Radar Recorder

Covert Traffic Monitoring

Radar Technology
The requirement for non-contact, covert traffic monitoring has resulted in the development of the Radar Recorder.

The sensor and recorder are both in the same enclosure which is housed, with the battery, inside a fully weather-proof case. The sensor element, a state of the art planar antenna, uses radar techniques to measure the speed of approaching and receding vehicles. The unit is supplied complete with connection cables, mounting bracket, clips, battery and charger. The data collection software for the Palm Pilot is provided free of charge. CA Traffic’s ‘Radar Recorder’ offers significant advantages over previous across the road radar monitoring units. The most important of these is the 2nd generation processing algorithm, which is used to accurately deduce speed information. The sophisticated platoon splitting algorithm also makes the Radar Recorder an extremely accurate counting device. The unit is 6 volt, very low powered, allowing 8 days of data achievable off a single battery.

The recorder uses a standard battery as used by all other CA Traffic equipment. A unit can be configured with one or two batteries. To avoid the problem of huge data files having to be downloaded, the device can be set to binning data storage mode as an alternative to per vehicle data recording.

- 24.2 GHz Radar UK Legal
- VDA-pro / VDA2 Compatible
- Light Weight
- 6 Volt Battery, 8/16 Days Life
- Qwik-Mount Bracket
- Low Cost / No Consumables
- Binned and Per Vehicle Data
- Flash Upgradeable
- 4Mb Memory standard
- Non Critical Radar Head Angle
- 2nd Generation Algorithms
- Easy Set up
- Vehicle Classification
- UK Design & Manufacture
- 2 Year Warranty

+44(0) 1296 333499 enquiries@c-a.co.uk www.ca-traffic.com
Installation
The laser cut stainless steel mounting bracket can be fixed to any diameter post available at the desired location and can be left installed for return to the site at a latter date.

Height of the bracket can vary from 1-3 Metres to suit the conditions prevailing. Installation of the bracket requires only that the angle is set approximately to 45° to produce accurate results, however, if the installation angle is out by no more than 7° the unit will still record accurate speed and length. The bracket can be fixed in a variety of ways including tamper-proof jubilee clips, as supplied, or the regular method of sign banding. Once installed it takes only seconds to place the recorder in position and padlock the recorded.

Accuracy
The radar mounted at one metre height on a busy two-lane road (12000 Vehicles per day) will, on volume, produce accuracy results of approximately 98% on the near side and 96% on the far side. As the height of placement of the radar is increased the volume accuracy will be increased. The speeds of vehicles recorded by the device are +/- 1 Mph.

This makes the Radar Recorder a reliable tool for getting speed profiles from both sides of a two-lane road. The unit is also a very capable length monitoring device allowing the accurate distinction of five types of vehicle, including Motorcycles.

Data Processing
As with all CA Traffic products, the data is compatible with VDA-pro and VDA 2. These products allow reports to be generated quickly and easily, as well acting as a database to permanently store data for quick retrieval at a later date. Per Vehicle data can also be filtered to allow for more precise investigation into road behaviour.

Technical Specification
<table>
<thead>
<tr>
<th>Sensor</th>
<th>Microwave 24.2 GHz, power output 5 Mw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed Range</td>
<td>2-130 Mph (3-199 Kph)</td>
</tr>
<tr>
<td>Radar Range</td>
<td>Up to 30 Metres</td>
</tr>
<tr>
<td>Memory Size</td>
<td>4 Mb</td>
</tr>
<tr>
<td>Battery Life (Supplied)</td>
<td>8 Days</td>
</tr>
<tr>
<td>Battery Life (Optional)</td>
<td>16 Days</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to 70°C</td>
</tr>
<tr>
<td>Weight (Battery supplied)</td>
<td>6.4 Kg</td>
</tr>
<tr>
<td>Weight (Optional Battery)</td>
<td>8.5 Kg</td>
</tr>
<tr>
<td>Accuracy Approx. (Near Lane)</td>
<td>&gt; 98%</td>
</tr>
<tr>
<td>Accuracy Approx. (Far Lane)</td>
<td>&gt; 96%</td>
</tr>
</tbody>
</table>