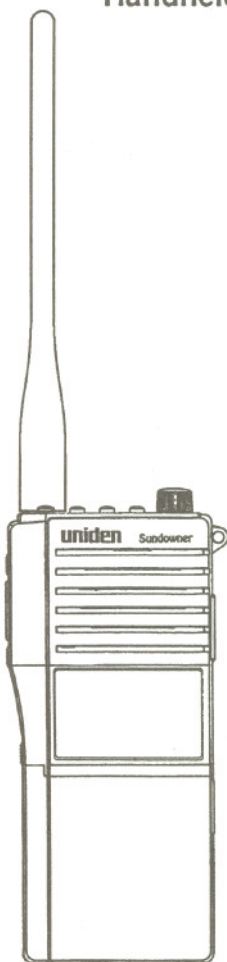


# uniden®

SUNDOWNER UH-056

Handheld UHF CB Radio



OPERATING GUIDE

# uniden®

UNIDEN AUSTRALIA PTY. LIMITED

345 Princess Highway, Rockdale, NSW2216

Ph(02)599-3100 FAX(02)599-3278

**Please read this Operating Guide carefully before operating this radio**

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## **Safety Information**

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**DO NOT** operate the transmitter of any radio equipment with the antenna touching, or close to the eyes, face, or exposed body parts.

**DO NOT** let children operate any transmitter-equipped radio equipment.

Have your radio equipment serviced by a qualified technician.

## **Nickel-Cadmium Battery Warning**

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This equipment contains a Nickel-Cadmium battery.

The Nickel-Cadmium battery contained in this equipment may explode if disposed of in a fire.

**DO NOT** short circuit the battery.

**DO NOT** charge the Nickel-Cadmium battery used in this equipment in any other charger other than the one designed to charge this battery. Using another charger may damage the battery, or cause the battery to explode.

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**Uniden®** is a registered trademark of **Uniden Corporation.**

Features, Specifications, and availability of Optional Accessories are all subject to change without notice.

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# Introduction

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Welcome to the world of CB Radio Communication. You have chosen the most reliable, highly engineered, ultra-precise piece of communication equipment.

## Description

Your UNIDEN Sundowner UH-056 represents the most advanced portable radio ever designed for use in the UHF Citizens Band Radio Service. This UH-056 UHF CB radio has been built to give you a rugged, reliable equipment that will provide you with years of trouble free service.

You are encouraged to thoroughly read the rest of this operating guide to acquaint yourself with the superior characteristic and operation of your transceiver. This full featured radio operates on any of the 40 UHF frequencies designated as Citizens Band Channels by the Spectrum Management Agency.

### WARNING

*The Citizens Band Radio communication Service (CBRS) is under the jurisdiction of the Australian Management Agency (SMA). Any adjustment or alteration which will change the performance of the transceiver's original SMA type acceptance is STRICTLY PROHIBITED. Replacement or substitution of power or frequency determining components e.g. Crystals, Transistors, ICs, Diodes, etc. with other than those recommended by UNIDEN will cause violation to the SMA type acceptance technical requirement.*

## Licensing Requirements

Before using your transceiver, you must obtain a Citizens Band Radio License from the Spectrum Management Agency (SMA). Application forms and brochures relating to CBRS are available at your nearest SMA office. Mail the completed application form and the appropriate fee to the Communications Manager, in the State or Territory in which the station will be operated.

