

# Digitalk

## OWNER'S MANUAL AND OPERATING INSTRUCTIONS

### 2 - WAY COMMUNICATOR

PLEASE READ THIS OWNER MANUAL CAREFULLY BEFORE USE. KEEP FOR YOUR REFERENCE.



FOR INSTALLATION INSTRUCTIONS PLEASE SEE PAGE 6.

## Special Features

### PRODUCT DESCRIPTION

The COMMUNICATOR is the newest generation in personal two-way communications. The COMMUNICATOR operates in a radio band, on any of the 40 channels. (Refer to "channel table" section on page 19 for more information.)

The COMMUNICATOR is a lightweight, compact two-way communication device that can be used to communicate with family or friends at parks, shopping malls, sporting events, concerts -- any indoor or outdoor activity!

The COMMUNICATOR is compatible with other brands utilizing the same frequency band (operating in the frequency range from 476.425MHz to 477.400MHz).

The COMMUNICATOR has 40-CHANNELS, featuring a multi-functional LCD Screen (which displays the current channel and various status icons).

Other features include ELECTRONIC VOLUME CONTROL, BATTERY SAVE CIRCUITRY and DUPLEX MODE.

Please read this Owner's Manual carefully to get the most out of your TWO-WAY COMMUNICATOR.

NOTE: The maximum transmission range will vary depending on terrain and environment. Range will be greater in open fields, while range is shorter within and around buildings or large structures.

This unit may not ensure privacy of communication.

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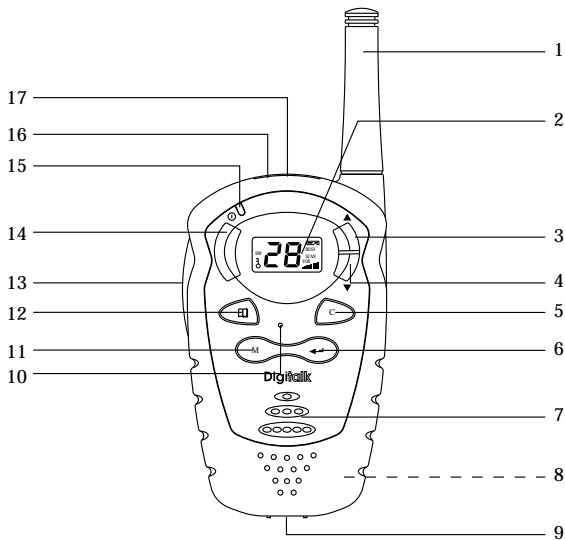
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## Communicator Controls



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## Communicator Controls

1. *Antenna* (Pg. 16, 18)
2. *LCD Screen*: Displays current channel selection and other radio status symbols. (Pgs. 8-10, 12, 13)
3. *Up ▲ button* (VOLUME/CHANNEL): Press to adjust volume level and change channels. (Pgs. 9-11, 13-15)
4. *Down ▼ button* (VOLUME/CHANNEL): Press to adjust volume level and change channels. (Pgs. 9-11, 13-15)
5. *Call ☎ button*: Press to transmit CALL TONES. (Pg. 11,13)
6. *Enter ↵ button*: Used to turn LCD Screen LAMP ON/OFF Buttons are locked when pressed and held. (Pg. 10, 11,13,14)
7. *Speaker* (Pg. 9)
8. *Battery Compartment* (LOCATED ON THE REAR): Houses 4 x "AAA" alkaline or Ni-MH rechargeable batteries (not included). (Pgs. 7, 15)
9. *Battery Compartment Cover Latch* (LOCATED ON THE REAR): Secures Battery Compartment cover. (Pg. 7)
10. *Mic*: Microphone. (Pgs. 9, 15)
11. *Monitor M button*: Press to tune in and hold onto weak signals. (Pgs. 9-11,13,15)
12. *Menu □ button*: Allows you to change channels. (Pgs. 10,11, 13-15)
13. *PUSH TO TALK PTT button*: Press to transmit. (Pgs. 9,11, 13,14)
14. *Power On/Off ⏻ button*: Press and hold the button to turn your unit ON/OFF. (Pgs. 7, 9)
15. *TX (transmission) LED indicator*: Illuminates red when transmitting. (Pgs. 9, 11, 12, 14)
16. *SP. Jack*: When earphone is connected into this jack, voice of the speaker will shift to earphone.
17. *Belt Clip* (LOCATED ON THE REAR) (Pg. 6)
18. *Mic. Jack / Battery Charge Jack* (Pg. 12)

