



RadioShack®

21-1679A

Weather Alert Handheld CB RADIO

Thank you for purchasing your
Weather Alert Handheld CB
Radio from **RadioShack**.

What's Included

- CB Radio
- Ni-MH Battery Pack
- AA Battery Case
- AC Charger
- Antenna
- Hand Strap
- Belt Clip
- User's Guide
- FCC Rules



Please read this user's guide before installing, setting up
and using your new CB radio.

www.radioshack.com





Contents

A Look at Your CB Radio	3
Powering Your CB Radio	4
Using the Ni-MH Battery Pack.....	4
Recycle Rechargeable Batteries.....	5
Using the AA Battery Case.....	5
Using AC Power	6
Using Vehicle Power.....	7
Connecting Your CB Radio	8
Installing the Antenna	8
Installing an Optional Antenna	8
Connecting an External Speaker or Microphone	8
Operating Your CB Radio	9
Receiving.....	9
Transmitting.....	9
Safety Precaution	10
Settings	10
High/Low Power Level	10
Backlight	10
Key Tone	10
Key Lock	11
Power Save	11
Scanning Channels.....	11
Using Channels 9 and 19	11
Listening to the Weather Band	12
Listening to a Weather Channel	12
Turning Digital Weather Alert On and Off.....	12
Understanding Digital Weather Alert	13
Additional Information	14
Legal Use of Your CB Radio	14
Common Uses for a CB Radio.....	14
Transmission Courtesies.....	14
Transmission Range.....	14
Common 10-Codes.....	15
Frequency Range	16
Specifications	17
Care	17
RF Emissions Information	18
Do Stuff	19
Limited 90-Day Warranty	20





A Look at Your CB Radio





Powering Your CB Radio

You can power your CB radio from one of these four sources:

- The rechargeable Ni-MH battery pack
- Eight AA batteries (not included) using the supplied battery case
- AC power using an AC-to-DC power supply (not included)
- Vehicle power using a DC power cord (not included)

Using the Ni-MH Battery Pack

Charge the Ni-MH battery pack (using the supplied AC charger) for about 18 hours prior to using it for the first time. Afterward, it takes 14-16 hours to charge the battery pack when it is fully discharged.

You can charge the battery pack while it is installed or removed. But the CB radio does not work during charging.

To charge the battery pack:

Connect the AC Charger to the **CHG Jack**, then plug it into an AC outlet. The **CHARGE Indicator** lights red and charging starts.

Note: *The supplied AC charger is for charging only, not for directly powering the CB.*

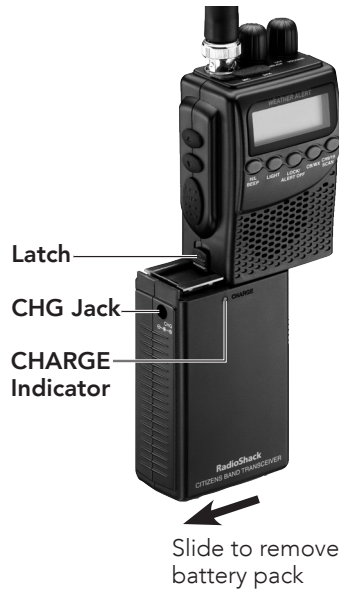
To install the battery pack:

Slide the battery pack onto the CB radio until it clicks. The battery pack fits onto the CB radio only one way. Do not force it.

To remove the battery pack, slide the battery pack in the arrow direction while holding up the latch.

Cautions:

- To avoid injury, do not connect





the AC charger to a ceiling outlet. After charging, disconnect the AC charger.

- You must use a Class 2 power supply that provides 16V DC and delivers at least 200mA. The barrel plug's center must be positive and the barrel plug must fit the CB's **CHG** jack. The supplied AC charger meets these specifications. Using an adapter that does not meet these specifications could damage the CB radio or adapter.
- Always connect the AC charger to the battery pack before you connect it to an AC outlet, and disconnect the AC charger from the AC outlet before you disconnect it from the battery pack.
- Overcharging your battery pack could shorten its life.
- Do not charge your battery pack at temperatures below 14°F (-10°C) or above 131°F (55°C).
- You cannot recharge the Ni-MH battery pack using DC power.