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## Feature Highlights

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- **Full 40 Channel UHF CB Coverage**  
Operates on any of the 40 Channels designated as Citizens Band Channels by the Spectrum Management Agency.
- **Simplex/Duplex Communication**  
Allows the Uniden Sundowner UH-056 to operate via a repeater station.
- **Two Level Switchable Transmitter Output Power**  
Lets you transmit at 1 Watt or 5 Watts for short-range or long-range communication.
- **Auto-Squelch System**  
Eliminates unwanted noise when activated.
- **Liquid Crystal Display (LCD) with Backlight**  
Shows visual display of the current Channel and/or Operation. Illuminated everytime a Key is pressed for better visibility at night or under dim conditions.
- **TX/Busy LED**  
**Lights RED** when the unit is transmitting. **Lights GREEN** when the received signal (on the current channel) is strong enough to break the squelch.
- **Channel Scan**  
Provides rapid, automatic scanning of programmed channels.
- **User Programmable Channel Scan List (using LOCK-OUT switch)**  
Allows the user to customise the Channel Scan List for faster scanning.
- **Battery Save**  
Conserves the Battery Power by putting the receiver on "sleep" when monitoring inactive channel.
- **Battery Low Detection**  
Informs the user when the battery level is low and needs recharging.
- **Rechargeable Battery Pack**  
Eliminates the costly expense of frequent Battery replacement.
- **Battery Free Memory**  
The programmed channels on the Scan List and other unit settings are retained in memory when the Battery Pack is removed from the unit.

## UNPACKING

Carefully check the package contents against the list:

- Uniden Sundowner UH-056 UHF CB Radio
- Flexible Antenna
- AC Adaptor/Charger
- Standard Nickel-Cadmium Battery Pack
- Belt Clip
- Wrist strap
- This Operating Guide

If any of the items are missing or damaged, contact your place of purchase immediately.

## OPTIONAL ACCESSORIES

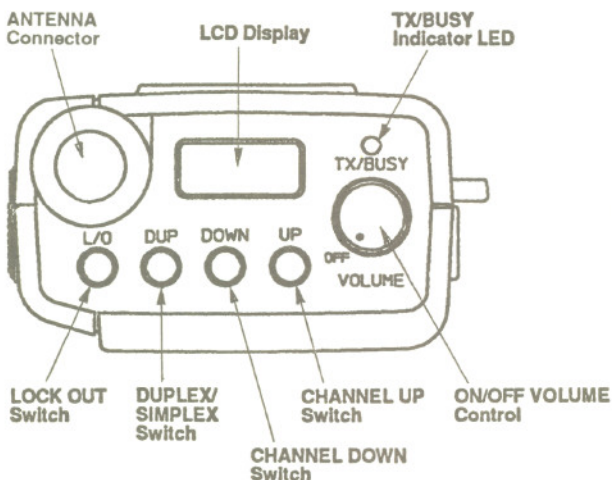
- **Speaker-Microphone**  
A two-in-one combination for convenient transmitting and receiving.
- **Spare Battery Pack**  
A replacement pack for your rechargeable battery (Either standard or Heavy Duty Pack).
- **Battery Pack Charger**  
Desktop Rapid Charger



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# Controls and Indicators

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## Top Indicators and Display

### Antenna Connector

- connect the antenna to this TNC port

### Lock-out Switch

- locks out a selected channel from channel scan.

### Duplex Switch

- allows Simplex or Duplex Operation on Channels 1 through 8

### Channel UP/DOWN Switches

- use to select a channel

### On/Off Volume Control

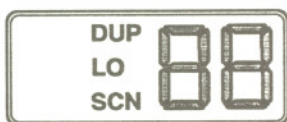
- Rotate clockwise to turn the radio **ON** and increase the volume. Rotate counter-clockwise to turn the radio **OFF** or decrease the volume.

### TX/Busy Indicator

- The **RED LED** lights when you press the **PTT** switch (to transmit). It blinks when the battery is low and needs recharging. The **GREEN LED** lights when the received signal (on the current channel) is strong enough to break the squelch.

