



GSM Vehicle Direction Finder (VDF) Technical Specifications

GSM Vehicle Direction Finder (VDF) Overview

The VDF a complementary product to the GSM-XPZ, is a key element of the MMI solution deployed to locate targets.



Based on the latest military technology, the DFV is a vehicle based direction finding system that significantly addresses the weakness of current direction finding systems. This significantly increases the operational benefit to the customer:

- direction find targets to within a few metres
- azimuth and elevation target resolution
- direction finding on specific GSM timeslots
- multi-antenna array for accurate target resolution
- map overlay of target position data
- covert antenna fit

GSM-VDF Features

The VDF is designed to work in conjunction with the GSM-XPZ product family. Available in 2 options, supporting either the Euro or US bands, location finding of a radiating target mobile can be performed from a vehicle.

Comprising of a multi-antenna array, system unit and laptop the system can be either permanently or temporarily mounted in a vehicle using either an external vehicle antenna or a highly covert internal antenna.

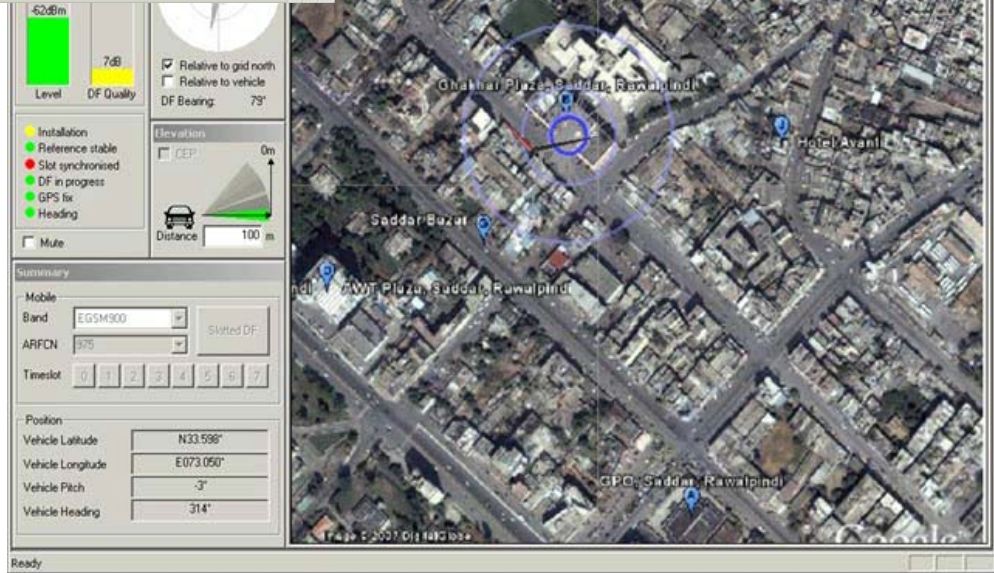
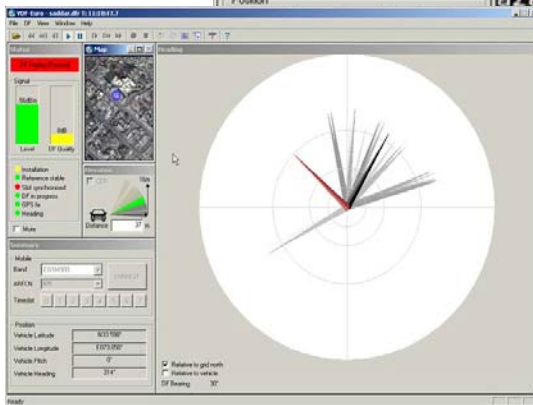
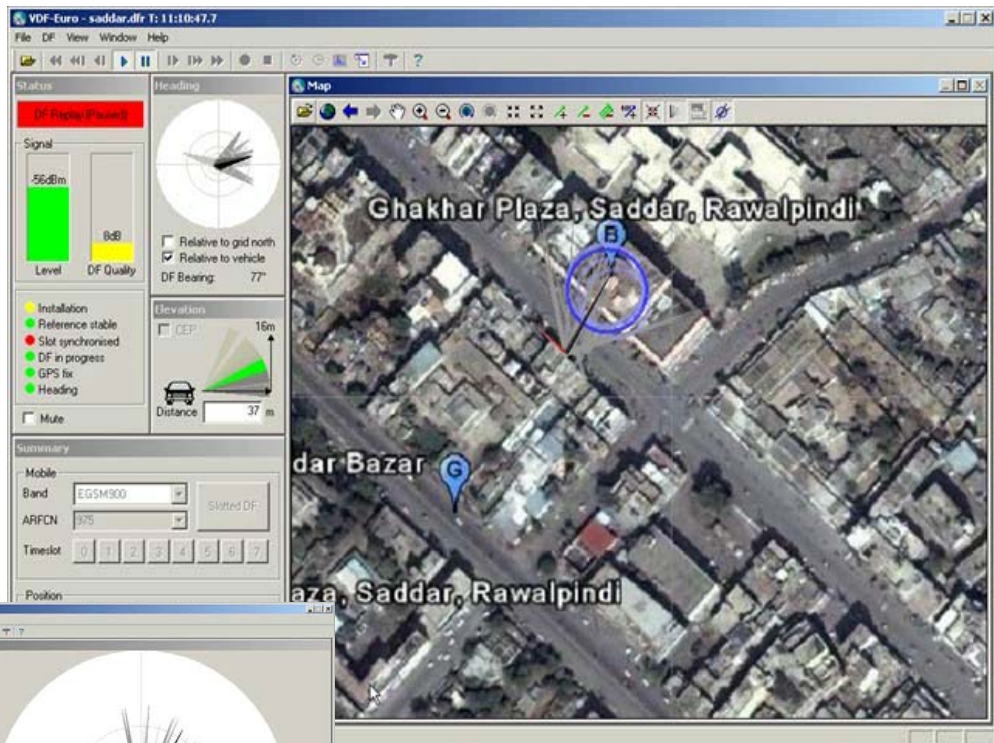
The antennas are very simply calibrated before the start of the mission using a supplied hand-held calibration unit. The key features of the VDF are:

- Direction find to a preset GSM frequency and timeslot.
- Direction find to a preset GSM frequency (for GSM XPZ accurate DF mode)
- Direction find simultaneously in Azimuth and Elevation
- Covert antenna mounted within vehicle or optional roof mount antenna
- Simple GUI display of direction in Azimuth and Elevation
- Display of historic vehicle and direction track
- Map overlay
- Capability for remote interface to other DF and XPZ devices
- Direction given in relation to North and vehicle direction
- Integrated GPS and compass

VDF Specifications

Function

Function:	Provides RF signal strength indication on a selectable RF channel
Channel Range:	Euro: ARFCN 975-1023 , 0-124 , 512-885 US: ARFCN 128-251, 512-810
Direction Finding Axis	Simultaneous in Azimuth and Elevation
Resolution:	Better than 5o
Accuracy	Better than 5o
Power Supply:	12V , 40W
Antenna (covert) :	Azimuth 360o Elevation (as per vehicle aperture)
Antenna (rooftop)	Azimuth 360o Elevation 90o
Mapping Formats	Combined Vector and Raster data ESRI shape file (SHP) Raster data in Band Interleaved by Line (BIL) Bitmap (BMP) Multiresolution Seamless Image Database (MrSID) Portable Network Graphics (PNG) ERDAS Joint Picture Expert Group (JPEG) TIFF and GeoTIFF





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