Recycle Rechargeable Batteries

Placing rechargeable batteries into the trash or the municipal waste system can be harmful to the environment and may be illegal in your area. **RadioShack** participates in an industry program to collect and recycle rechargeable batteries at the end of their useful life.

You can return your rechargeable batteries to your local **RadioShack** store for recycling (at no cost to you). Or call 1-800-THE-SHACK (1-800-843-7422) for information on rechargeable battery recycling in your area. **RadioShack's** involvement in this program is part of the company's commitment to preserving our environment and conserving our natural resources.

Using the AA Battery Case


1. Turn off the CB radio if it is on.
2. Pull the halves of the case apart to open it. Insert eight AA batteries, matching





the polarity marks (+ and -). Snap the halves of the case together to close it.

- Slide the battery case onto the CB radio until it clicks. The battery case fits onto the CB radio only one way. Do not force it.

Replace the batteries when the sound becomes weak or distorted,  appears, or the CB radio stops working.

Battery Notes:

- Dispose of old batteries promptly and properly. Do not burn or bury batteries.
- Use only fresh batteries of the required size and type.
- Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.
- If you do not plan to use the CB radio with batteries for two weeks or longer, remove the batteries. Batteries can leak chemicals that can destroy electronic parts.

Using AC Power

To power your CB radio from your home, you will need a 12V DC power supply that provides a minimum of 2.5A at 12V and a DC power cord (neither included).

- Turn off the CB radio if it is on.
- Use the DC power cord to connect the CB's **12V DC PWR Jack** and the DC power supply.
- Connect the DC power supply to an AC outlet.
- Turn on the CB radio to use.



12V DC PWR Jack

Cautions:

- You must use a Class 2 power supply that provides regulated 13.8V DC and delivers at least 2.5A. The barrel plug's center must be positive and the barrel plug must fit the CB's **12V**





DC PWR jack. Using an adapter that does not meet these specifications could damage the CB radio or adapter.

- Always connect the power supply to the CB radio before you connect it to an AC outlet, and disconnect the power supply from the AC outlet before you disconnect it from the CB radio.

Using Vehicle Power

To power your CB radio from your vehicle, you will need a DC power cord (not included). You may also need a roof-mounted antenna to improve transmission quality and increase the transmission range.

1. Turn off the CB radio if it is on.
2. Use the DC power cord to connect the CB's **12V DC PWR** jack and the vehicle's 12V power source, such as the cigarette-lighter socket.
3. Turn on the CB radio to use.

Cautions:

- You must use a Class 2 power supply that provides regulated 12V DC and delivers at least 2.5A. The barrel plug's center must be positive and the barrel plug must fit the CB radio's **12V DC PWR** jack. Using an adapter that does not meet these specifications could damage the CB radio or adapter.
- Always connect the power supply to the CB radio before you connect it to the vehicle outlet, and disconnect the power supply from the outlet before you disconnect it from the CB radio.





Connecting Your CB Radio

Installing the Antenna

To install the supplied antenna, align the two slots on the antenna connector with the tabs on the BNC connector of the CB radio. Push the antenna connector to the CB radio and rotate the antenna connector clockwise until it locks into place.



Installing an Optional Antenna

The CB's BNC connector allows you to use a variety of optional antennas, including external mobile antennas and outdoor base station antennas.

Always use the 50-ohm, RG-58, or RG-8 coaxial cable to connect an outdoor antenna. If the antenna is over 50 feet from the CB radio, use the RG-8 low-loss dielectric coaxial cable.

Safety Precaution:

If an outside antenna is installed, be sure the antenna system is grounded so as to provide protection against voltage surges and built-up static charges. When installing the antenna, be careful not to touch overhead power lines as contact with them might be fatal.

Connecting an External Speaker or Microphone

Connect an external speaker (not included) to the **SPK** jack of your CB radio. This mutes the CB's internal speaker.

Connect an external microphone (not included) to the **MIC** jack of your CB radio. This disables the CB's internal microphone.





Operating Your CB Radio

Receiving

1. Turn **SQUELCH** fully anticlockwise.
2. Turn on the CB radio. A channel number and the signal meter appear. If necessary, press **CB/WX** so that a channel number and the signal meter appear.
3. Press **▲** or **▼** to select the desired channel.
4. Adjust **OFF/VOLUME** to the desired volume level.
5. Slowly turn **SQUELCH** back clockwise just until the noise stops.