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## Getting Started

Carefully remove your communicator from its packing. If there is any visible damage, do not attempt to operate this communicator. Return it to the place of purchase

### Removing the BELT CLIP:

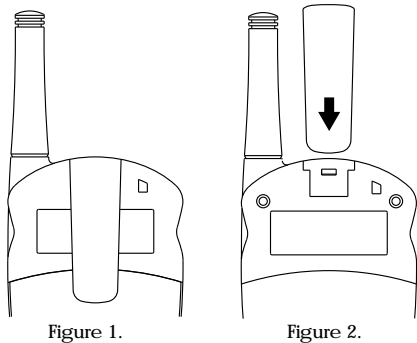


Figure 1.

Figure 2.

1. Pull the BELT CLIP LATCH away from the unit.
2. While pulling the BELT CLIP LATCH, push up on the BELT CLIP to remove it from the unit. See Figure 1.

### Installing the Belt Clip:

1. Slide the BELT CLIP into the BELT CLIP SLOT. See Figure 2.
2. A "click" indicates the BELT CLIP is locked into position.

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## Getting Started

### Battery Installation:

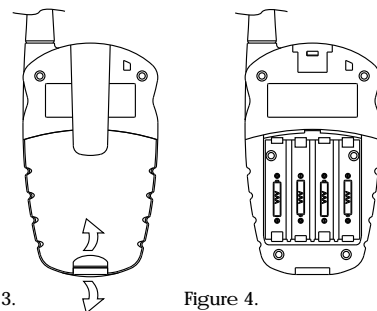


Figure 3.

Figure 4.

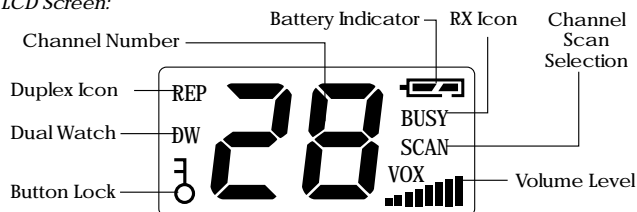
1. Release the BATTERY COMPARTMENT COVER LATCH located on the rear side of the unit (see Figure 3) and remove the BATTERY COMPARTMENT COVER from the BATTERY COMPARTMENT (See Figure 4).
2. Install 4x1.5V AAA alkaline batteries or Ni-MH rechargeable batteries (not included) as shown.
3. Reinstall the BATTERY COMPARTMENT COVER and lock the BATTERY COMPARTMENT COVER LATCH into position.

The COMMUNICATOR has a built in POWER SAVER feature for maximum battery life. But when the COMMUNICATOR is not being used, conserve battery power by pressing the ⏻ button to OFF. Remove the batteries if the unit will not be used for a long period of time.

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## Getting Started

### LCD Screen:



<b>SCAN</b>	Displayed during CHANNEL SCAN mode.
	Press and hold the ENTER button until the BUTTON LOCK symbol is displayed.
<b>BUSY</b>	Displayed when receiving a signal.
<b>28</b>	Channel Number changes from 1 to 40 as selected by user.
	Displays current BATTERY LEVEL.
	Displays current VOLUME LEVEL.
<b>DW</b>	Displayed during DUAL WATCH mode.
<b>VOX</b>	Displayed during VOX mode is on.
<b>REP</b>	Displayed during Duplex mode is on.

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## Getting Started

### Turning the Unit ON:

Press and hold the button. The unit will "beep" with dual tone and the LCD SCREEN will briefly display a SELF-TEST Screen.

### Turning the Unit OFF:

Press and hold the button. The unit will "beep" with a signal tone and the LCD Screen will turn blank.

### Adjusting Speaker Volume:

1. Press the Up button to increase the Speaker Volume.
2. Press the Down button to decrease the Speaker Volume.
3. The Speaker Volume level is indicated by the number of bars displayed in the lower right corner of the LCD Screen.

NOTE: Volume Up and Down buttons are disabled during BUTTON LOCK mode

### Receiving a Signal:

The unit is continuously in the RECEIVE mode when the unit is ON and not Transmitting. When you receive a signal on the current channel, the RX icon (BUSY) is displayed. (See "LCD SCREEN" for details).