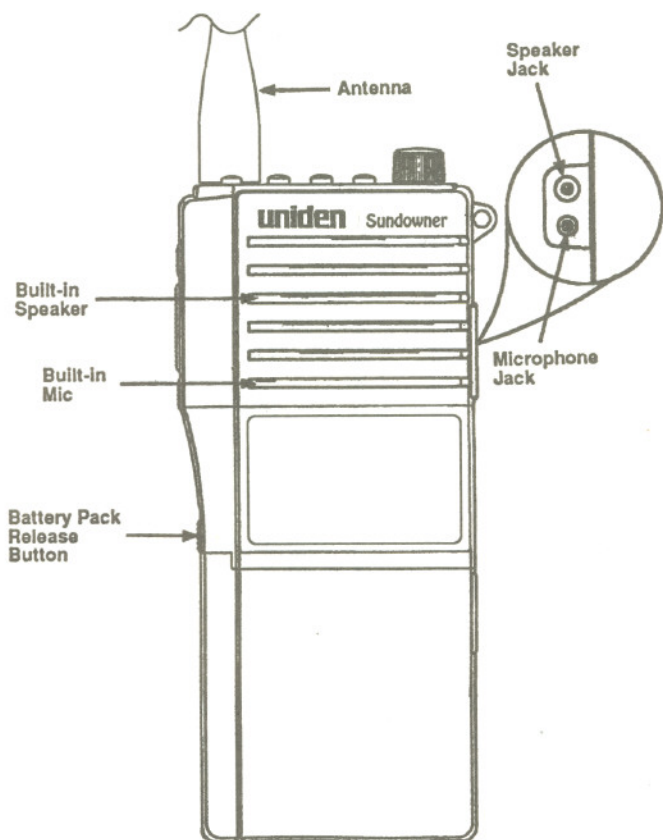
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Liquid Crystal Display (LCD) has several indicators that show the current operating mode. The digits at the right show the current selected channel. The smaller, two/three-letter displays show which features are enabled.



<b>DUP</b>	Duplex Channel Operation Selected
<b>LO</b>	Low Power TX Selected
<b>SCN</b>	Scan feature enabled





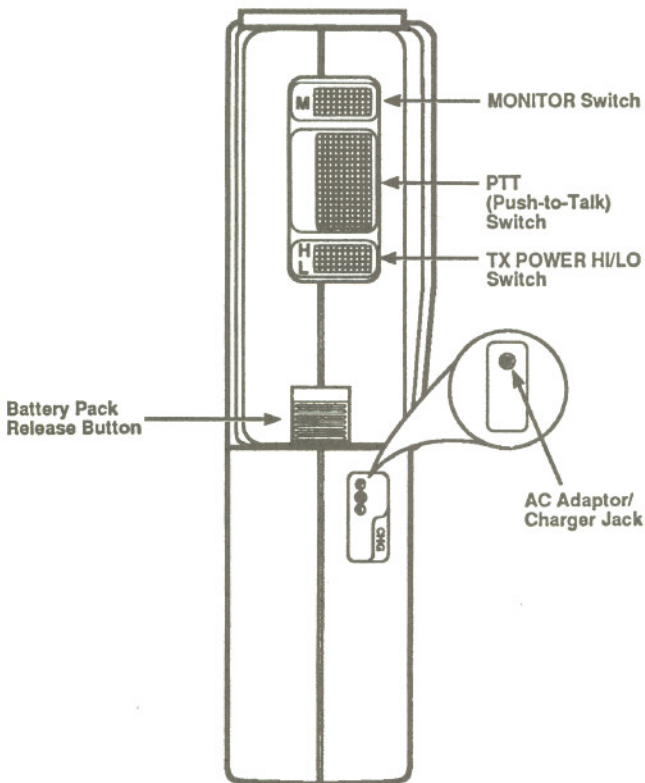
## Front Controls

**Built-in Speaker** - Audio Output

**Built-in Microphone** - Speak into the microphone when transmitting.

**Speaker Jack** - Connect optional external speaker here.

**Microphone Jack** - Connect optional external microphone here.



## Side Controls and Connectors

**Battery Pack Release Button** - To remove the Battery Pack, push up on the release button and slide the Battery Pack away from the radio.

**Monitor Switch** - Press to set the Auto-squelch feature ON or OFF.

**Push-to-Talk (PTT) Switch** - Press and hold to talk. Release to listen for a reply.

**TX Power HI/LOW Switch** - Press to set the Transmit output power to HIGH (5W) or LOW (1W).

**AC Adaptor/Charger Jack** - Connect AC Adaptor/Charger here

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# GETTING STARTED

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## Antenna

To attach the antenna to the TNC connector on top of your radio, press down and rotate the antenna base clockwise until it seats firmly into place.