Note: Do not turn **SQUELCH** too far clockwise because you might cut out weak signals.

RX below the signal meter indicates the CB radio is ready to receive transmissions.

Transmitting

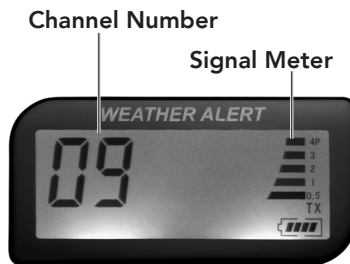
Test receiving transmissions on your CB Radio before trying to transmit a message.

To transmit a message:

1. Press and hold **PTT. TX** appears below the signal meter and the signal meter shows the output level. Hold the CB radio 2–3 inches from your mouth and speak in a normal voice to the internal microphone.
2. When you finish speaking, release **PTT**.

Notes:

- If you transmit a message while the CB radio is displaying a weather alert (see **Understanding Digital Weather Alert**), the alert tone stops and **WX** displays steadily. To stop the alert tone without transmitting a message, press **LOCK/ALERT OFF**.
- To avoid overheating the internal circuit, do not press and hold **PTT** nonstop for over two minutes.





Safety Precaution

Your wireless hand-held portable transceiver contains a low power transmitter. When the Push-to-Talk (PTT) button is pushed it sends out radio frequency (RF) signals. The device is authorized to operate at a duty factor not to exceed 50%. In August 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless devices.

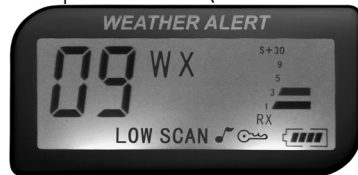
To maintain compliance with the FCC's RF exposure guidelines hold the transmitter and antenna at least 1 inch (2.5 centimeters) from your face and speak in a normal voice, with the antenna pointed up and away from the face. If you wear the handset on your body while using the headset accessory, use only the supplied belt clip for this product and when transmitting, take it out of the belt to ensure that the antenna is at least 1 inch (2.5 centimeters) from your body.

Settings

High/Low Power Level

Press **H/L BEEP** to switch between low power level (**LOW** appears) and high power level.

Note: *Low power level reduces the range of the CB radio.*



Backlight

Press **LIGHT** to turn on the backlight; press again to turn off. The backlight turns off automatically after 10 seconds.

Key Tone


To activate the key tone, press and hold **H/L BEEP** for 2 seconds. **♪** appears. The CB radio sounds a beep when you press any key except **PTT**.

To disable the key tone, press and hold **H/L BEEP** for 2 seconds again so that **♪** disappears.





Key Lock

To activate key lock, press and hold **LOCK** for 2 seconds.  appears. This locks all keys except **PTT** and **LIGHT**. To unlock key control, press and hold **LOCK** for 2 seconds again.

Power Save

If you do not press any key or if the CB radio does not receive any signal for about 10 seconds, the CB radio automatically enters power save mode. **P. SAVE** flashes.

Scanning Channels

1. Press **CB/WX** to select the CB or weather mode.
2. Press and hold **CH9/19 SCAN** for 2 seconds. **SCAN** appears, and the CB radio scans through all channels in the selected band. When it receives a strong signal, scanning stops.
3. To deactivate scanning, press and hold **CH9/19 SCAN** for 2 seconds or press the **▲** or **▼** key.

Notes:

- When you turn on the CB radio for the first time, the scan feature is automatically set to on in the weather band.
- To change weather channels manually, press the **▲** or **▼** key.

Using Channels 9 and 19

Channel 9 is reserved for motorist assistance and for reporting emergency information about accidents, hazardous road conditions, etc. Channel 19 is used by truck drivers for general communication purposes.

Press **CH9/19 SCAN** once to select channel 9, press again to select channel 19, press again to return to the previously selected channel.

Notes:

- When you select channel 9 or 19, you cannot press **▲** or **▼** to change channels.
- Always give priority to emergency messages on channel 9.





Listening to the Weather Band

The FCC has allocated channels for use by National Oceanic and Atmospheric Administration (NOAA). Regulatory agencies in other countries have also allocated channels for use by their weather reporting authorities.

