

LEOPARD 1 LOW POWER REPEATER/ RE-BRO



SKU# REP-KIT

OVERVIEW

The Repeater kit comprises of all the parts required to create a REPEATER for RF signals in all three bands, VHFL, VHFH and UHF.

Take the tactical advantage and use any two Leopard1 or Cheetah3 manpack radios to create any of the repeater options below:

- 1) VHFL - VHFL (30 - 88Mhz to 30-88Mhz)
- 2) VHFL - VHFH (30-88Mhz to 100-170Mhz)
- 3) VHFL - UHF (30-88MHz to 100-512Mhz)
- 4) UHF - UHF (100-512MHz to 100-512Mhz)

All that is required to achieve this repeater are the cross an AUX connect cable, suitable antenna/s and possible duplexer and a few simple menu settings.

Repeater Set Up using 2 x leopard 1 radios with the cross connect cable, local external speaker and handset for technical set up communications. For the more fixed base station applications we recommend the use of frequencies within a manageable split for a duplexer.



Cross Connect cable

The advantage is reduced hardware utilising a single elevation kit or mast and a single band specific antenna.

For more tactical applications where frequency agility is most important we recommend to operate without duplexer by increasing the frequency spacing to 20MHz or more and use two separated antennas.

The limitation is mostly in the frequency and duplexer bandwidths. Typical deployment options on the back of this page.

Also see our brochure on REBRO (Rebroadcast) systems which are very similar to the repeater, just using HF antennas.

Output Power	Typical to radio (2-20W/ -10W)
Sensitivity	Typical to radio (-118dBm)
Frequency	Typical to radio(30-170 /-512MHz)
Duplexer	As per available COTS (66-88 /138-174 / 380-470 Mhz)
Antennas	Disc Cone / Dipole (30-88 / 100-512 Mhz)
Power Supply	9-35Vdc (Typical 12V 100Ahr battery with solar/ac charge)
Operating Temp	- 40....+70 °C



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For VHF to VHF Repeater and VHF to UHF REBROADCAST the following parts are required:

1)VHF Radio 1	Leopard1 (H) 30-170Mhz or (HV)	SKU# LEO1-H(V)
2)VHF Radio 2 Optional Radio	Leopard1 (V) 30 - 170 Mhz or (HV) Cheetah3 (V) 30-170MHz or (VU)	SKU# LEO1-(H)V SKU# CHE3-V(U)
3)Cross Connect AUX Cable	Aux to Aux Crosspatch Cable	SKU# CAB-REP-1
4)VHF Base Antenna	VHF Disc Cone Antenna Kit	SKU# ANT-VHF-DCK
5)UHF Base Antenna	UHF Disc Cone Antenna Kit	SKU# ANT-UHF-DCK
6)Elevation Kits VHF	7 Meter portable Mast Kit	SKU# ELK-PB-7m
7)Elevation Kits UHF	7 Meter portable Mast Kit	SKU# ELK-PB-7m
8)DC Battery replacement	Battery Eliminator X2	SKU# BAT-EL-DC
9)DC Batter 100Ahr	Battery 100Ah Kit	SKU# BAT-BAG-100
10)Solar/DC Power Box	Solar/AC Charger 300W	SKU# PS-PB-R
11)Cable Kit Repeater	Cable Kit - Repeater	SKU# CBL-REP-K
12) Repeater Rack	SP Rack Repeater Setup	SKU# RCK-SPRP

The minimum items required would be items 1, 2, 3, 4, 5 to set up a rapid deployed repeater station using trees/ bamboo poles to elevate the antennas and the standard radio batteries to power equipment.

For more permanent installations items 1 through to 11 are recommended and shown in the diagram below.

