjustments and/or modifications can lead to illegal operation as defined by Part 95 of *FCC Rules*. Such illegal operation can lead to very serious consequences.

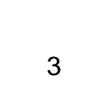
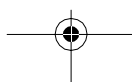
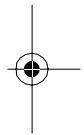
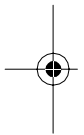
To be safe and sure:

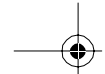
- Never open your CB's case.
- Never modify your CB.

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

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

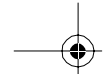
If you cannot eliminate the interference, the FCC requires that you stop using your CB.





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## INSTALLATION



### MOUNTING THE MICROPHONE HOLDER

Using a Phillips screwdriver and the supplied screws and washers, attach the supplied microphone holder to the CB's left or right side either horizontally or vertically.

Illustration  
Star Lock Washer (2)  
Small Screws (2)

#### Cautions:

- If you use the TRC-445 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.
- Do not mount the CB where it could damage or interfere with the proper operation of any passive restraint safety device (an air bag or seat belt).

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

1. Using the slots in the mounting bracket as a template, mark the positions for the screw holes.
2. In each marked location, drill a hole slightly smaller than the supplied mounting screws.

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

3. Using a Phillips screwdriver, attach the mounting bracket to the mounting surface with the large mounting screws and star lock washers.

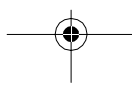
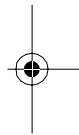
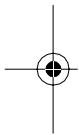
Illustration  
Star Lock Washer (2)  
Mounting Screws (3)

### MOUNTING THE TRC-445

The most common mounting location for this CB is under a vehicle's dashboard. However, if you use the TRC-445 as a base station, you can place it on a desk, shelf, or table (see "Using the CB as a Base Station" on Page 8).

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 points.





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

Illustration  
 Mounting Knobs (2)  
 Rubber Washers (2)

To disconnect the microphone, unscrew the locking nut and gently pull out the microphone plug.

**Caution:** Never pull on the microphone cable.

## CONNECTING THE MICROPHONE

1. Align the slot on top of the microphone's plug with the ridge inside the **MIC** jack. Then fully insert the plug into the jack.

Illustration

2. Turn the plug's locking nut clockwise to tighten it.
3. Slide the microphone onto the microphone holder.

Illustration

## INSTALLING AN ANTENNA

**Caution:** To prevent damage to your CB, you must connect an antenna to it before you operate it.

### Selecting an Antenna

When deciding on an antenna and its location, consider these points:

- The location of the antenna should be as high as possible.
- The antenna and antenna cable should be as far as possible from sources of electrical noise (ignition systems, gauges, and so on).

Your local RadioShack store sells a variety of CB antennas for both mobile and base-station use. Choose the one that best meets your needs.



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## Connecting an Antenna

Once you choose an antenna, follow the mounting instructions supplied with the antenna. Route the antenna cable to the CB, then screw the cable into the **ANTENNA** jack on the back of the CB.

Follow these steps to power the CB from your vehicle's battery.

Illustration  
Red Wire  
Orange Wire  
Black Wire

Illustration

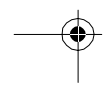
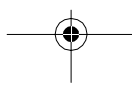
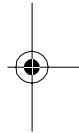
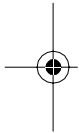
### Cautions:

- Do not run the cable over sharp edges or moving parts that might damage it.
- Do not run the cable next to power cables or other CB antenna cables.
- Do not run the cable through a vehicle's engine compartment or other areas that produce extreme heat.

## USING VEHICLE BATTERY POWER

You can power this CB from your vehicle's battery or from standard AC power with an optional DC power supply. For information on using AC power, see "Using the CB as a Base Station."