NOAA and your local weather reporting authority broadcast your local forecast and regional weather information on one or more of these channels.

Listening to a Weather Channel

Press **CB/WX** to select weather mode. **WX** appears. The CB radio scans through the weather channels and then stops on the strongest channel. Press **CB/WX** again to return to CB mode.

Note: You cannot adjust the power level or switch to channel 9 or 19 while listening to a weather channel.



Turning Digital Weather Alert On and Off

- Digital weather alert automatically scans in the background when you select the CB mode, unless you turn it off.
- Press **LOCK/ALERT OFF** to turn digital weather alert on and off.

In CB mode, **WX** displays as described below.

WX Appearance	Weather Alert	Weather Signal
WX not present	Not on	Not scanning for signal
WX flashes	On	No signal found
WX displays steadily	On	Signal found and locked in
WX displays steadily for 2 seconds and then flashes twice	On	Signal found; scanning for signal





Understanding Digital Weather Alert

The weather service precedes each weather alert with a digitally-encoded SAME (Specific Area Message Encoding) signal, then a 1050 Hz tone. When your local weather station broadcasts a weather alert signal, the CB radio sounds an alert tone and displays a message showing the alert level.

SAME Event Code	Alert Tone	Message
A (Watch)	Watch alert 10 seconds	WCH (Watch)
W (Warning) TOR (Tornado) SVR (Severe)	Warning alert 10 seconds	WRN (Warning)
S (Statement) RWT (Test)	Statement alert 10 seconds	ADV (Advisory)

Notes:

- The CB radio does not display the actual location referenced by SAME messages. It uses only the message portion of the SAME signal.
- If severe weather threatens, do not wait for an alert tone; tune to the weather broadcast and monitor the weather information.
- If a weather signal ends, the CB radio beeps three times (when the key tone is turned on) and only when the weather signal ends the first time, then **WX** flashes to indicate there is no signal.





Additional Information

Legal Use of Your CB Radio

The CB Radio service is a private, two-way, short-distance voice communications service for personal or business activities. For rules regarding legal CB radio use, see the included **Plain English Rules – Citizens Band Radio Service** published by the FCC.

Common Uses for a CB Radio

- Warn of traffic tie-ups ahead.
- Help truck drivers and delivery personnel learn road and traffic conditions and get assistance in locating destinations.
- Provide fast help in the event of emergency or breakdown.
- Help construction crews coordinate the activities of different work crews.
- Assist communication between security officers.
- Provide weather and road information.
- Contact friends or other CB users on trips.
- Keep in touch with your office or home.
- Bring more fun for camping, fishing, and other sports; help locate a friend or find out what's cooking back at camp.

Transmission 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 seconds before trying again.
- Do not hold down **PTT** when you are not talking. (This is called dead keying.)
- Assist callers with directions, information about road conditions, and any other reasonable requests.

Transmission Range

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





- Type and quality of the antenna.
- Height of the antenna's mounting location (the higher the antenna, the better the signal's range).
- Surrounding terrain (mountains and tall buildings limit the range).
- Weather conditions.
- Number of nearby CBs operating on the same channel.

Note: *Your CB radio's transmission range is generally line-of-sight. To ensure maximum range, always keep the battery pack fully charged or use fresh batteries.*

Common 10-Codes

Citizens Band radio operators have largely adopted the 10-codes for standard questions and answers. These codes permit faster communication and better understanding in noisy areas. The following table lists some of the more common codes and their meanings:

Code	Meaning	Code	Meaning
10-1	Receiving poorly	10-22	Report in person to ____
10-2	Receiving well	10-23	Stand by
10-3	Stop transmitting	10-25	Can you contact ____
10-4	OK, message received	10-26	Disregard last information
10-5	Relay message	10-27	I am moving to channel
10-6	Busy, stand by	10-28	Identify your station
10-7	Out of service	10-32	I will give you a radio check
10-8	In service	10-33	Emergency traffic
10-9	Repeat message	10-36	Correct time is ____
10-10	Transmission completed, standing by	10-37	Wrecker needed at ____
10-11	Talking too rapidly	10-38	Ambulance needed at ____
10-12	Visitors present	10-41	Please turn to channel ____
10-13	Advise Weather/Road conditions	10-42	Traffic accident at ____
10-17	Urgent business	10-43	Traffic tie-up at ____
10-18	Anything for us?	10-50	Break channel
10-19	Nothing for you. Return to base	10-62	Unable to copy; use telephone
10-20	My location is ____	10-70	Fire at ____
10-21	Call by telephone		





Note: Although this table lists the meanings of the 10-codes in the form of a statement, they can also be phrased as questions (10-6: Are you busy? 10-20: What is your location?)

