# **DISCOVERY CHANNEL**

# **FAMILY RADIO SERVICES**

MODEL: DS-04

**INSTRUCTION MANUAL** 

# Discovery Kids - 2-Way Radio

Instruction Manual: (for bottom of 1st page with illustration)

To have the most fun with your 2-Way Radio, you'll want to take a look at this manual pretty carefully.

#### Intro:

Exploring your world has just gotten even more exciting now that you have the Discovery Kids™ 2-Way Radio.

You can carry it almost anywhere, and all you have to do is get your frequencies set and you'll be able to talk with anyone else who has a 2-Way Radio.

#### FCC NOTICE:

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 the dealer or an experienced radio/TV technician for help.

#### FCC INFORMATION:

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. Privacy of communications any not be ensured when using this equipment.

#### SAFETY INFORMATION:

Your wireless hand-held portable transceiver contains a low power transmitter. When the talk 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.

CAUTION: To maintain compliance with the FCC's RF exposure guidelines hold the transmitter and antenna at least 1 inch 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 from your body. Use only the supplied ANTENNA. Unauthorized ANTENNAS, modifications, or attachments could damage the transmitter and may violate FCC regulations.

# FCC WARNING:

This equipment generates or uses radio frequency energy. Changes or modifications not expressly approved in writing may cause harmful interference and void the user's authority to operate this equipment. Adjustment to this unit or replacement of any transmitter component (crystal, semiconductor, etc.) to this unit that could result in a violation of the rules.

# Getting started with your Discovery Kids 2-Way Radios:

#### 1. Batteries

Your 2-Way Radio is powered by four (4) AAA Alkaline batteries. To install the batteries, lift the spring-action hook on the back of the Radio to find a coin-screw that can be loosened by turning counter-clockwise. You will then be able to slide out the battery compartment cover and insert the 4 AAA batteries. Line up your batteries by polarity similar to the diagram below. Return the compartment cover by sliding it back in place and turn the coin-screw clockwise to tighten.



# DIAGRAM WITH BACK CALLOUTS (file: 2way radio back (clean))



# DIAGRAM OF BACK OF BATTERY PACK (file: Battery Compartment)

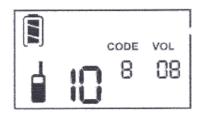
# Caution:

- (1) Do not mix new and old batteries.
- (2) Do not mix different types of batteries (alkaline, carbon-zinc, nickel-cadmium)
- (3) Do not use rechargeable batteries (nickel-cadmium) in this product.

#### 2. Settings

# A Turning your 2-Way Radio On

Press and hold the Discovery Kids logo Power button until the display lights up and you hear a tone. When first turned on, the radio will be in Normal Operating Mode (NOM), and the LED inside the Power button will flash twice every second to let you know that it's ready when you are.



# SHOW LCD SCREEN OF NOM (file: DE-04LCD\_ANOM)

#### B. Turning your 2-Way Radio Off

Press and hold the Discovery Kids Power button until the display clears and you hear a tone.

#### C. Adjusting Volume on your 2-Way Radio

In the NOM mode, press the UP (B) or DOWN (C) button to adjust the volume. A beep will be heard each time the button is pressed. If you hold the UP (B) or DOWN (C) button down, the volume will change automatically and you won't hear the beeps. Release the button when you are happy with the volume.

#### D. Setting the Channel Number on your 2-Way Radio

In the NOM, press the MODE (A) button once, and the CHANNEL icon will begin to flash to indicate that the radio is in channel setting mode. Press the UP (B) or DOWN (C) button to select a new channel. There are 14 channels to choose from (1-14), but both radios must be on the same channel in order to communicate. Select your channel and press the Push-To-Talk (PTT) button to confirm your new channel.

Your radio will always return to NOM if you don't press any button within 10 seconds.

#### E. Setting the Private Conversation Code on your 2-Way Radio

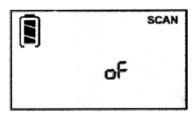
Private Conversation Codes will allow you to use your 2-Way Radio without being interrupted by other radios in the area. For this to work properly, the Code that your radio is set to must be given to the friends that you want to communicate with, and all radios must be set to the same Private Conversation Code in order to work. On your Discovery Kids 2-Way Radio, you and your friends have a total of 38 Private Conversation Codes per channel to choose from (1-38). Which means 532 Private Conversation Code/Channel combinations to choose for your mission!

Thanks to the Private Conversation Code, if another person's radio has scanned your channel they still won't be able to talk to you, and the only way they can even listen in on your conversation is if their Code is set to (-). This feature allows you to be as private and secretive, as you want with your 2-Way Radio.

From the NOM, press the MODE (A) button twice, and the CODE icon will flash. Press the UP (B) or DOWN (C) buttons to select a new Code (1-38), if you don't want to set this Code, just select "--" or hold down the buttons to scroll through all the codes. Once you select your Private Conversation Code hit the Push-To-Talk (PTT) button to confirm your new Code.

Your radio will always return to NOM if you don't press any button within 10 seconds.