1. Plug the single connector end of the power cord into the **POWER 13.8V DC** jack on the CB's back panel.
2. Connect the black wire to your vehicle battery's negative (-) terminal or to a metal part of the vehicle's frame that is not insulated from the frame by a plastic part.
3. Connect the red wire, with in-line fuse, to a source of voltage that turns on and off with the ignition switch, such as a spare accessory terminal in your vehicle's fuse box. This prevents the battery from being drained if you leave the CB on when you turn off the ignition.
4. Connect the orange wire, with in-line fuse, to a source of voltage that supplies constant positive (+) power, or directly to your vehicle's positive (+) battery terminal. This enables the radio to "remember" the last channel you tuned to when you turn the radio back on.



## USING THE CB AS A BASE STATION

Although this CB is designed for mobile use, you can also use it as a base station. For base-station installation, you need the following items.

- 12-volt DC power supply (such as Cat. No. 22-504)

**Caution:** Most 12-volt DC power supplies plug into a standard AC outlet to produce DC power. Before connecting your CB to a 12-volt DC power supply, read and follow the instructions included with the power supply.

- Base station antenna (such as Cat. No. 21-921)
- Coaxial antenna cable and connectors

**Note:** Your local RadioShack store carries coaxial antenna cable and connectors.

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

Illustration  
Red Wire  
Orange Wire  
Black Wire

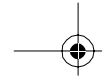
1. Mount the base station antenna as described in its owner's manual.

**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 the power line, contact with the antenna, mast, cable, or guy wires can cause electrocution and death. Call the power company to remove the antenna. DO NOT attempt to do so yourself.

2. Route the antenna cable to the CB, then connect the cable to the **ANTENNA** jack on the back of the CB.
3. Plug the single connector end of the power cord into the **POWER 13.8V** DC jack on the CB's back panel.
4. Connect the black wire to the DC power supply's negative (-) terminal.
5. Connect the red wire and orange wire, with in-line fuses, to the DC power supply's positive(+) terminal.

**Note:** When you turn off the DC power supply, the CB "remembers" the last channel you tuned for only a few minutes. After that, when you turn on the DC power supply again, the radio automatically selects Channel 9.





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## CONNECTING OPTIONAL EXTERNAL SPEAKERS

You can connect your CB to an external CB speaker and a public-address speaker.

**Note:** When you connect an external or PA speaker, the CB's internal speaker automatically disconnects.

### External CB Speaker

To connect an external CB speaker, use an 8-ohm speaker capable of handling 3–10 watts of power (such as Cat. No. 21-549). Simply plug the speaker cable's  $\frac{1}{8}$ -inch plug into the CB's **EXT SP** jack.

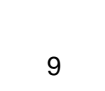
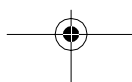
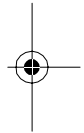
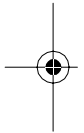
Illustration

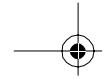
### Public Address Speaker

To connect a PA speaker to the CB, use an 8-ohm speaker cable capable of handling 5 or more watts of power (such as Cat. No. 40-1235 or 40-1236). Plug the speaker cable's  $\frac{1}{8}$ -inch plug into the CB's **PA SP** jack.

Illustration

To use the CB as a PA system, see "Using the Public Address Function" on Page 15.





## ADJUSTING THE STANDING WAVE RATIO

Most antennas are factory tuned. However, you can usually improve radio performance by tuning your antenna system to the CB's RF output power using the SWR meter on this radio.

Once you have installed the antenna according to its instructions, follow these steps to adjust the standing wave ratio to your equipment.

**Note:** You cannot change the SWR on some mobile and base-station antennas.

1. Turn on the CB by turning **OFF/VOLUME** clockwise until it clicks.

Illustration  
Figure 13

2. Set **S/RF/SWR/CAL** to **CAL**.

Illustration  
Figure 13

3. Hold down the microphone's talk button and adjust **SWR CAL** so the SWR/RF/signal meter's needle points to **CALt** (on the top SWR scale).

Illustration  
Figure 13 and  
Figure 19

4. Release the microphone's talk button.
5. Set **S/RF/SWR/CAL** to **SWR**.
6. Press the microphone's talk button again and read the meter's needle on the top SWR scale for the antenna's actual SWR measurement. Refer to the Standing Wave Ratio Chart on Page 11 to interpret the SWR meter readings.

