DR5000 Series

DMR Digital Radios with inbuilt Lone Worker Protection

The latest addition to the award winning "Lynx" series of radios, the palm sized DR5000 series has been designed for the professional user, with a rugged and robust housing which meets MILSTD810F and IP65 for water and dust ingress & shock resilience.

The DR5000 series of radios are fully featured, punching way above its price tag. In reality no other DMR digital radios comes close in features for the price.

Small, compact and fitting comfortably in the hand, not only is the DR5000 tough - its smart too, with inbuilt features for Personal Protection Equipment including Man-Down, Lone Worker and a Panic Alarm button - all programmable to allow ultimate flexibility and control.

There are three radios in the range - The DR5100 with simple operation, the DR5600 with a Menu button, LCD display and 4 programmable keys and the top of the range DR5800 with full keypad.

Unique to all the higher tier RED "Lynx" products, the DR5000, has full English voice annunciation, not just "Channel Annunciation", with unique alarms spoken to the radios in the group. Only available with RED's DR5100 is the option for bespoke voice alarms and prompts to be recorded and added into the system.

Thanks to BTL technology and a crisp Loudspeaker giving over 1 Watt of audio output the DR5000 is much better to hear in noisy environments than its competitors. The radio has a standard "M1" fit audio accessory connector and there is full compatibility with the "Lynx" range of radios, sharing battery chargers and audio accessories.

Voice annunciation of Channel number allows simple operation and the battery status can be easily checked at the press of a button to give a voice annunciation of its state.

DR5100

DR5600

DR5800

DR5000 Series

Key Features

- **IP65 rated for water & dust protection**
  Allows use in harsh environments, coupled with MILSTD 810F for robustness

- **Full Alarm Features:-**
  Man-Down
  Lone Worker
  Panic Button
  Programmable Alarm Buttons

- **Powerful 1 Watt Audio Output**
  BTL Technology output, makes radio louder than most competitors and allows clear speech even in noisy environments.

- **Voice Annunciation**
  Award winning Alarm Voice Alerting
  Channel Annunication
  Battery Level Annuniciaton
  Programmable (optional) Bespoke Alarms

- **1700mAh Li-Ion battery pack**
  High Power battery pack gives in excess of 15 hours use

- **Easy Trunking and Pseudo Trunking**
  Allows use of Single Frequency Repeaters up to 4 Repeaters with 8 Logical Chanels

- **Multi-Site Roaming**
  IPSC roaming ability for large coverage applications.

- **TDMA Direct Mode**
  High Power battery pac

- **Mixed Channel Mode**
  Analogue/ Digital/ Mixed

- **Transmit Interupt (DMR Mode)**
  Allows (pre-programmed) radios to interupt a Digital Call in progress.

- **Wideband**
  VHF: 136-174Mhz and UHF 400-480MHz

- **Group Call/ All Call/ Individual Call**
  Call Groups can be set up for individual requirements; Teams, Groups or everyone, as well as the unique feature for Individual Calling and “ringing” of radios.

DR5000 Series

Lone Worker Protection

MAN DOWN ALARM

The programmable Man Down Alarm operates when radio unit is tilted beyond around 45 degrees from vertical, starting a local “pre-alert” warning to the radio user, with an audible alert tone, followed by a full Alarm condition if the radio is not picked up back to its normal vertical position.
The pre-timer allows the user some time if accidently tilted, and can be programmed from 0 seconds up to 255 seconds, before the Man-down alarm is activated. Both the “Man-down” time and the “reminder” time can be programmed by your dealer for best working practice and environment.