Frequency Range

Your CB radio receives and transmits on the following 40 CB channels:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	26.965	15	27.135	28	27.285
2	26.975	16	27.155	29	27.295
3	26.985	17	27.165	30	27.305
4	27.005	18	27.175	31	27.315
5	27.015	19	27.185	32	27.325
6	27.025	20	27.205	33	27.335
7	27.035	21	27.215	34	27.345
8	27.055	22	27.225	35	27.355
9	27.065	23	27.255	36	27.365
10	27.075	24	27.235	37	27.375
11	27.085	25	27.245	38	27.385
12	27.105	26	27.265	39	27.395
13	27.115	27	27.275	40	27.405
14	27.125				

In addition, your CB radio can receive these weather service channels:

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





Specifications

Receiver

Frequency Coverage 26.965~27.405 MHz, 162.400~162.550 MHz
 Sensitivity..... 1 μ V for 10 dB
 Adjacent Channel Rejection ((S+N)/N)..... 60 dB
 Squelch..... Adjustable from 0.5 μ V
 Audio Output Power (10% THD)..... 400 mW
 Current Drain 80 mA (Standby); 400 mA (Max. Audio)

Transmitter

Frequency Coverage 26.965~27.405 MHz
 Power Output..... 3 W (High); 1 W (Low)
 Conducted Spurious Emission Harmonics 60 dB
 Type of Modulation A3
 Frequency Tolerance 0.002%
 Antenna Impedance 50 Ω
 Current Drain (@ Max. Modulation)..... 1.3 A (High); 700 mA (Low)
 Dimensions (H×W×D) 7.4 × 2.6 × 1.8 inch (186 × 65 × 47 mm)
 Weight (including battery pack & antenna)..... 18.3 oz (520 g)

Specifications are subject to change and improvement without notice.
 Actual product may vary from the images found in this document.

Care

Keep the CB radio dry; if it gets wet, wipe it dry immediately.
 Use and store the CB radio only normal temperature environments. Handle the CB radio carefully; do not drop it.
 Keep the CB radio away from dust and dirt, and wipe it with a damp cloth occasionally to keep it looking new.

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





RF Emissions Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult your local **RadioShack** store or an experienced radio/TV technician for help. If you cannot eliminate the interference, the FCC requires that you stop using your product. Changes or modifications not expressly approved by **RadioShack** may cause interference and void the user's authority to operate the equipment.

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.

Warnings:

- Any adjustment to this equipment is recommended to be performed by or under the immediate supervision and responsibility of a person certified as technically qualified to perform transmitter maintenance and repair duties in the private land mobile services and fixed services by an organization or committee representative of users of those services.
- Replacement of any transmitter component (crystal, semiconductor, etc.) for this equipment could result in violation of FCC rules.





Do Stuff

Do more with your CB radio.



Mini Extension Speaker

- Clip it to your visor.
- Set it on your dash.

25-watt, 39" Whip, Magnetic-mount Mobile CB Antenna

- Receive more, and
- Transmit farther in your car.



DC Power Cord

- Power up in your car.



13.8VDC 3-Amp Power Supply

- Power up in your home.



5-Watt Heavy-duty Extension Speaker

- Amplify at home or in the car.



7.5-Watt Amplified Mobile Extension Speaker

- Amplify over loud noises.





Limited 90-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. For complete warranty details and exclusions, check with your local **RadioShack** store.

RadioShack Customer Relations

300 RadioShack Circle, Fort Worth, TX 76102

04/04



Protect the environment by recycling used electronics. Go to www.ecyclingcentral.com to find a recycle location near you.



©2007. **RadioShack** Corporation.
All rights reserved. **RadioShack** and RadioShack.com
are trademarks used by **RadioShack** Corporation.

11A07
21-1679A
AO0300AAA1
Printed in China