## Battery Information

The Sundowner UH-056 comes with a standard rechargeable Ni-Cd Battery Pack. An optional heavy duty rechargeable Ni-Cd Battery Pack is also available.

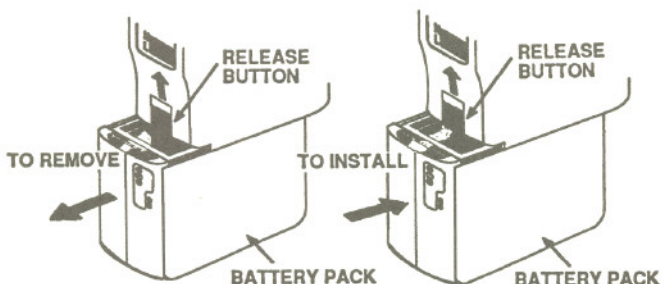
## Installation

THE RECHARGEABLE NICKEL-CADMIUM BATTERY PACK MUST BE CHARGED FULLY BEFORE USING IT FOR THE FIRST TIME.

When installing or removing the rechargeable Battery Pack, be sure that the power (ON/OFF Volume control) is turned OFF.

To remove the Battery Pack, push up on the release button and slide the Battery Pack away from the radio.

To replace, align the Battery Pack rails with the transceiver and slide toward the transceiver unit until the Battery Pack locks in place.



## Recharging the Nickel-Cadmium Battery Pack

**Note:** Before charging, be sure that the power (ON/OFF Volume control) is turned OFF.  
Recharge the Ni-Cd Battery **ONLY** when the unit indicates a **LOW BATTERY** condition.  
(TX LED blinks during TRANSMIT)

Insert the discharged Battery Pack in the rapid charger, or connect the trickle charger to the side of the unit.

Using the trickle charger, the standard pack charges fully in 8 hours, and the heavy duty pack in 12 hours. If you have a rapid charger, the standard pack charges fully in 1.5 hours, and the heavy duty pack charges fully in 2 hours.

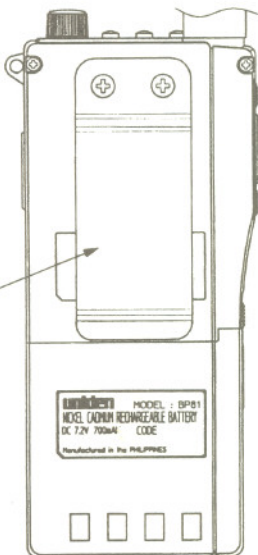
**DO NOT** leave the Batteries on charger for an extended period of time.

## Belt Clip Installation

Place the Belt Clip on the mounting area on the back of the radio, making sure the holes in the clip line up with the threads in the back of the radio.

Insert the 2 screws into the corresponding holes and tighten.

Belt Clip



### CAUTION:



**DO NOT** tighten the screws too tight, you could damage the case.

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# OPERATION

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## RECEIVE

1. Turn the radio ON. Rotate the ON/OFF Volume control clockwise until you hear the click. A channel number should appear in the LCD Display.
2. Press the  or  switch to select the desired channel.
3. Press the monitor switch (Auto-squelch turns OFF).
4. Rotate the ON/OFF Volume control to adjust the speaker volume to a comfortable level.
5. Press the Monitor switch (Auto-squelch turns ON).

## Auto-Squelch

Automatically eliminates the unwanted "rushing" noise when the unit is turned ON.

- press the Monitor Switch to set the Auto-squelch feature ON or OFF


**Note:** *To listen to weak signal transmissions, switch OFF the Auto-squelch feature (Squelch is on minimum level).*

## Channel Scan




When you pressed the  Key for more than 1.5 seconds, the scan feature starts and the **SCN** indicator appears on the LCD.

Scanning stops automatically on any active channel that is not Locked-out, receives a call and you hear the caller.

To resume scanning, press the  Key.

If there is too much activity on a certain channel and you wish to exclude it from being scanned, simply press the  Key when on that channel. It will be automatically removed from the scan list, and scanning resumes (please see page 12 on how to create a channel scan list).

