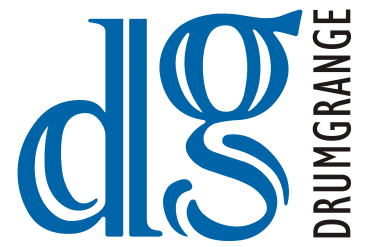


DX500 Series VHF/UHF Transceivers



Covering the ICAO and Military VHF and UHF frequency bands, the Drumgrange DX500 series of compact and cost-effective Transceivers has been designed to meet the needs of professional, government and military users in surface to surface and surface to air roles. Options are available for fixed, mobile and naval applications, independent and co-sited environments and various primary power and remote control applications.



Drumgrange DX502 Transceiver (over 250 units in service with the Royal Air Force)

FUNCTIONS INCLUDE:

- Frequency Range: 117 to 137 and 225 to 400 MHz
- Fully synthesised with 10 pre-set channels
- 25kHz and 8.33kHz channel spacing
- 6 watts AM output
- Versions available from 6 watts to 100 watts output

OPERABILITY FEATURES:

- MTBF 10,000 hours (MIL HDBK 217F)
- Modular construction - MTTR 30 minutes
- AC mains and external battery operation
- BAPT approved remote control over telephone lines

OPTIONS:

- Extended or remote control heads
- Co-site operation
- 20 watt and 100 watt versions
- Drop-in replacement packages for obsolescent radios
- FM and digital modes



DX502 Extended Control Unit

Drumgrange has extensive expertise in communications technology from VLF to UHF, with systems in service with all three UK Armed Services, in submarine, surface ship, airborne, land mobile and fixed site applications.

DX500 Series VHF/UHF Transceivers

Technical Specifications

Frequency Range:	VHF: 117-136.975 MHz UHF: 225-399.975 MHz
Channel Spacing:	8.33kHz and 25kHz (selectable by channel)
Channel Selection:	10 pre-set channels, or direct input via key-pad
Modulation:	AM (FM and digital modes available as option)
Operating Mode:	Single Frequency Simplex
Frequency Stability:	± 1 kHz (VHF) ± 2.5 kHz (UHF)

Transmitter

RF Output Power:	6 watts minimum
VSWR:	2:1 (50 ohm) with full output
Audio /frequency Response:	300 - 3000Hz ± 2 dB
Noise Floor:	-103dBm/Hz
Spurious Outputs:	-60dBc
Audio Input: line:	-20dB to +10dB, or microphone

Receiver

Sensitivity:	10dB (S+N)/N for 2.5 μ V, m = 0.3, at 1 kHz
Audio /frequency Response:	300 - 3000Hz + 1dB, -3dB
AGC:	AF Level Change <6dB for RF input 12 μ V to 200mV
IF Selectivity:	8.33kHz channelisation: 6dB >6kHz, 60dB <16kHz 25kHz channelisation: 6dB >16kHz, 60dB <50kHz
Unwanted Responses:	>70dB
Output Level:	-20dB to +10dB, plus internal loudspeaker
Overload Protection:	≤ 4 V EMF unmodulated RF carrier input

Physical Characteristics

Temperature Range:	0°C to +50°C (Operating) -20°C to +60°C (Storage)
Power Supply:	230VAC nominal 50/60Hz or 24VDC nominal external battery
Dimensions:	427mm x 530mm x 133 mm
Weight:	18.3kg

“We design, develop and manufacture innovative products and are also experts at integrating existing technology to create successful, cost effective solutions.”



Registered Office: Chertsey, Surrey Registered in England No. 1460044
© Drumgrange Ltd 20057

Drumgrange Limited
Unit A, The Forum
Hanworth Lane
Chertsey
Surrey KT16 9JX
Tel: +44 (0) 1932 581100
Fax: +44 (0) 1932 569646
Email: info@drumgrange.co.uk
Internet: www.drumgrange.co.uk

Drumgrange Limited
3-7 South Way
Southwell Business Park
Southwell, Portland
Dorset DT5 2NJ
Tel: +44 (0) 1305 862100
Fax: +44 (0) 1305 862101
Email: info@drumgrange.com
Internet: www.drumgrange.co.uk



Approved to BS EN ISO 9001: 2000 and TickIT