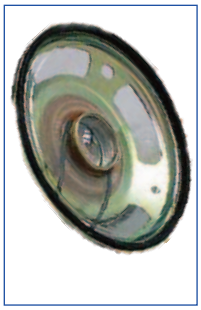
LONE WORKER ALARM & PANIC BUTTON

The programmable Lone Worker Alarm operates when the radio user fails to press a button after a pre-programmed time period, from 1 minute to 255 minutes, starting a local warning to the radio user, with an audible alert tone, followed by a full Alarm condition if the radio is not activated by the user to indicate that they are OK.
The pre-timer allows the user some time once the “Lone Worker” time has expired to reset the timer by activating a key and can be programmed from 0 sec - 255 sec. before the Main alarm is activated. If the user fails to reset the Lone Worker then the Main Alarm will be activated.
The top mounted Panic button can also be programmed to send an alarm signal when pressed.
Both alarms can be set (by your dealer) to alert locally or send an alarm signal to other radios in the group for summoning assistance.

IP65 and MILSTD810F

All Lynx radios are built to exceed IP65 for ingress of water and dust, as well as exceeding MILSTD 810F for shock, vibration, solar radiation, rain, humidity and salt fog. This level of robustness makes the radio suitable for harsh environments where standard IP54 rated radios will generally fail due to the lack of protection against dirt and fluid ingress.
Internal seals and “O” rings protect the main circuit board, the audio accessory connector is sealed with a tight rubber cover and the microphone has a waterproof membrane cover. The speaker is mylar plastic film and sealed in, alongside all other potential ingress points with silicone.

AUDIO QUALITY



All Lynx radios have a powerful audio amplifier circuit, which gives a clear, crisp and powerful “punch” even in noisy environments.
The radio is rated at 1 Watt power achieved by using “BTL” (balanced tuned load) technology which allows a much bigger signal to be sent to the speaker and outperforms its competitors easily. This “HiFi” approach to audio delivery allows a crisp signal without distortion to be be appreciated by the user.

A range of audio accessories are available to fit the universally standard “M1” plug fitting (Motorola 2 pin)
There is a screw retainer for when the “H1” (Hytera) audio accessories are used.

ALARM ANOUNCEMENTS

We created the award winning and unique concept for Voice Alerting initially with our (now obsolete) PT600 analogue radio. This technology is continued in the DR5000 series. The radio has voice prompts factory installed for the annunication of any incoming Emergency and Panic Alarm identifcation.
Below is the standard alarm annuncations pre-programmed into the radio. These are programmed by us or your supplier to your requirements and can, for suitable quantities and additional cost, be bespoke created as required.

Alarm No	Annunciation	Alarm No	Annunication	Alarm No	Annunciation	Alarm No	Annunciation
1	*Alarm 1*	*9*	*Alarm 9*	*17*	*Alarm 17*	*25*	*Security Alarm*
2	*Alarm 2*	*10*	*Alarm 10*	*18*	*Alarm 18*	*26*	*Code Yellow*
3	*Alarm 3*	*11*	*Alarm 11*	*19*	*Alarm 19*	*27*	*Code Red*
4	*Alarm 4*	*12*	*Alarm 12*	*20*	*Alarm 20*	*28*	*Code Green*
5	*Alarm 5*	*13*	*Alarm 13*	*21*	*Door Entry Alarm*	*29*	*Refuse Entry*
6	*Alarm 6*	*14*	*Alarm 14*	*22*	*Fire Alarm Actvated*	*30*	*Security to doors*
7	*Alarm 7*	*15*	*Alarm 15*	*23*	*Alarm Clear*	*31*	*Urgent Assistance*
8	*Alarm 8*	*16*	*Alarm 16*	*24*	*Evacuate*	*32*	*Emergency*