To disable scanning:

- when on an active channel, press the  Key and the unit stays on the active channel.
- while scanning, press the  or  Key. The unit returns to the channel where scan function is activated.
- press the **PTT** switch. When the unit is on an active channel, it transmits on the same channel. When scanning, the unit transmits on the channel where scan function is activated.

**SCN** indicator disappears from the LCD Display.





## Drop Out Delay

While scanning, the radio stops at a busy channel and receives a transmission. When the received call is over, the unit will wait for three seconds for the return of the signal. Otherwise it resumes scanning.

## Create a Channel Scan List with Channel Lock-Out Feature

You may have certain channels that you do not want to hear every time you scan. These are channels that are busy in a major portion of time, and the scanning stops at that channel(s) often enough to interrupt the scan cycle. You can Lock-out those channels so they are not scanned.

There are two ways to exclude channels from being scanned:

1. Using the  or  switches, manually select the desired channel and press the  button. The locked-out channel blinks.
2. While scanning, when the unit stops on the channel you wish to lock-out because of its too much activity, simply press the  **Key** and it will be automatically removed from the scan list. Scanning resumes.

To remove the lock-out condition from a channel, manually select the channel and press  button again. The channel stops blinking.



## TRANSMIT

1. The maximum transmit power output level of UH-056 is 5 watts.

To switch to low power, press the **HI/LO** switch. **LO** appears on the **LCD** and the transmit power output level is changed to 1 watt.


To switch back to High power, press the **HI/LO** switch again. The **TX** power returns to high and the **LO** indicator disappears from the **LCD**.


2. Before you transmit, listen for activity on the selected channel.
3. When the channel is clear, press the **PTT** switch to transmit. The **TX LED** comes on when you transmit. Hold the radio with the microphone approximately two inches in front of your mouth with the antenna at approximately a 45-degree angle away from your head. Speak in a clear, normal, conversational voice.
4. When you are finished speaking, release the **PTT** switch and listen for an answer.

## Simplex / Duplex Communication

Duplex Operation allows the Uniden Sundowner UH-056 to operate via a repeater station on Channels 1 through 8. The set receives on these channels but transmits on Channels 31 through 38 respectively.

When Duplex operation is disabled, the set receives and transmits on the same channel. (Simplex Communication)

To activate Duplex operation on a Channel where Repeater Service is available, select the channel and then press the  button. **DUP** indicator appears on the **LCD** Display.

To put the Duplex programmed channel back to normal Simplex operation, select the channel and press the  button again. **DUP** indicator disappears from the **LCD** Display.



## Low Battery Level Detection

Uniden Sundowner UH-056 has a built-in battery level detector circuit. It evaluates your Battery Pack everytime you transmit to determine whether the power inside the Battery is still sufficient enough to support normal Receive and Transmit communications.

The circuit will inform you in two ways.

1. When the **PTT** switch is pressed and the **TX LED** blinks. It means the battery level is already low and needs recharging. You can still transmit, however, you must finish the conversation and have your battery charged fully to resume normal operation.
2. When the Blinking **TX LED** went unnoticed and the Battery goes down to where normal communication can no longer be supported, the circuit will disable the **PTT** switch and emit an error tone everytime you try to transmit.

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## SERVICE

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Should you find it desirable or necessary to have service performed on your Uniden Sundowner UH-056, you are urged to contact the Uniden Dealer from whom you made your purchase. Your Uniden Dealer will be able to assist you with complete service information.

If you require service that is within the terms of your warranty, you should present a copy of your receipt to your dealer to authenticate your claim.

If you find it inconvenient to obtain service assistance from your dealer, you may obtain service from Uniden Service Division. If you want this service, please pack your radio in a suitable container that will provide adequate protection. Enclose a note describing the problem and a copy of your receipt and send the radio (transportation prepaid) to:

**uniden** Australia Pty. Limited  
SERVICE DIVISION  
345 Princess Highway,  
Rockdale, NSW 2216

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## Care and Maintenance

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Your **Uniden Sundowner UH-056** is a precision piece of electronic equipment and you should treat it accordingly. Due to the rugged design, very little maintenance is required. However, a few precautions should be observed:

- If your radio has been accidentally subjected to spray or splash, you should immediately wipe it down with a soft cloth dampened with fresh water.
- If the antenna has been damaged, you should not transmit except in case of emergency. A defective antenna may cause damage to your radio.
- You are urged to arrange a periodic performance check with your **Uniden Dealer**.