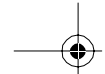
The SWR is keyed to the actual frequency of the RF signal transmitted. Therefore, you will get a different SWR reading from one CB channel to another. Almost all the CB transmissions usually fall within an acceptable range. However, for optimum radio performance, we recommend you "fine tune" the antenna's system to the most commonly used CB channel. If you have no particular channel preference, set your antenna's SWR for maximum performance on Channel 19.

## STANDING WAVE RATIO CHART

The ideal standing wave ratio (SWR) reading is a 1:1 ratio, or a meter reading of 1 on the SWR meter's top scale (which you can usually get only in laboratory test conditions). A 1.5:1 to 2:1 SWR ratio is excellent for most mobile CB antenna applications. This chart explains the different readings you might see.

Standing Wave Ratio Chart		
Ratios	Rating	Description
1:1 to 1.5:1	Superior	Perfect match between the antenna/cable system and the CB's RF output power.
1.5:1 to 2:1	Excellent	The antenna/cable system are an outstanding match with this CB transmitter's RF output power. Ideal for most CB installations.
2:1 to 3:1	Good	The antenna/cable system with this CB transmitter will perform to specifications under most normal conditions.
Higher than 3:1	Inefficient	Requires inspection of antenna system's mounting hardware or ground, or adjustment/replacement.

**Note:** Prolonged exposure to the elements (salt spray, humidity, corrosion, and so on) or vehicle vibration can cause degradation in antenna performance and a rise in the SWR meter's normal reading. Once a month, or anytime the SWR reading is greater than 3, check the condition of the antenna and its coaxial cable, RF electrical connections, and so on.



## OPERATION

Before you start using your CB, you should know how to use it effectively and courteously. "CB Operation Tips" contains information that will help you get more enjoyment from using your CB.

**Caution:** Do not attempt to use your CB without first connecting an antenna.

### TURNING ON THE CB AND RECEIVING TRANSMISSIONS

1. Turn **SQUELCH** fully counterclockwise.

Illustration

2. Set **CH-9/NOR/CH-19** to **NOR**, **S/R/F/SWR/CAL** to **S/R/F** (send and receive), and **CB/WX/PA** to **CB**.

Illustration

3. To turn on the CB, turn **OFF/VOLUME** clockwise until it clicks and continue turning until you hear a hissing sound. The **TX/RX** indicator lights, the CB displays the last-tuned channel number, and the **SWR/R/F** signal meter lights.

**Note:** If necessary, set **DIM/BRT** to **DIM** to dim the meter and channel display, or to **BRT** to brighten them.

Illustration

4. Turn **SQUELCH** clockwise until the hissing sound stops.

**Note:** If the CB picks up unwanted, partial or very weak transmissions, turn **SQUELCH** clockwise to decrease the CB's sensitivity to these signals. Turn **SQUELCH** counterclockwise if you want to listen to a weak or distant station.

5. Adjust **OFF/VOLUME** to a comfortable listening level.

6. To manually tune channels, turn the tuning control at the right end of the control panel to select a channel. The channel number appears on the display, and the SWR/RF/signal meter shows the signal strength.

Illustration

7. If necessary, turn **RF GAIN** clockwise to boost the strength of a signal.

Illustration

**Notes:**

- If you turn the tuning control slightly to the left or right, the TRC-445 rapidly scans down or up.
- To quickly tune to Channel 9 or 19, set **CH-9/NOR/CH-19** to **CH-9** or **CH-19**. 9 or 19 flashes on the display.
- If you set **CH-9/NOR/CH-19** to **CH-9** or **CH-19**, you cannot tune other channels using the tuning control.

**Important!** Channels 9 and 19 are reserved for motorist assistance and for reporting emergency information about accidents, hazardous road conditions, and so on. Always give emergency communications priority on Channels 9 and 19.

