THE *WIZARD*®

Work Zone Alert
and
Information Radio

RF Safety Warning

The antenna for this device must be mounted on top of the roof of the vehicle or on top of the construction site trailer away from nearby personnel. All personnel must remain at least 7" from an unobstructed antenna to avoid extended periods of RF exposure.

Wizard Field Operation Procedures

A guide for settings and message selection under varying operating conditions.

With trucks logging more than 50 billion vehicle miles on the nation's roads, more maintenance and more work zones increases the opportunity for more accidents. Higher speeds, inattentive driving and closer spacing contribute to rear-end vehicle collisions and hazardous conditions for road construction workers.

The Wizard® is designed to provide advanced warning of impending traffic slowdowns to give all vehicles, especially heavy trucks, the necessary time to stop. The Wizard is a completely portable wireless broadcasting system adaptable to any work site, sending localized messages on selected CB channels.

The Wizard counts down the selected interval for sending, listens for a break in activity on channels 9 and 19 (or other user selected and emergency CB channels), and broadcasts when clear. Care is taken to not interfere with normal CB communication between vehicles.

A short message alerts the driver to slow down. The message can be broadcast on a second user selected channel if desired. Messages can be changed at the site, broadcast distances adjusted for traffic backup, and message frequency modified to compensate for average speeds.

This radio has been type accepted and certified by the FCC.

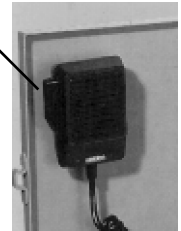Select desired Transmit Channel using the "Channel Selector" switch

Adjust Squelch and Volume Controls to desired levels

Listen for "break" in conversations

Squeeze (and hold) microphone switch while speaking. As soon as you finish your message release the microphone switch and listen for a response. Be sure to hold the microphone near your mouth so that your voice - not just background noise - can be heard.

Release microphone switch to listen for response

Enclosure

General Specifications

The Wizard enclosure is a protected, weather resistant box. Boxes that are fully weather protected are available as an option.
Internal components are securely mounted to the case and inter - connected with industrial connectors
It may be used in many weather conditions so long as no part of the box is submerged.
Care should be taken to protect the unit with appropriate security measures if placed in an unattended location.

Set The Wizard to Broadcast
 Automatically

   Set "MODE" switch to "TRANSMIT"
   position.

Remote Antenna Installation

Construction Site Trailer

If unit is used inside a trailer, external antenna (optional)
may be mounted in any convenient outside location accord -
ing to instructions
Plug lead-in shielded cable to "antenna in" connector.
Operate the system according to all previous instructions.
No personnel should be closer to the antenna than 7 unob -
structed inches.
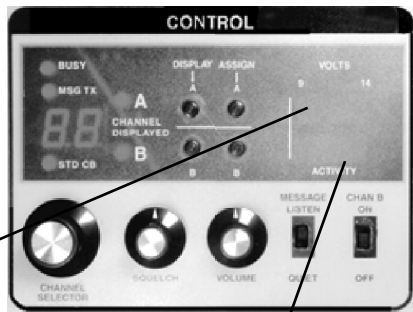NOTE: DO NOT OPERATE WITHOUT A PROPERLY
CONNECTED AND LOCATED ANTENNA !

Power Panel Indicators

There are two light bar
indicators that provide
dynamic strength infor -
mation

Meters

The "VOLTS" bar indicates the
level of DC power being provided to
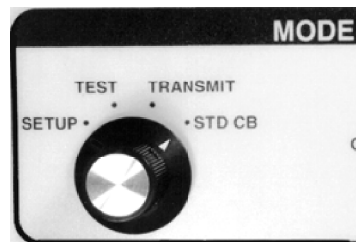the unit. It should read about 12V for proper operation
.
The "ACTIVITY" bar gives an indication of how frequent and strong the
signals are that are being received by the CB. Distant transmissions (weak
signals) will not cause the system to interpret the channel as being busy.

CB Microphone Operation

Operator Communication

The "Microphone" may be used if
desired for live communications
Rotate "MODE" switch to "STD CB"

Contents

Elimination of Licensing

The Federal Communications Commission has ruled that Citizens Band Radio Service operators are no longer required to obtain an FCC license to operate their CB equipment. In doing so, the FCC also permits CB stations to operate without station identification. Elimination of individual station licenses results in no lessening of the operating privileges or responsibilities of CB users. An operator of a CB radio station is still required to comply with the Communica - tions Act and with the rules of CB Radio Service.

Rules You Should Know

In common with all other CB operators, you must comply with the general rules prohibiting music, profanity, promotion of illegal activi - ties, selling of merchandise or services, and blasting others off the air with illegally amplified transmitters.
Although one-way communications are generally not allowed, oper - ation of the Wizard for its intended purpose is permitted. Rule 18 (d) provides specific permission to establish one-way communica - tions concerning highway conditions to assist travelers. An opera - tor should be monitoring the Wizard at all times.
Since Rule 7 (b) reserves Channel 9 for emergency communica - tions or travelers assistance, channel 9 may be a good choice as channel B.

A second channel is provided to extend cover - age to one other channel that may be used for information.
 Using the "Channel Selector Knob" select a SECOND channel on which to alternate trans - missions. Perform the same procedure as out - lined above, using the "Channel B" assign but - ton. The same channel should NOT be assigned to A and B.

To confirm the channels selected, push the display channel A or display channel B buttons and observe the channel number displayed. Release the switch as soon as the channel selection is confirmed.

