MKIII VOR REMOTE MONITOR

On-Air, Network Capable, VOR Remote Monitor Receiver

The MKIII Remote Monitor is capable of monitoring transmitted VOR signals and determining if a valid signal is present as well as status for any deviation of calculated VOR bearing angle. This feature monitors any ground station failure or drift as well as the presence of multipath.

- ***Displays calculated VOR Bearing to station***
- ***Variable Alarm Tolerance on VOR signal Bearing***
- ***Alarm on VOR ident signal***
- ***Software-Defined Radio Solution***
- ***Received VOR Spectrum Display***
- ***Network capable via Ethernet connection***
- ***Lightweight, 19 inch rack mountable***

Received data, including signal spectrum, displayed locally or remotely via Ethernet connection. Also locally via VGA and USB

Front panel: Left to right: Power On/Off switch; VOR OFF/ON green or red light alarm; VOR OFF/ON bearing green or red light alarm; Lamp test and Alarm mute panel switch are located below VOR alarms; CPU Reset Switch; LED display of VOR bearing angle

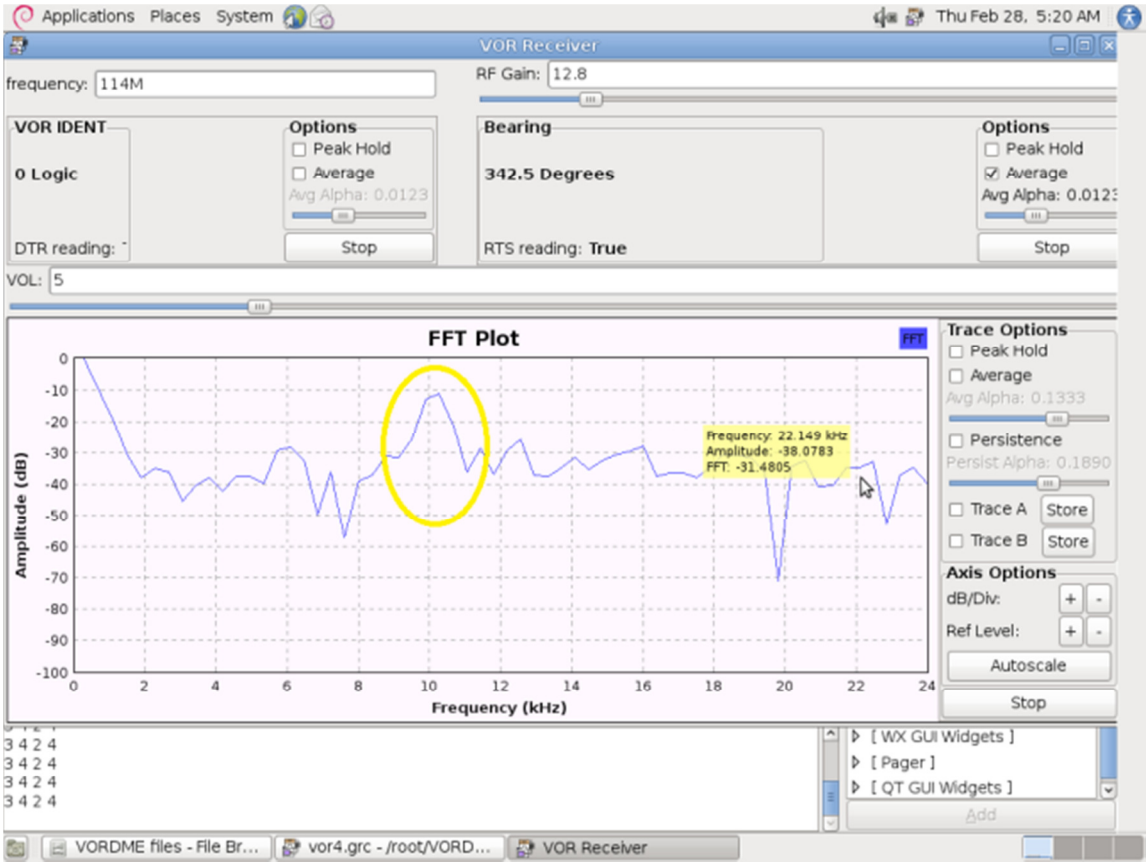
Shown above: VOR only version of MKIII

For optional VOR/DME MKIII version there are two BNC male connectors on the back panel. One for VOR and one for DME as shown here to the left.

Back panel: VOR antenna connections – BNC male; Ground connection; Audio jack output – 3/8 inch mini stereo jack; DC power input - 12 vdc; USB interface for mouse access to CPU software; USB interface for keyboard access to CPU software; VGA interface for display; Ethernet jack

The MKIII Monitor can be installed in many locations, such as an air traffic control tower cab or in the equipment maintenance room. Remote display of status, alarms and data is possible to any office or location with an Ethernet connection. VOR VHF antenna and 50 ft of coax cable RG-58 provided.

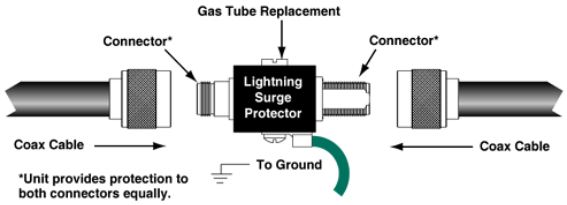
MKIII Versions. The MKIII monitor can be configured as VOR only or as VOR+DME. The MKIII is capable of monitoring Instrument Landing System (ILS) Localizer or Glideslope signals or any other VHF or UHF transmissions.



Monitor Control Screen with VOR spectrum displayed

Lightning Protection. The incoming RF coax is protected by a high performance lightning surge protection device:

- Reliable Performance from DC ~ 3 GHz
- Bi-Directional Protection
- Protector will pass DC
- Easily Replaced Gas Tube Element, Mounting Bracket Included
- Multi-Strike Capability



SPECIFICATIONS

Parameter	***Specification***	***Note***
Frequency range	Receiver tunable 50 MHz – 2.2 GHz	Processing for VOR band 108-112 MHz; optional 960-1215 MHz for DME band
VOR Bearing Accuracy	+/- 1.5 degree	Field tested
VOR Bearing tolerance alarm	Minimum +/- 1 deg Maximum as needed	User programmable. Tolerance can be set to detect multipath or ground transmitter failure
Signal Processing	Software Defined Radio interfaced to CPU for digital signal processing. Phase locked loop. VOR signal spectrum displayable.	VOR bearing angle algorithms with variable sample rates and multipath mitigation logic. Optional DME signal/ident
Remote Access	Via Ethernet connection using TightVNC Viewer with full access to program, data and control remotely and via internet	Software updates can be provided remotely via internet or dial-up
Power Supply	Input: 100-240 VAC, 50/60 Hz, 2.5 A. With or without electrical ground.	Output: 12-17 VDC, 10-7.6 amps; max 130W; typical output 15VDC at 8.3A. Dual barrel connector, 2.5mm inner diameter, 5.5mm outer diameter
CE Mark Certification	Certificate Number: EMC-003337-NE	Approved under EU Directives 2004/108/EC (EMC); Emissions per EN 55022, EN 61000; Immunity Testing per EN 55024, EN 61000.

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