SPECIFICATIONS

		DR5100	DR5600	DR5800
General	Channels	Up to 32 (16 in 2 Zones)	Up to 2000	Up to 2000
	Zones	Up to 2 (programmable)	Up to 250 (programmable)	Up to 250 (programmable)
	Power Supply	7.5V DC KB40-01 1300mAh KB50-01 1700mAh		
	Frequency Range	VHF: 136MHz - 174MHz. UHF: 400MHz - 480MHz		
	Channel Spacing	12.5KHz / 25Khz (Analogue Mode) 12.5Khz (Digital Mode)		
	Emission Types	FM (11K0F3E) 4FSK (DMR) 7K60FXD (Data) / 7K60FXE (Data and voice)		
	Operating Temperature Range	-30°C - +60°C		
	Antenna	50 Ohm SMA connector. 1/4 wave whip or Stubby Helical (UHF), Helical (VHF)		
	Current Drain	TX (high): <0.5A, RX (max audio): <330mA, Standby: <70mA		
	Average Battery Life (@ 5/5/90)	>15hrs (DMR mode), >12hrs (Analogue mode)		
	Environmental Rating	IP65 and MILSTD 810C/D/E/F		
	Dimensions	96.5mm Height (excl. antenna), 54mm Width and 33mm Depth (with standard battery)		
	Weight	245g incl battery		
Receiver	Analogue Sensitiivity	>0.35uV/ -116dBm (20dB SINAD), >0,22uV/ -120dBm (12dB SINAD)		
	Digital Sensitivity	>0.22uV/ -120dBm @BER <5% 0.25uV/ -118dBm @BER 1%		
	Intermodulation	TIA603: 70dB;/ ETSI: 65dB		
	Adjacent Channel Selectivity	TIA603C: 70dB/ ETSI:70dB @25KHz TIA603C: 60dB/ ETSI: 60dB @12.5KHz		
	Spurious Rejection	TIA603C: 75dB/ ETSI: 70dB		
	Blocking	84dB		
	Rated Audio Output	1W into Speaker / 750mW into Accessory output		
	Audio Distortion	<3% at Rated output		
	Audio Response	+1~-3dB		
	Conducted Spurious Emission	-57dBm,1GHz, -47dBm>1GHz ETSI 300086		
Transmitter	Frequency Stability	1.00ppm		
	Power Output	1W (Low Power), 4W (High Power UHF), 5W (High Power VHF)		
	Modulation Limiting	+/-2.5KHz@12.5KHz/, +/-5.00KHz@25KHz		
	FM Hum and Noise	-40dB @12.5Khz, -45dB @25KHz		
	Conducted/ Radiated Emissions	-36dBm <1GHz, -30dBm >1GHz		
	Adjacent Channel Power	-50dB		
	4FSK Modulation Accuracy	5% @ 25°C , 10% @ Extreme temperatures		
	Audio Response	+1~ -3dB (300-3000Hz)		
	Digital Protocol	ETSI TS 102 361-1, -2, -3		
	Audio Distortion	<3%		
	Vocoder	AMBE +2 ™		

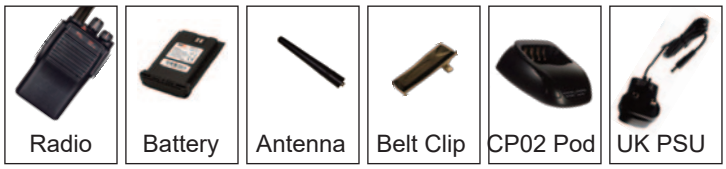
R&TTE and R.E.D. (Radio Equipment Directive)

The DR5000 series have been fully independently tested by BAY Area Compliance Testing Labs in accordance with the R&TTE directive 1999/5/EC and the Radio Equipment Directive (RED) 2014/53/EU which came into effect as of 13th June 2017 with the following standards/ specifications:

ETSI EN301 489-1 V2.2.1 (2019-03) ETSI EN301 489-5 V2.2.1 (2019-04) ETSI EN301 086 V2.1.2 (2016-08)
ETSI EN300 113 V2.2.1 (2016-12). Report No RDG190624001-SF-Aq applies.

The DR5000 series is also tested in accordance with EN5056: 2017/EN62209-1: 2016/ EN62209-2: 2010 and REDCA technical guidance note 20 for SAR testing and assesment guidance, for compliance in Specific Absorption Rate (SAR) limits applicable to the occupation/ controlled exposure that are specified in ICNIRP guidelines.

Standard Package:



Dealer Details

Designed and manufactured in China for UK and Eire Importer:
Red Radio, Suite 500, 6-8 Stuart St, Luton, LU1 2SJ.
All specifications correct at going to press. E&OE.