### Transmitting a Signal:

1. Check the channel activity by pressing and holding the MONITOR button. You'll hear static if the channel is unoccupied. Don't TRANSMIT if someone is talking on the channel. Press and hold the PTT button to TRANSMIT. The TX LED Indicator will light up in red. Hold the unit in a vertical position with the MICROPHONE 2 to 3 inches from the mouth.
2. While holding the PTT button, speak into the unit using a normal tone of voice.
3. Release the PTT button when you have finished transmitting.

NOTE: In order for other people to receive your transmission, they must also be on the same channel you are currently using. Refer to the "Changing Channels" section for more information.

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## Operation

### Changing Channels:

The COMMUNICATOR has 40 available channels. To change channels:

1. Press the MENU button until the current channel number flashes on the LCD Screen.
2. While the channel number is flashing:
  - Press the Up button to move to a higher channel.
  - Press the Down button to move to a lower channel.
  - The channel changes from 1 to 40, or from 40 to 1.
3. Press the ENTER button to confirm the selected channel and return to the NORMAL mode.
4. Channel change operations are disabled during BUTTON LOCK mode.
 

NOTE: Refer to the "Channel Table" section of this Owner's Manual for detailed frequency listings.

### Monitor:

You can use the MONITOR feature to check for weak signals in the current channel.

1. Press the MONITOR button.
2. Press and hold the MONITOR button until it "beeps" for continuous monitoring.

### ENTER / Back-light / Button Lock:

1. Press and immediately release the ENTER button to light up the LCD Screen. The BACKLIGHT will automatically shut off after 4 seconds if no other buttons have been pressed.
2. Press and hold the ENTER button until the BUTTON LOCK icon is displayed on the LCD Screen.

NOTE: Volume and Channel Change Operations as well as Call & Monitor Operations are disabled during BUTTON LOCK mode. Press and hold the ENTER button again to deactivate BUTTON LOCK mode.

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## Operation

### Channel Scan:

CHANNEL SCAN performs searches for active signals in an endless loop from 1 to 40.

1. Press MENU button twice and Up , Down buttons to activate CHANNEL SCAN. The channel number on the LCD Screen changes rapidly until an active signal is detected.
 

During CHANNEL SCAN mode.

  - Press ENTER button or PTT button to confirm the selected channel.
  - Press the CALL button to change to CALL function and to send a CALL TONE on that active channel.
  - Press the MENU button 4 times to deactivate CHANNEL SCAN mode.
2. When an active signal (one of 40 channels) is detected. CHANNEL SCAN pauses keeping the active signal broadcasted.
3. Press the PTT button to communicate through the active signal channel and CHANNEL SCAN is deactivated.
4. When an active signal (one of 40 channels) is detected, but another channel is desired, press the MONITOR button 2 times to bypass the current channel and continue to search for another active channel.

### Sending Call Tones

You can use CALL TONES to alert the other when you are attempting to contact them. You can also use CALL TONES to signal the beginning or the end of a transmission.

1. Press the CALL button, the red TX LED indicator will light up and the CALL TONE continues for 3 seconds.
2. Release the CALL button, your CALL TONES will transmit to nearby receivers set to the same channel.

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## Operation

### Battery Level Indicator:

1. The BATTERY LEVEL is indicated by the number of squares present inside the BATTERY icon on the LCD Screen.
2. When the BATTERY LEVEL is low, the BATTERY icon will flash to indicate that the batteries need to be replaced.
3. Do not charge this unit using an AC/DC adaptor with regular "AAA" alkaline batteries installed. Only use optional AC/DC adaptor with "AAA" Ni-MH rechargeable batteries (not included).

### Battery Charge Indication

During BATTERY CHARGE mode, the BATTERY indicator will keep flashing.  
NOTE: Please ensure that the unit is turned off during BATTERY CHARGE mode.

### To Charge The COMMUNICATOR

In the event you wish to use the unit with rechargeable batteries (not included) you will be required to use an AC/DC adaptor - Input 230 VAC 50 Hz - Output 6 VDC 100MA (not included).

Remark: Please make sure that the polarity of the plug of the adaptor is correct. If not, there will be the danger of burning the COMMUNICATOR. For detailed information of the AC/DC adaptor, please contact your local dealer.

- = Insert 4 "AAA" NI-MH rechargeable batteries (not included)
- = Turn the unit OFF
- = Plug the adaptor into the wall and insert the round end into the CHARGE JACK marked CHG on the top of the COMMUNICATOR.
- = After charging, unplug the adaptor. Turn the unit ON. The BATTERY LEVEL INDICATOR on the LCD Screen will display the new BATTERY LEVEL.