CB Broadcast Message

After channels have been selected, select the appro - priate message in Message panel.
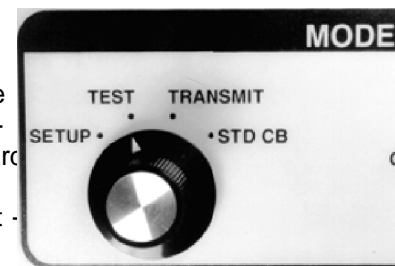Select "Message Frequency" indicated in seconds. If 30 seconds is selected, the timer will countdown 30 seconds after the completion of each transmissioin to begin a new transmission. If the channel is busy, it will take a few additional seconds to wait for a break in the conversation.
NOTE: The faster the traffic, the more frequently the message should be sent.

To Confirm Complete Setup

Set "MODE" switch to "TEST" position. The system will perform automatically, governed by the current settings (including timed response and message selection). The message will be directed only to the Wizard speaker, not transmitted to the active chan - nel. If you do not hear the message when the Wizard is simulating a transmission, set the speaker switch to "on" and/or turn the volume switch to a higher set - ting.
If the settings give the desired results, then proceed. Otherwise, return to the appropriate previous steps.

CB Channel Selection

While the dominant "trucker" channel nationally is 19, certain regional preferences may influence your Channel A selection. Channel B may be set to the primary emergency channel (9) or another secondary channel of your choice
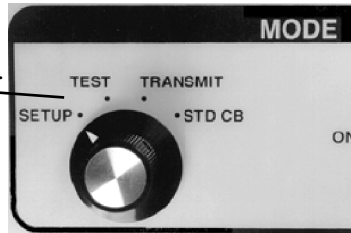.
Place "MODE" switch in "SETUP" position.

Push "Display A" switch to display the channel number currently designated as the primary broadcast channel
.
Push "Display B" to display the channel number currently designated as the secondary channel.

If the selections are satisfactory, there is no need to change the designated working channels.

Note: Channel B should be different from channel A to avoid back-to-back messages on channel A. If you wish to use only one channel, slide the channel B on-off switch to "off."

To Designate Working Channels

To change the designated working channels...

1. Turn the "Channel Selector" until the desired channel on which you wish to transmit a message appears in the "Channel Displayed" window.

2. Push the "Assign A" button to designate to the system that the channel displayed will be designated "Channel A".
Note: Although the Wizard is technically capable of being set to any of the 40 CB channels, for simplicity the factory pre-selects 6 channels starting with 19 and 9 - the channels that are normally used.

Easy to Operate

1   *Bring Wizard to desired location*

2   *If not already attached to a power source plug into a cigarette lighter or other 12V DC source*

3   *Select prerecorded message or record on the spot*

4   *Select CB channels on which to transmit and amount of delay between messages*

5   *Turn mode control to "Transmit" and the rest is automatic.*

The broadcast should be under the direct control of a nearby operator at all times

Operation

Antenna connector

12V Power connector

If the Transceiver is placed Indoors

If located in construction shack or other permanent or semi-permanent loca-
tion, place antenna in suitable external location and connect antenna lead-in to
terminal at lower right side of case.

If the Transceiver is placed Outdoors

Screw antenna securely into coaxial antenna connector
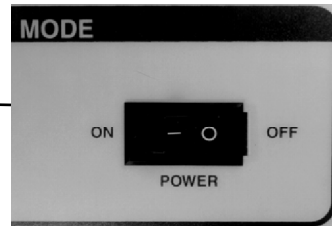No personnel should be closer to the antenna than 7 unobstructed inches.

Select power source

12 volt operation

A connection cable is provided for plugging into a standard automo-
tive cigarette lighter. Cables for connecting to other 12V DC sourc-
es are available.

Initial Set-up

Open front cover.
Turn on main power switch.
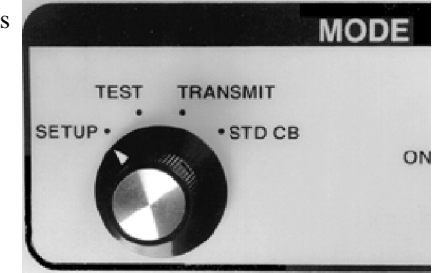Different lights will turn on depending on
the settings.

The voltage indicator light bar
should indicate 12V. However, the
unit will function normally when
provided by at least 10V DC

Message Set-up

There is a provision for storing 3 different messages. Messages can be
recorded in the field. They will be more readily understood if the back-
ground noise is minimized, and the
person recording the message speaks
clearly.

To Record A Message

Place Mode Switch in "SETUP"
position. Recording a new message
will erase any message previously
recorded at that message position.

Place "Message Selection" switch in
position 1, 2, or 3.

Squeeze the microphone to depress the
mic switch, and speak. Release "Record"
switch only after complete message has

been recorded. Keeping
the message as short as
practical will minimize
inconvenience to CB users. The system will record a mes-
sage as long as 18 seconds. The number of seconds
remaining will be displayed.

To Listen and Confirm Recorded Message(s)

1. Select message 1, 2 or 3.
2. Press "Push to Listen" momentarily
and release to hear any recorded mes-
sage. This will not alter messages.

Transmit Set-up

It is IMPORTANT in the set-up of the CB Broadcast frequencies to follow
the procedure accurately, and reconfirm certain settings occasionally dur-
ing the broadcast period. For instance, depending on volume of traffic and
the slowdown rate, message frequency selection may require changing. It
is also important to keep the message relevant. Credibility is established
by broadcasting the right message at the right time.