8. If you hear low-level popping-type noises, set **NB/OFF** to **NB** to turn on the noise blanking circuit.

Illustration

9. To turn off the TRC-445, turn **OFF/VOLUME** counterclockwise until you hear it click.

## TRANSMITTING

**Note:** We recommend you try receiving transmissions before you transmit.

1. Follow Steps 1–8 under “Turning On the CB and Receiving Transmissions” on Page 12.
2. Hold down the microphone’s talk button and speak into the microphone in a normal voice from about 2–3 inches away. The **TX/RX** indicator changes to red, and the SWR/RF/signal meter indicates the strength of your transmission.



**Note:** Do not speak too loudly when transmitting. It does not make your signal any stronger, and might distort your transmission.

Your TRC-445 receives these weather service frequencies:

Illustration

3. When you finish transmitting, release the microphone talk button. The **TX/RX** indicator changes to green. The TRC-445 can now receive transmissions.
4. To turn off the TRC-445, turn **OFF/VOLUME** counterclockwise until you hear it click.

Frequency (MHz)	Channel
162.400	WX 2
162.425	WX 4
162.450	WX 5
162.475	WX 3
162.500	WX 6
162.525	WX 7
162.550	WX 1

To listen to one of the seven available weather channels, set **CB/WX/PA** to **WX**, then turn **WEATHER** to choose the desired channel. The **WX/ALERT** indicator lights green.

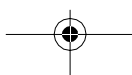
## LISTENING TO WEATHER BROADCASTS

Illustration

The TRC-445 is preprogrammed to receive seven channels which have been allocated by the Federal Communications Commission (FCC) for use by the National Oceanographic and Atmospheric Administration (NOAA). NOAA broadcasts your local forecast and regional weather information on one or more of these channels in your area.

**Note:** When you set **CB/WX/PA** to **WX**, the channel display and SWR meter turn off.

Readjust **OFF/VOLUME** if necessary.





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## Weather Alert

In the event of severe weather conditions, the National Weather Service broadcasts a special signal tone (1050 Hz) that the TRC-445 sounds if it is turned on. When the radio receives this signal tone, the **WX/ALERT** indicator glows red in the CB or PA mode and orange in the WX mode.

If **CB/WX/PA** is set to **CB** or **PA**, switch to **WX** to hear special severe weather information and warnings.

**Note:** If the TRC-445 is turned off, it does not sound the signal tone.

4. Hold down the microphone talk button and speak into the microphone in a normal voice.

**Note:** To prevent feedback, hold the microphone as far away from the PA speaker as possible.

5. Adjust **OFF/VOLUME** as needed to adjust the PA's volume.



## USING THE PUBLIC ADDRESS FUNCTION



1. Connect a PA speaker to the TRC-445 (see "Connecting Optional External Speakers" on Page 9).
2. Turn **OFF/VOLUME** fully counterclockwise.
3. Set **CB/WX/PA** to **PA**. The SWR/RF/signal meter and **TX/RX** indicator turn off.

Illustration



## CB OPERATION TIPS

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Like most activities, CB radio has its customs and courtesies. The following tips will help you get the most enjoyment out of your CB.

### COMMON USES FOR A CB RADIO

#### Business Uses

- Truck drivers and delivery personnel can learn road and traffic conditions and get assistance in locating destinations. A CB is also good company on those “long hauls.”
- On construction crews, a CB quickly pays for itself when you are calling for additional materials or coordinating the activities of different work crews.
- For security officers, a CB is more than a convenience — it is a must for both safety and efficiency.

#### Personal Uses

- Keep in touch with home while driving to work, to the store, or to a social activity. Let your family know you are tied up in traffic or that you will stop by the store on the way home.
- If you are a two-car (or more) family, CBs are great for communicating with family members while they are in their cars.

- Contact friends or neighbors — find out “what’s happening” or plan a get-together.
- Ever have car trouble or run out of gas on the highway? What an assurance it is to be able to radio for assistance.
- Camping, fishing, and other sports are more fun with a CB. Locate a buddy or find out “what’s cooking” back at camp.