#### F. Setting Scan Feature on your 2-Way Radio



# SHOW LCD SCREEN OF SCAN (file: DE-04LCD\_ASCAN)

One of the coolest things about the 2-Way Radio is that you can listen in on other transmitting radios. All you have to do is use the SCAN mode.

From the NOM, press the MODE (A) button 3 times, the display will flash "SCAN" and ON or OF icons. This feature is automatically set to OF when entering the SCAN mode. Press the UP/DOWN (B/C) button to turn it ON or OFF. The radio will start scanning after you return it to NOM or if you press the Push-to-talk (PTT) button.

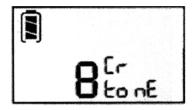
Now you can be always on the lookout! Your 2-Way Radio is able to detect transmissions in the SCAN mode. When it detects something, it stops scanning and stays on the channel for 2 seconds. If you don't

press any buttons during this time, the radio will continue scanning for activity. To get out of SCAN mode hit the MODE (A) button.

If it turns out the Private Conversation Codes on your radio and another radio you've spotted match, you can listen and talk to the other radio user.

If you choose not to have a Private Conversation Code, you can listen, but not talk, to the other users on the scanned channel.

# G. Setting Call - Ring Tone Feature on your 2-Way Radio



SHOW LCD SCREEN OF CALL TONE (file: DE-O4LCD\_Acall Tone - note: remove clock icon)

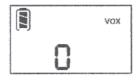
Your Personal Radio, Your Personal Sound. Like a cell phone, your 2-Way Radio has up to 8 individual call tones you can choose from. From the NOM, press MODE (A) button 4 times to enter the CALL-RING SETTING mode. The display will change as you change the ring sound. The display shows the current tone and 'CA TONE' flashes, and the tune is played. The UP (B) or DOWN (C) buttons can change the call-ring number – up to 8 different tones.

When you choose the tone you like, press the PTT button to confirm your CALL TONE and the radio will return to NOM. Just like that, your new call-ring tone has been set.

Your radio will always return to NOM if you don't press any button within 10 seconds.

Also, if you press the UP (B) button during a transmission or if the CALL (D) button is pressed during normal mode, the radio will transmit the call-ring tone. This means your friends can identify you by your personal ring tone as well as your voice. If you hold the button down, the call-ring will be transmitted for no more than 10 seconds.

#### H. Setting VOX Sensitivity on your 2-Way Radio



SHOW LCD SCREEN OF VOX (file: DE-04LCD\_AVOX)

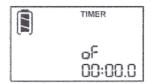
Your 2-Way Radio has a VOX feature. This means that is can be activated by the sound of your voice, without using your hands. Here's how you make it work: From the NOM setting, press the MODE (A) button 5 times. VOX SETTING mode will appear in the display. The current voice sensitivity level will be shown in the number setting display (which is the same as the channel number) and the VOX icon will be flashing. Be careful, though, this setting is voice sensitive and if it is set to "0" it is then turned off.

The UP (B) and DOWN (C) buttons can change the sensitivity levels. The most sensitive level is "1". Remember, "0" means it's turned off. Once you select your sensitivity level, press the PTT button to confirm your VOX and the radio will return to NOM.

When the VOX feature is activated, the radio will transmit for at least 2 seconds when it detects any sound higher than your selected level (which will most likely be your voice.) Depending on where you are, different settings will be needed. For example, if you're exploring in the woods, you may only need to set it to "1," but, if you're at an amusement park or a sporting event you may need to set it to "3."

Your radio will always return to the NOM if you don't press any button within 10 seconds.

#### I. Setting the Stopwatch on your 2-Way Radio



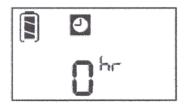
SHOW LCD SCREEN OF TIMER (file: DE-04LCD\_AstopWatch - should have a little clock to the left of "timer")

Your 2-Way Radio does a lot more that transmit your voice. It's also a stopwatch. From the NOM, press the MODE (A) button 6 times and the TIMER icon will begin to flash to indicate that you are in the STOP-WATCH SETTING mode.

Press the UP (B) button to turn on the stopwatch and press the DOWN (C) button to turn off the stopwatch. Press the PTT button or wait 10 seconds to return to the NOM. Press the START (D) button to start the timer. Press the START (D) button again to pause the timer so you to take a lap time. Pressing the STOP (E) button will stop the stopwatch and display the total elapsed time. Press the STOP (E) button again to clear the time back to zero.

While you are in the stopwatch mode you will not be able to use the CALL mode.

#### J. Setting the Auto-Power Off Feature (APO) on your 2-Way Radio



# SHOW LCD SCREEN OF APO (file: DE-04LCD Aautopower)

A mind of its own! Your 2-Way Radio will automatically turn off if you don't use it for a little while. And you'll be glad it has this feature the next time you go to use it, because even if you forgot to turn it off last time, the batteries will still be ok. Of course, there are limits to battery life.