Note: It takes approximately 6 hours to fully charge the batteries if they are at their lowest level or takes around 14 hours to fully charge the new batteries.

CAUTION: Do not use non-rechargeable batteries with external AC/DC adaptor as may cause an explosion. Consult your local dealer.








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## Operation

### Dual Watch:

You can use Dual Watch to monitor 2 channels.





To enter Dual Watch mode:

1. Press MENU  button 3 times.
2. Press Up  and Down  buttons to select desired channel.
3. Once Dual Watch is on, automatically scan the channel that between 2 prefixed channel and the carrier stop on either activated channel to receive. Dual Watch restarts when the carrier disappears.
4. Press MONITOR  button to monitor weak signal.
5. Press ENTER , PTT  or CALL  button to end the Dual Watch mode.


### Internal VOX Control Function

On VOX mode, automatically transmitting and receiving signals without pressing any button.



To turn on the VOX function:

1. Press MENU  button 4 times to enter the VOX mode;
2. While the VOX icon is flashing;
3. Press Up  button to select higher VOX sensitivity;
4. Press Down  buttons to select lower VOX sensitivity;
5. Press MENU  button twice to confirm the selected mode.

Note: 1. The VOX sensitivity is indicated by the number of bars displayed in the lower right corner of the LCD Screen.

2. You can press the ENTER  button twice to stop transmitting for 4 seconds and adjust the VOX sensitivity to lower level if the surroundings is too noisy which cause transmitting continuously.

### To turn off the VOX function:

1. While the VOX icon is flashing, press Down  buttons until the number of bars disappears.
2. Press the MENU  button twice to confirm the VOX off mode.

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## Operation

### To activate the VOX sensitivity:


1. While the VOX mode is on, plug the connector of the headset (not included) into SPK/MIC jacks of the communicator and then speak through the microphone of the headset to activate the transmitting mode.
2. Transmitting mode will turn on automatically and on standby mode.
3. The TX LED indicator illuminates red when transmitting.

Note: The VOX sensitivity is automatically activated once plug the connector of the Headset (not included) into SPK/MIC jacks of the communicator. You don't have to push the PTT button of the headset while transmitting.




### Second Counter Function:

Use for counter second meter from 00 to 99 seconds.



To enter Second Counter mode:

Press MENU  button 5 times to enter Second Counter mode.

While the Second Counter Meter is flashing:

1. Press Up  button to run Second Counter continuously;
2. Press Down  button to pause the Second Counter.
3. Press MENU  button to confirm the second counter and return to the original default channel automatically;
4. If an active signal is detected while in Second Counter mode, the unit will return to RECEIVE mode automatically;


To reset the Second Counter meter:

Once enter the Second Counter mode and while it is flashing, press ENTER  button to reset the Second Counter to 00 status and press MENU  button to confirm.

### Duplex Function

This function allows user to use REPEATER feature.

To activate the Duplex function:






Press POWER  button once to enter Duplex or Repeater mode.

Press the button one more time to release the function.

During Duplex mode is on, display will show REP icon.

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## Troubleshooting

SYMPTOM	SOLUTION
No power.	<ul style="list-style-type: none"><li>= Check batteries. Ensure that the batteries are installed properly.</li><li>= The batteries may be weak.</li><li>= Replace old batteries with four (4) new "AAA" alkaline batteries or Ni-MH rechargeable batteries.</li></ul>
Reception is weak.	<ul style="list-style-type: none"><li>= Press the Up  button to increase VOLUME.</li><li>= The receiving signal may be weak and/or out of range.</li><li>= If this happens, press the MONITOR  button.</li></ul>
Cannot change channels.	<ul style="list-style-type: none"><li>= To change channels, press the MENU  button until the channel number flashes on the LCD Screen.</li><li>= Press the Up  or Down  buttons to change channels.</li><li>= Batteries may be weak.</li></ul>
Range is limited.	<ul style="list-style-type: none"><li>= BATTERIES may be weak.</li><li>= Replace with new batteries if the BATTERY LEVEL indicator is low.</li><li>= The maximum range will vary depending on terrain and environment.</li><li>= Open fields provide the maximum range, while steel/concrete structures, heavy foliage and use in buildings and in vehicles may limit the range significantly.</li><li>= Wearing the radio close to the body, such as in a pocket or on a belt, will decrease range; change the location of the radio.</li></ul>
Sound distortion problems.	<ul style="list-style-type: none"><li>= If you are transmitting, speak in a normal tone of voice, 2 to 3 inches away from the MICROPHONE.</li><li>= If you are receiving, lower the volume to a comfortable level.</li><li>= Radios too close. Radios must be at least 5 feet apart; increase your distance.</li><li>= Radios too far apart. Obstacles interfere with transmission. Talk range is up to 2 miles in clear unobstructed conditions.</li></ul>

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## Care and Maintenance

### ! CAUTION

#### Damaged ANTENNA:

Do not use any COMMUNICATOR that has a damaged ANTENNA. If a damaged ANTENNA comes in contact with the skin, a minor burn may result.