### CB COURTESY

- Wait for a pause in someone else’s transmission before you ask for a break.
- If you do not receive an answer to your call after a second attempt, sign off and wait several minutes before trying again.
- Do not hold down the microphone talk button when you are not talking. (This is called “dead keying.”)
- Assist callers with directions, information about road conditions, and any other reasonable requests.



## USING COMMON 10-CODES

Citizen's band operators have largely adopted the 10-codes for standard questions and answers. These codes permit faster communication and better intelligibility in noisy areas.

This table lists codes adopted by the Associated Public-Safety Communications Officers (APCO).

Code	Meaning
10-1	Your signal is bad.
10-2	Your signal is good.
10-3	Stop transmitting.
10-4	Message received and understood.
10-5	Relay information to _____.
10-6	I am busy or are you busy?
10-7	Out of service.
10-8	In service.
10-9	Repeat last message.
10-10	Negative (NO).
10-11	_____ in service.
10-12	Stand by.
10-13	Report road/weather conditions.
10-14	Information.
10-15	Message delivered.
10-16	Reply to message.

Code	Meaning
10-17	En route.
10-18	Urgent.
10-19	Contact _____.
10-20	What is your location?
10-21	Call _____ by telephone.
10-22	Cancel last message.
10-23	Arrived at the scene.
10-24	Assignment complete.
10-25	Meet _____.
10-26	Estimated time of arrival is _____.
10-30	Use caution.
10-31	Pick up.
10-33	Emergency traffic. Clear the channel.
10-34	What time is it?
10-41	Switch to Channel _____.
10-62	Cannot understand.

## MAXIMUM RANGE

The maximum range and quality of CB transmissions vary depending on these conditions:

- The type and quality of antenna used
- The height of the antenna's mounting location — the higher the antenna, the better the signal's range
- The surrounding terrain — mountains and tall buildings limit the range
- Weather conditions
- The number of nearby CBs operating on the same channel

## REDUCING NOISE

The noise blanking (NB) circuit helps keep background noise to a minimum. However, strong sources of electrical noise (such as your vehicle's ignition, another radio, or spark plugs) might be more than the circuit can compensate for.

If you use the CB with the engine on, you can determine the source of the noise by turning off the engine and operating the CB with the ignition set to ACC. If most or all of the noise goes away, the problem is in your vehicle's ignition or electrical system.

Here are a few hints to help you reduce or eliminate such noise.

- Replace old ignition wires with new, high-voltage, noise-suppression wires.
- Install noise suppressors on your spark plugs, or install new spark plugs that have built-in suppressors.
- Be sure that the ground connection (black wire) is securely attached to either your vehicle battery's negative (-) terminal or to the DC power supply's negative terminal.

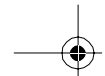
If problems persist, check your alternator/generator, regulator, and gauges. Noise from these sources can be reduced or eliminated using bypass capacitors at various output voltage points.

Your local RadioShack store has a wide selection of noise-suppression accessories.

## **TROUBLESHOOTING**

If your CB is not working as it should, follow the suggestions below to see if you can eliminate the problem. If you cannot, take the CB to your local RadioShack store for assistance.

<b>Symptom:</b>	<b>Check That:</b>
Trouble with reception	<ul style="list-style-type: none"> <li>• The CB is turned on.</li> <li>• <b>CB/WX/PA</b> is set to <b>CB</b>.</li> <li>• <b>OFF/VOLUME</b> is turned up.</li> <li>• <b>RF GAIN</b> is adjusted properly.</li> <li>• The microphone is securely connected to the CB.</li> <li>• The antenna cable is securely connected to both the antenna and the CB.</li> </ul>
Trouble with transmission	<ul style="list-style-type: none"> <li>• The CB is turned on.</li> <li>• <b>OFF/VOLUME</b> is turned up.</li> <li>• The microphone is securely connected to the CB.</li> <li>• All connectors are clean and tightened.</li> <li>• You are fully pressing the microphone talk button.</li> <li>• The antenna cable is securely connected to both the antenna and the CB.</li> </ul>
No channel selection, or only Channel 9 or 19 can be selected	<ul style="list-style-type: none"> <li>• <b>CB/WX/PA</b> is set to <b>CB</b>.</li> <li>• <b>CH-9/NOR/CH-19</b> is set to <b>NOR</b>.</li> </ul>
CB does not work at all	<ul style="list-style-type: none"> <li>• The power supply and in-line fuse are working (see "Replacing the Fuses" on Page 21).</li> </ul>



## CARE AND MAINTENANCE

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Your RadioShack TRC-445 Deluxe 40-Channel Mobile CB Radio with Weather Alert is an example of superior design and craftsmanship. The following suggestions will help you care for your TRC-445 so you can enjoy it for years.