### Operator Troubleshooting

Should the unit malfunction or not perform properly, the operator should perform the procedures indicated below.

1. If the transceiver is completely inoperative.
  - \* Check the Battery
2. If trouble is experienced with receiving.
  - \* Check if the Radio is Switched-On
  - \* Check the **VOLUME** control setting
  - \* Check if the antenna is securely connected to the antenna connector
3. If trouble is experience with transmitting.
  - \* Check if the antenna is securely connected to the **Antenna Connector**

# UHF CB CHANNEL INFORMATION

## SIMPLEX Operating Mode

Channel Assignment	Transmit Frequency(MHz)	Receive Frequency(MHz)
1	476.425	476.425
2	476.450	476.450
3	476.475	476.475
4	476.500	476.500
5	476.525	476.525
6	476.550	476.550
7	476.575	476.575
8	476.600	476.600
9	476.625	476.625
10	476.650	476.650
11	476.675	476.675
12	476.700	476.700
13	476.725	476.725
14	476.750	476.750
15	476.775	476.775
16	476.800	476.800
17	476.825	476.825
18	476.850	476.850
19	476.875	476.875
20	476.900	476.900
21	476.925	476.925
22	476.950	476.950
23	476.975	476.975
24	477.000	477.000
25	477.025	477.025
26	477.050	477.050
27	477.075	477.075
28	477.100	477.100
29	477.125	477.125
30	477.150	477.150
31	477.175	477.175
32	477.200	477.200
33	477.255	477.255

**SIMPLEX Operating Mode (Cont...)**

Channel	Transmit	Receive
Assignment	Frequency(MHz)	Frequency(MHz)
34	477.250	477.250
35	477.275	477.275
36	477.300	477.300
37	477.325	477.325
38	477.350	477.350
39	477.375	477.375
40	477.400	477.400

**DUPLEX Operating Mode**

Channel	Transmit	Receive
Assignment	Frequency(MHz)	Frequency(MHz)
1	477.175	476.425
2	477.200	476.450
3	477.225	476.475
4	477.250	476.500
5	477.275	476.525
6	477.300	476.550
7	477.325	476.575
8	477.350	476.600

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# SPECIFICATIONS

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## GENERAL

Channels	: 40
Frequency Range	: 476.425MHz to 477.4MHz
Communication Mode	
CH1 to CH8	: Simplex / Duplex
CH9 to CH40	: Simplex
Frequency Control	: Phase Locked Loop (PLL)
Controls	: On/Off Volume Control, On/Off Monitor Switch HI/LOW TX Power Switch
Buttons	: UP Key, DOWN Key, L/O Key, DUPLEX Key
Status Indicator	: TX LED at PTT On: RED Continuous : Transmitting Flashing : TX/Low Battery TX LED at PTT Off : GREEN Lights ON : Busy Channel
	: SCN (Scanning), LO (Low TX Power Selected) DUP (Duplex Communication)
Channel Display	: Liquid Crystal Display (LCD, Dual 7 Segments)
Connectors	: Antenna, External Speaker External Microphone AC Adaptor for Batt. Charge
Size	: 62mm W x 37mm L x 150mm H
Weight	: 390 g.
Power Requirements	: 7.2V DC
Antenna Impedance	: 50 ohms, nominal
Microphone	: Built-in Electret type
Speaker	: 8 ohms, 0.5W
Operating Temperature	
Range	: 0°C to +55°C
SMA Approvals	: Type accepted under MS250

