

ZARES – ZPRS01 - UHF 4W PRS Transceiver

This high-power, easy to use transceiver operates on the licence free Public Radio Service (PRS) band. It provides clear communications in a compact design with a range of up to 10km*. Eight duplex channels enable even further range when used with a PRS repeater. Advanced features include channel scan, keypad entry and a cool blue LCD which indicates channel, transmit power, battery condition & received signal strength.

Features

- Up to 100 hours standby & up to 10km range.
- 4W transmit with HI or LO setting to conserve power
- Cool blue LCD display & direct keypad entry
- 38 transmit, 40 receive & 8 duplex repeater channels.
- Channel scanning & keypad key lock
- Transmit time out timer to conserve power

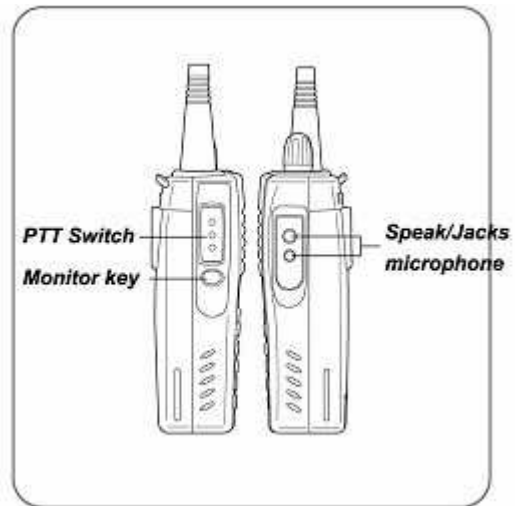
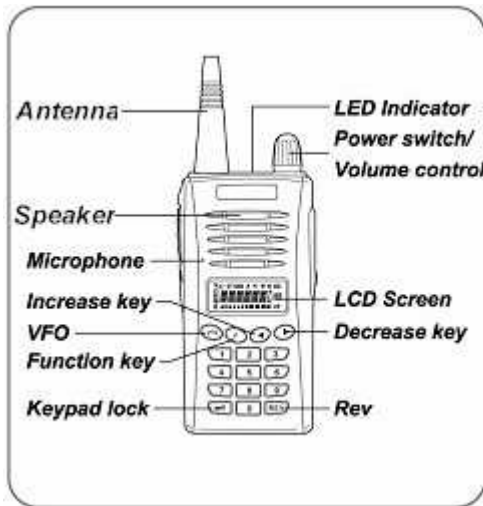
Package Contents

- 1x Zares ZPRS01 PRS transceiver
- 1x Drop-in battery charger & 12V charge lead
- 1x Antenna
- 1x Ni-MH rechargeable battery
- 1x Belt clip
- 1x Speaker / Microphone cover & 1x Cover Screw

IMPORTANT WARNINGS


- This transceiver is not a toy. Do not allow children or infirm persons to play with it.
- The recommended use of this transceiver is 1 minute talk to 4 minutes receive. If you talk longer, the back will get hot. Beware of this and take adequate precautions.
- This transceiver is not waterproof. Do not leave it or store it in a humid, hot or damp environment or expose it to direct sunlight for prolonged periods.
- Do not short-circuit the transceiver battery, charge it with anything other than the provided charger, disassemble it or throw it away in a fire.
- DO NOT TRANSMIT WITHOUT THE ANTENNA or you could permanently damage the transceiver beyond repair.
- This transceiver is not designed for, or use in, life support appliances, devices, or systems where malfunction of the product can reasonably be expected to result in personal injury.
- Do not use this transceiver near flammable liquids, fumes or where a spark could cause a fire.
- This transceiver contains no user serviceable parts. Refer all repairs to authorized service personal only.


LAYOUT








LCD SCREEN



 ⁷⁵/₅/₂₅ Displays the working frequency menu selection and other function selection.

 ⁵/₉ Displays the HL/LO power output when transmitting.

ICON	EXPLANATION
	Signal strength indicator
A	Signal scan indicator
	Turn the speaker on
	Turn key sound on
R	Reverse frequency
HI	High power output
LO	Lower power output
S	Battery save
	Keypad Lock
	Battery indicator

CHARGE THE BATTERY BEFORE USE

The new battery MUST be charged before you use the transceiver. Screw on the antenna, attach the battery, plug in the charger and drop it into the charge cradle. When charged, the red light on the charge cradle will turn green.

www.zares.co.nz

Operating guide

Operation of the transceiver is very easy. Turn it on, use the keypad or ◀ ▶ keys to select the required PRS channel. Adjust your personal setting as per the following table. Then press and hold the PTT Switch to talk, release it to receive.