Keep the CB dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.



Use and store the CB only in normal temperature environments. Temperature extremes can shorten the life of electronic devices and distort or melt plastic parts.



Keep the CB away from dust and dirt, which can cause premature wear of parts.



Handle the CB gently and carefully. Dropping it can damage circuit boards and cases and can cause the CB to work improperly.



Wipe the CB with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the CB.

Modifying or tampering with the CB's internal components can cause a malfunction and might invalidate the CB's warranty and void your FCC authorization to operate it. If your CB is not performing as it should, take it to your local RadioShack store for assistance.



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## REPLACING THE FUSES

The TRC-445's 2-amp fuses help protect your CB from power surges and short circuits.

- If the red wire's fuse is blown, replace it with a 2-amp, fast-acting glass fuse, such as Cat. No. 270-1007.
- If the orange wire's fuse is blown, replace it with a 1-amp, fast-acting glass fuse, such as Cat. No. 270-1005.

Follow these steps to replace each fuse.

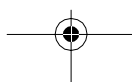
1. Make sure the power source and CB are both off.
2. To open the fuse holder, push the fuse holder ends together, then turn either end counterclockwise and release it.

3. If the fuse is blown, replace it.

**Caution:** Make sure you replace the fuse only with another fuse of the same type and rating.

4. To close the fuse holder, push the fuse holder ends together, then turn either end clockwise.

Illustration



# SPECIFICATIONS

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## GENERAL

Channels ..... 40 Channels  
Frequency Range ..... 26.965 MHz to 27.405 MHz  
Power Requirements ..... 13.8 V DC (12–16 Volts DC, Negative Ground)  
Dimensions .....  $7\frac{1}{4} \times 7\frac{7}{8} \times 2\frac{1}{4}$  Inches  
(184 × 200 × 57 mm)  
Weight ..... 3.1 lbs (1.4 kg)

## RECEIVER

Sensitivity ..... 0.7  $\mu$ V or better for 10 dB (S+N)/N  
Adjacent Channel Rejection ..... 65 dB (at 10 KHz)  
Audio Output ..... 4.5 Watts (Maximum)  
Frequency Response ..... 450–2500 Hz  
Intermediate Frequency ..... 1st IF: 10.695 MHz  
2nd IF: 455 KHz  
Cross Modulation ..... 50 dB  
Squelch ..... Adjustable from 0.5  $\mu$ V to 1 mV

## TRANSMITTER

Output Power ..... 4 Watts (FCC Maximum)  
Type of Modulation ..... AM Double-Sideband, Full Carrier Modulation  
Modulation Capability .....  $\pm 90\%$   
Spurious Emission ..... Less than –70 dB  
Frequency Tolerance .....  $\pm 200$  Hz  
Antenna Impedance ..... 50 Ohm  
Current Drain (13.8-volt supply) ..... 1 Amp with No Modulation  
1.6 Amps with 80% Modulation



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## PUBLIC ADDRESS

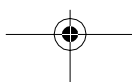
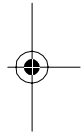
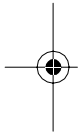
Output Power ..... 4.2 Watts (Maximum)

Current Drain (at maximum power) ..... 1.2 Amps

## WEATHER RADIO

Frequency Coverage ..... 162.400 MHz  
162.425 MHz  
162.450 MHz  
162.475 MHz  
162.500 MHz  
162.525 MHz  
162.550 MHz

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.



### Limited Ninety-Day Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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