## Transmitter

Power Output	
HI	: 4W (nominal), 5W (max.)
LOW	: 1W (nominal)
Modulation	: F3E, $\pm 5\text{kHz}$ Deviation
Frequency Tolerance	
at 25°C	: $\pm 300\text{Hz}$ (nominal)
Mic. Sensitivity	
at $\pm 3\text{kHz}$ Dev.	: 4.5mV (nominal)
Hum and Noise	
(300Hz, 3kHz BPF)	
(750 $\mu\text{S}$ DeEmp)	: 40dB
Modulation Frequency Response	
at 1kHz $\pm 1\text{kHz}$ Dev.	
500Hz	: -6dB
2000Hz	: +6dB
Current Drain	
at HIGH Power	: 1800mA

## Receiver

Sensitivity	
at 12dB SINAD	: 0.35 $\mu\text{V}$ (nominal)
Squelch Sensitivity	: 0.20 $\mu\text{V}$ (nominal)
	(Auto-squelch: ON)
Audio-Frequency	
Response (ref: 1kHz, $\pm 3\text{kHz}$ Dev.)	
500Hz	: +6dB
2000Hz	: -6dB
Total Harmonic Distortion	
at Standard AF Output	
(50mW at 4 ohm Load)	
	: 3 %
Hum and Noise	: 40dB
Adjacent Channel	
Selectivity	
at $\pm 25\text{kHz}$	: 60dB
Image Rejection Ratio	: 45dB
IF Rejection Ratio	: 55dB
Current Drain	
Max Volume	: 250mA
Squelched	: 50mA



# WARRANTY

## Uniden Sundowner UH-056 Handheld UHF CB Radio Australian 1 Year Warranty

**Note:** Please keep your sales docket as it provides evidence of warranty.

**WARRANTOR:** Uniden Australia Pty. Limited ACN 001 865 498

**ELEMENTS OF WARRANTY:** Uniden warrants to the original retail owner for the duration of this warranty, its Sundowner UH-056 Handheld UHF CB Transceiver Radio (hereinafter referred to as the Product), to be free from defects in materials and craftsmanship with only the limitations of exclusions set out below.

**WARRANTY DURATION:** This warranty to the original retail owner only, shall terminate and be of no further effect ONE (1) Year after the date of original retail sale. This warranty will be deemed invalid if the product is; (A) Damaged or not maintained as reasonable and necessary, (B) Modified, altered or used as part of any conversion kits, subassemblies, or any configurations not sold by Uniden, (C) Improperly installed, (D) Repaired by someone other than an authorized Uniden Repair Agent for a defect or malfunction covered by this warranty, (E) Used in conjunction with any equipment or parts or as part of a system not manufactured by Uniden, (F) Installed, programmed or serviced by anyone other than an authorized Uniden Repair Agent, (G) Where the Serial Number label of the product has been removed or damaged beyond recognition.

**PARTS COVERED:** This warranty covers for one year, the Sundowner UH-056 Handheld UHF CB Transceiver Unit only. All accessories, NICAD Battery, AC Adaptor/Battery Charger, Antenna, Belt Clip, Wrist Strap are covered for 90 days.

**STATEMENT OF REMEDY:** In the event that the product does not conform to this warranty at any time while this warranty is in effect, the warrantor at its discretion, will repair the defect or replace the product and return it to you without charge for parts and service.  
THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES.

**WARRANTY CARD:** If a warranty card has been included with this product then please fill it in and return it to us within 14 days of purchase. Your name and serial number of the product will then be registered in our database and this will help up process your claim with greater speed and efficiency should you require warranty service.

**PROCEDURE FOR OBTAINING PERFORMANCE OF WARRANTY:** In the event that the Product does not conform to this warranty, the Product should be shipped or delivered, freight pre-paid, with evidence of original purchase, (eg/ a copy of the sales docket), to the warrantor at:

### UNIDEN AUSTRALIA PTY. LIMITED SERVICE DIVISION

345 Princes Highway, Rockdale, NSW 2216  
Ph (02) 599 3100 FAX (02) 599 3278

Customers in other States should ship or deliver the Product freight pre-paid to their nearest Uniden Authorized Repair Centre.  
(Contact Uniden for the nearest Warranty Agent to you)

UNIDEN AUSTRALIA PTY. LTD.

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