TRANSCIVER SETTINGS					
To adjust..	Which does this..	press	then press..	then press ◀ or ▶ to select these options..	
Squelch	Mutes out background audio 'hiss'.	F	1	0 (off), 1 (min) to 9 (max)	
Transmit power	Selects between Hi or Lo and helps conserve battery power	F	2	Lo, Hi	
Channel scan	Scans through all PRS channels	F	3	◀ to scan down or ▶ to scan up	
Backlight	Keypad & display backlight	F	4	Auto, off, on	
Key beep	Enable or disable the keypad beeper	F	5	On, off	
Key lock	Locks out the keypad	F	6	Manual, auto. You can also press and hold ↔ for 2 seconds	
Transmit timer	Turns off the transmitter after a pre-set time	F	7	Off, 10, 20, 30, 40, 50, 60, 70, 80 or 90 (seconds)	

Then press the PTT button to save the option you have just changed.

SETTINGS SUMMARY...

Press the F key, then the number key corresponding to what you want to change, press ◀ or ▶ to change the option then press the PTT to save it..

PRS channel allocation & frequencies

CH #	Receive	Transmit	Used for..
1	476.425	476.425	Reserved for repeaters
2	476.450	476.450	Reserved for repeaters
3	476.475	476.475	Reserved for repeaters
4	476.500	476.500	Reserved for repeaters
5	476.525	476.525	EMERGENCY
6	476.550	476.550	Reserved for repeaters
7	476.575	476.575	Reserved for repeaters
8	476.600	476.600	Reserved for repeaters
9	476.625	476.625	General conversations
10	476.650	476.650	General conversations
11	476.675	476.675	Calling other stations
12	476.700	476.700	General conversations
13	476.725	476.725	General conversations
14	476.750	476.750	General conversations
15	476.775	476.775	General conversations
16	476.800	476.800	General conversations
17	476.825	476.825	General conversations
18	476.850	476.850	Caravans, campers, etc
19	476.875	476.875	General conversations
20	476.900	476.900	General conversations
21	476.925	476.925	General conversations
22	476.950	Disabled	Reserved for data only
23	476.975	Disabled	Reserved for data only
24	477.000	477.000	General conversations

CH #	Receive	Transmit	
25	477.025	477.025	General conversations
26	477.050	477.050	General conversations
27	477.075	477.075	General conversations
28	477.100	477.100	General conversations
29	477.125	477.125	General conversations
30	477.150	477.150	General conversations
31	477.175	477.175	Reserved for repeaters
32	477.200	477.200	Reserved for repeaters
33	477.225	477.225	Reserved for repeaters
34	477.250	477.250	Reserved for repeaters
35	477.275	477.275	EMERGENCY
36	477.300	477.300	Reserved for repeaters
37	477.325	477.325	Reserved for repeaters
38	477.350	477.350	Reserved for repeaters
39	477.375	477.375	General conversations
40	477.400	477.400	Trucks & other hi-way users
41	476.425	477.175	Repeater (Duplex) - PRS 01
42	476.450	477.200	Repeater (Duplex) - PRS 01
43	476.475	477.225	Repeater (Duplex) - PRS 01
44	476.500	477.250	Repeater (Duplex) - PRS 01
45	476.525	477.275	Repeater (Duplex) - PRS 01
46	476.550	477.300	Repeater (Duplex) - PRS 01
47	476.575	477.325	Repeater (Duplex) - PRS 01
48	476.600	477.350	Repeater (Duplex) - PRS 01

Optional accessories



Wired DC Supply

- Ideal battery replacement for when used in a vehicle
- Clips on in place of the 6V battery
- Accepts 10-28V DC so OK for most cars, trucks, etc.
- Lighter plug has LED and is fused



Speaker Microphone

- Plugs into the side of the Zares & has metal clip on back
- Small, convenient & simple to operate
- Curly cord long enough to reach a Zares in your pocket
- Provides clearer sounding audio



Earpiece Microphone

- Plugs into the side of the Zares
- Cord long enough to reach a Zares in your pocket
- Manual PTT Switch and microphone in the lead

