



# DF5 Sequitor

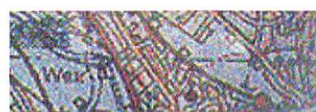
Multi-channel receiver for direction finding and tracking applications - wide coverage, high sensitivity



## DF5 Sequitor

The high performance solution for direction finding and tracking

- Sophisticated multi-channel receiver, offering advanced tracking system.
- Suitable for direction finding and mobile tracking.
- Hand-held controller with full range of displays: main unit can be housed elsewhere in the vehicle.
- High levels of sensitivity for improved range capabilities.
- Software-based design allows easy incorporation of enhancements and special application requirements.
- User-friendly design, with automatic calibration and antenna tuning.





# DF5 Sequitor

The high performance solution for direction finding and tracking

Mobile tracking is a complex task, requiring sophisticated techniques to overcome fading, multipath and difficult propagation conditions.

With the DF5 SEQUITOR, Datong have developed advanced proprietary direction finding methods and incorporated these into a high performance package which is easy to use and designed to obtain the best results available on the market today.

## Operating Principle

The DF5 SEQUITOR is a four channel interferometer. A minimum of three channels is required for successful operation, one of which can be allocated as a reference channel. The reference channel may be either part of the covert triple array or fed separately from a fourth antenna. Whatever antenna configuration is chosen, an optional high gain element could be used for the reference channel, to give maximum range and sensitivity.

Using a patented technique, the signals are processed together, achieving high levels of detection sensitivity. The sensitivity and the tracking range is determined mainly by the reference antenna, with directional information provided by the three support antennas.

Even when presented in a concealed format for security applications, the DF5 provides range capabilities well in excess of other commercially available systems using exposed antennas.

## DF5 SEQUITOR - Tracking and DF performance at its peak

Datong's DF5 SEQUITOR unit incorporates powerful signal processing techniques designed for effective multipath suppression. The unit stores in its memory all bearing data integrated over preselected time periods to suit the environment.

## User-friendly display

The control unit is designed for ease of operation, with all functions accessible from a hand-held controller. This display monitors the signal, giving constant information on signal direction, quality and relative strength, together with indications on the status of the signal (e.g. moving or stationary).

The directional 360° display mimics a conventional compass, showing the bearing as a line pointing to the target, together with a



wide range signal strength display.

The DF5 SEQUITOR was developed by Datong to extract the maximum possible information from signals in order to give usable bearings even on the weakest pulses.

## Operational Advantages:

- Alarm status - device may be programmed to alert any change in status of the transmitter
- Audio output to enhance ease of use
- High levels of sensitivity - extended range tracking capabilities
- Covers a frequency range of 25 500MHz (extendable to 1500MHz)
- Operates with both narrow and wide band transmissions and will track on speech or data channels
- Automatic calibration and set up facilities
- Wide range of antenna options to meet developing application requirements

## Technical Specification

**Typical minimum signal from DF antenna for useful directional indication**  
-152dBm

**Frequency range**  
25-500MHz (future models will extend the range up to 1500MHz and down to MF)

**Channels**  
100

**Fine-tuning range**  
No hardware restrictions

**Fine-tuning step size**  
10Hz

**Power supply voltage**  
8 to >30 Volts DC

**Power supply current**  
Approx. 3 Amps at 12 Volts

**Dimensions of control unit**  
200 x 90 x 28mm

**Dimensions of main unit**  
365 x 333 x 107mm

**Carrying case**  
385 x 210 x 485mm

Please note: specifications are subject to change without prior notification.