From the NOM, press MODE (A) 7 times, and the radio will enter the APO SETTING mode. You will see a flashing clock and the large numeric display will show the current period of APO time. Press UP (B) or DOWN (C) to change the APO time (from 1 to 3 hours. 0 means that APO is turned off). Press the PTT button to select your Auto-Power Off selection.

Your radio will always return to the NOM if you don't press any button within 10 seconds.

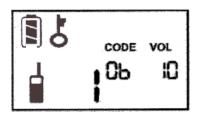
# 3. Operating your Discovery Kids 2-Way Radio

# A. Sending Messages from your 2-Way Radio

It's now time to talk! Just hold the radio 3 inches from your mouth, press and hold the PTT button and speak clearly into the mic.

Do not hold the PTT button down when you are receiving messages.

#### B. Setting the Lock Feature on your 2-Way Radio



# SHOW LCD SCREEN OF Lock (file: DE-04LCD\_Alock Frame)

You can save your settings and no one can mess with them. Press and hold the LOCK/STOP (E) button for 1 second, the LOCK feature will be turned on and its icon will appear on the display. You will then hear a beep.

Press and hold the STOP/LOCK (E) button again for I second, and the LOCK feature will be turned off. You will then hear a beep, as well.

The key-lock feature prevents anyone from accidentally changing or disabling the UP, DOWN, CALL/START or MODE buttons or settings. The PTT and POWER buttons, however, are still usable in this mode.

# C. Busy Indicator on Your 2-Way Radio

#### D. Spring-Action Stand/Hook

Your Radio is equipped with a spring-action hook for attaching your belt, pocket or shirt when you don't want to use your hands to carry it. If you like, you can even use it as a stand for your radio.



Show flip out action (file: 2Way Radio Side (clean) - two images on right

#### E. Use of Hands-free Cable for VOX

You don't have to use your hands at all to use the 2-Way Radio. Just plug in the single pin headset into the external jack when the radio is turned off. Turn the radio back on and it automatically switches into VOX mode. You will not be able to turn off VOX mode while the handsfree cable is plugged in. And thanks to the Spring Action Hook you can now use your radio without pressing any buttons or even holding it. Just talk and listen into the headset!

Please remember to turn the Radio off when plugging or unplugging the handsfree cable.

# F. LCD Backlight on your 2-Way Radio

Whenever a button except the PTT is pressed, the LCD backlight will light up for 5 seconds.

# G. Signal Light Feature on your 2-Way Radio

You won't only be heard; you'll be seen as well! Your radio is equipped with a 3-color (red, blue and white) signal light that can be seen for over a mile away. The signal light feature is located above the PTT button. Rotate the rim clockwise or counterclockwise until it clicks to set the color of the signal light you want to use.



Show location and revolution of light (file: 2Way Radio Side (clean) - left image)

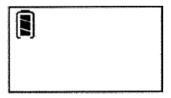
Caution: Looking directly into super bright signal light may cause damage to the eye.

# H. Power Saving Feature on your 2-Way Radio

In the NOM mode, the Power Saving feature will put the radio's most active circuits, in an on/off cycle to save battery power. This will not work in SCAN mode though.

# I. Battery Meter Indicator on your 2-Way Radio

If your radio is not busy, it can measure the amount of power left in the battery. The BATTERY METER will show as follows:



#### (Will BE PULLING OUT THE ICONS AND INSERT BEHIND FULL, MEDIUM, LOW)

Three levels of battery power are displayed. If the icon shows three bars you are at FULL. Two bars indicate MEDIUM, and one bar indicates LOW. If the battery level is at LOW, the LOW indicator will flash. In the meantime, the transmission feature will be disabled and there will be a warning beep every 3 minutes or each time you use the PTT button.

After sustained use while the LOW indicator is flashing, all other LCD display icons and all of the buttons will be turned off except POWER.

The batteries may run down if left in the radio and aren't used.

Do not leave the batteries in the 2-Way Radio if you don't plan on using it for an extended period of time.

#### GO OUT THERE AND HAVE FUN.

# Caring for your Discovery Kids 2-Way Radios

To clean your radio after a rough mission, use a clean cloth dampened by water. Do not use any of the following liquids to clean your radio:

- Cleaning solvents (i.e., thinners, household cleaners)
- Abrasive solvents
- Aerosol solvents (i.e. cleaning foams)
- Petroleum based products.

Submersing your 2-Way Radio may have an adverse effect on this product.

#### **Safety Information**

This product is marketed with and in accordance with FCC requirements.

- Do not operate your 2-Way Radio in hazardous environment, where explosion or fire may result.
- Do not operate handset near unshielded electrical blasting caps.
- Under certain conditions, handset can interfere with blasting operations. Turns your handset OFF to
  prevent accidental transmission when in a "blasting area" or in area posted: "Turn off Two-Way
  Radios". Construction crews often use remote control RF devices to set off explosives."

#### **IMPORTANT**

In the event of an accident, this product cannot be used for contacting emergency or rescue services.

Should you have any questions, please feel free to call us TOLL-FREE 1-800-379-0244

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