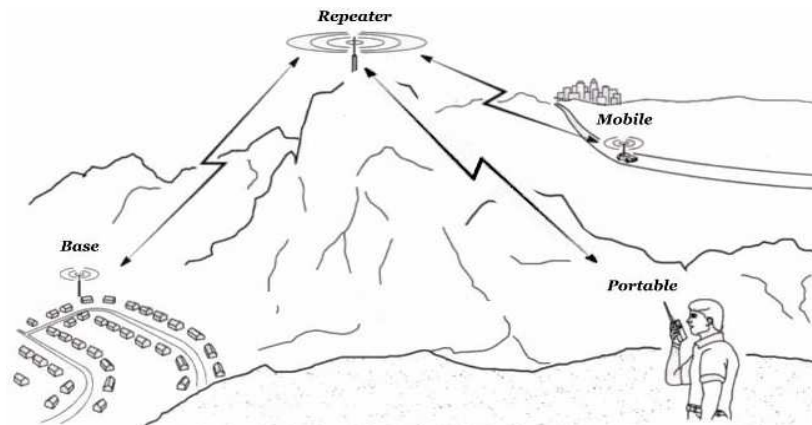


Leatherette Carry Case

- Helps to protect the Zares from harsh environments
- Handy belt loop and carry strap
- Clear plastic window
- Top flap has Velcro type hook & loop tab

Zares accessories are available from
www.zares.co.nz
 or your local Zares agent.

About PRS repeaters



To achieve greater range, a radio repeater can be used. This where a station communicates with the repeater which in turn rebroadcasts the signal over a wider area. There are 8 channels for PRS repeater use in NZ. On this transceiver, these 8 channels are numbered 41 to 48. So in Tuaranga the local repeater operates on PRS channel 2. With this transceiver, tune to channel 42 to access the repeater.

NZ PRS Repeaters (as at June 06)

PRS #	Tune to..	Repeater Location
1	41	Coopers Beach, Northland. Glenfield Auckland. Pukemoremore, Waikato. Kimbolton, Manawatu. Waitai Station, Cook Strait. Otematata, Waitaki. Kaikoura, Marlborough. Hamilton, Otago.
2	42	Wellsford, Northland. Ohauiti, Tauranga. Cape Foulwind, West Coast. Picton Marlborough. Georgetown, Waitaki Valley.
3	43	Ahipara, Northland. Silverdale, Auckland. Wanganui. Taumarunui. Huntly, Waikato. Tapanui, Otago.
4	44	Ngunguru, Northland. Awhitu Peninsula, Sth Auckland. Clifton, Hawkes Bay. Glandstone, Wairarapa.
5	45	Waitakere, Auckland. Poukawa, Hawkes Bay. Purin, Waikato. Rays Hill, Marlborough. Riversdale, Southland.
6	46	Three Mile Bush, Whangarei. Te Kohanga, Waikato. Blenheim, Marlborough. Montalto, Canterbury. Oware, Southland.
7	47	Whitford, Auckland. Hauturu, Waikato. Morrisons Bush, Wellington. Albury Hill, Canterbury. Nightcaps, Southland.
8	48	Bombay, South Auckland. Lincoln, Christchurch. Riversdale, Southland.

- Most repeaters are privately owned and not all operate 24/7
- Repeaters can usually be accessed up to 50km. In some circumstances, they can be accessed up to 150km!

Specifications

*Frequency Coverage: 430.000MHz – 489.995MHz
 *Channel Spacing: 5KHz, 6.25KHz, 10KHz, 12.5KHz, 25KHz
 Emission Type: F3E (FM)
 Antenna Connector: SMA male
 Antenna Impedance: 50 Ohms
 Other Connectors: Speaker, Microphone
 Standby Current: 10mA
 Approximate Standby Time: 100 hours.
 Supply Voltage: 6.0V
 Battery: 6.0V 1200mAh Ni-MH
 Charger: Drop-in. Requires 12~16V DC at least 100mA
 Country of Manufacture: China

Supplier Code, Compliance : Z726, AS/NZS 4365-2002
 Receiver Type: Dual conversion superhetrodyne
 Receiver Sensitivity (12dB SINAD): ≤0.16µV
 Adjacent Channel Selectivity: ≥70db
 Audio Output: 0.5W
 Audio Distortion: ≤5%
 Transmit Power: 4W with selectable Hi or Lo
 Frequency Stability: ±2.5PPM
 Modulation Type: Variable reactance
 Deviation (Max.): ±5KHz
 Weight: Approx. 250g
 Size (WxHxD): 56x106x32

* Frequency range and channel spacing locked to PRS band as per AS/NZS 4365-2002. The communication ranges quoted are a guide only and are subject to change as a result of terrain, building density & structure, etc. Specifications subject to change without notice or obligation.