



## Systems & Projects

Mobile Direction Finder

**The Mobile Direction Finder is a completely self-contained system for use as a mobile monitoring and direction finding vehicle.**

**All the monitoring equipment and accessories are mounted into an air-conditioned Chrysler Voyager .**



## Monitoring Equipment

### VHF/UHF search receiver

The VHF/UHF search receiver ESMC has a frequency range 20...1300 MHz. To further extend the frequency range to 3000 MHz the frequency extension unit ESMC-FE is added. The receiver is ideally suited for signal reception (aural monitoring, radio monitoring, recording), searching and scanning (continuous manual tuning at any channel spacing, 5 start/stop frequency ranges, optional spectrum display with a speed of 13 GHz/s, 1000 memory locations), frequency occupancy measurement, coverage measurement, level and frequency measurement.

### VHF/UHF direction finder

The system features an advanced DF method, which is based on correlative interferometry and digital signal processing. The frequency range covered is determined solely by the receiver and the DF antenna and may be from 20 ... 3000 MHz. The direction finder consists of the DF unit EBD190 and an associated antenna. The DF unit is connected to the unregulated IF output of the receiver. To enhance user comfort, frequency and bandwidth information coming from the receiver is fed to the DF unit for automatical band switching of the DF antennas and automatical setting of the optimal DF bandwidth. These two functions are also provided via keys on the frontpanel for manual adjustment. A remote control display EBD190A is mounted on the dashboard next to the driver for homing purposes, which provides direction indication and basic receiver settings.

### Antenna system

To cover the frequency range 20 ... 3000 MHz two antennas are provided, the ADD190 from 20 ... 1300 MHz and the ADD071 from 1300 ... 3000 MHz. Both antennas can be fixed on top of the roof by way of four "quick-locks" for easy and quick antenna change.

### Spectrum Display EPZ513

The spectrum display EPZ513 provides a real time IF and RF panoramic display. It is ideally suited for detection and evaluation of unknown signals.

### Audio cassette recorder (optional)

By means of the voice logging cassette recorder AN2, recording of audio signals is possible. By means of the optional unit AN2TI the standard cassette recorder can additionally record the time and date information onto the individual tracks.

### Power supply system

The monitoring equipment is battery powered by using a second auxiliary battery, which is fully independent from the car battery. Charging of both batteries can be performed by using the alternator of the car or by connecting the external AC-mains. A 12V<sub>DC</sub> to 230V<sub>AC</sub> converter is provided for use of additional equipment that can not be battery operated or for domestic use when no mains is available.