#### Batteries:

All batteries can cause property damage and/or bodily injury such as burns if conductive material such as jewelry, keys or beaded chains touches exposed terminals. The material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse or other container with metal objects.

### ! WARNING

#### For Vehicles with an Air Bag:

Do not place your COMMUNICATOR in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a COMMUNICATOR is placed in the air bag deployment area and the air bag inflates, the COMMUNICATOR may be propelled with great force and cause serious injury to the occupants of vehicle.

#### Potentially Explosive Atmospheres:

Turn your COMMUNICATOR OFF when in any area with a potentially explosive atmosphere, unless it is a type specifically qualified for such use (for example, Factory Mutual Approved). Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

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## Care and Maintenance

#### Batteries:

Do not replace or charge batteries in a potentially explosive atmosphere. Contact sparking may occur while installing or removing batteries and cause an explosion.

#### Blasting Caps and Areas:

To avoid possible interference with blasting operations, turn your COMMUNICATOR OFF near electrical blasting caps or in a "blasting area" or in areas posted: "Turn off two-way radio". Obey all signs and instructions.

NOTE: Areas with potentially explosive atmospheres are often, but not always, clearly marked. They include fueling areas such as below deck on boats, fuel or chemical transfer or storage facilities; areas where the air contains chemicals or particles, such as grain, dust, or metal powders; and any other area where you would normally be advised to turn off your vehicle engine.

## Care and Maintenance

To clean the unit, wipe with a soft cloth dampened with water. Don't use cleaner or solvents on the unit; they can harm the case and leak inside, causing permanent damage. Battery contacts may be wiped with a dry, lint-free cloth.

If the unit gets wet, turn it off and remove the batteries immediately. Dry the BATTERY COMPARTMENT with a soft cloth to minimize potential water damage. Leave the cover off the BATTERY COMPARTMENT overnight or until completely dry. Do not use the unit until completely dry.

To ensure optimal unit performance, the following operating procedures should be observed:

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## Care and Maintenance

#### For Portable Two-way Communicators:

- = When transmitting with a COMMUNICATOR, hold the COMMUNICATOR in a vertical position with its MICROPHONE 1 to 2 inches (2.5 to 5.0 cm) away from your mouth. Keep the ANTENNA at least 1 inch (2.5 cm) from your head and body.
- = If you wear a COMMUNICATOR on your body, ensure that the ANTENNA is at least one inch (2.5 cm) from your body when transmitting.

#### Electromagnetic Interference/Compatibility:

Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed or otherwise configured for electromagnetic compatibility.

- = Turn your unit OFF in any facilities where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.
- = Turn your unit OFF when on board an aircraft when instructed to do so. Any use of the unit must be accordance with airline regulations or crew instructions.

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## Specifications

MAJOR FUNCTION			
Channels Available		40 Channels	
Output Power (TX)		0.5W (Maximum RF Power)	
Battery Life		25 Hours (typical)	
Range		About 5 Km	

CHANNEL TABLE		CHANNEL TABLE	
CHANNEL NUMBER	FREQUENCY (MHz)	CHANNEL NUMBER	FREQUENCY (MHz)
* 1	476.425	21	476.925
* 2	476.450	22	476.950
* 3	476.475	23	476.975
* 4	476.500	24	477.000
* 5	# 476.525	25	477.025
* 6	476.550	26	477.050
* 7	476.575	27	477.075
* 8	476.600	28	477.100
9	476.625	29	477.125
10	476.650	30	477.150
11	476.675	31	477.175
12	476.700	32	477.200
13	476.725	33	477.225
14	476.750	34	477.250
15	476.775	35	477.275
16	476.800	36	477.300
17	476.825	37	477.325
18	476.850	38	477.350
19	476.875	39	477.375
20	476.900	40	477.400

\* Repeater channels

# Emergency calling channel. Use this channel only for emergency.

NOTE: The maximum transmission range will vary depending on terrain and environment.

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