



Type 354 Emergency Roadside Telephone

Overview



Recently, the Highways Agency launched their new Type 354 Emergency Roadside Telephone (ERT). The launch signalled the start of a multi million pound programme to replace over 6500 ERT's on the motorway and all purpose trunk road network in England.

The new ERT is a high-visibility emergency telephone, which may be configured to meet different installation requirements. Unlike its predecessor, the Type 352A (also made by GAI-Tronics), the Type 354 also offers a range of innovative features that greatly improve the clarity and functionality for both the user at the roadside, and for the operator monitoring calls in the Control Office.

By utilising a sophisticated Noise-Cancelling system, the Type 354 gives improved audio performance both for the road user and the Control Office operator. In addition the innovative use of non-voice communications enables the ERT to be used by people who have difficulty communicating in spoken English (e.g. the hard of hearing or non- English speaking).

The ERT's many innovative features include:

- display for user prompting, volume control and non-voice communication
- stylish ergonomic design
- patented safety design meeting latest European Standards. BS EN 12767
- environmentally friendly with solar cells and very low power consumption
- low maintenance costs and increased reliability
- rapid installation and replacement
- comprehensive diagnostics including automatic self testing and reporting

Variants

There are three main electrical variants of the Type 354 ERT:

- NMCS
- Public Switched Telephone Network (PSTN)
- GSM

A feature of the Type 354 design is its modular construction. This allows the ERT to be installed in a variety of applications such as bridge parapet and tunnel situations as well as the more normal columnar version.

The standard column mounted ERT comprises:

- The Column Module
- The Telephone Instrument Module
- The Header Module

There are a number of variations of these modules to cater for specific installations, including:

- Parapet mounting variant (2/4 wire NMCS/ PSTN)
- Wall mounting variant (2/4 wire NMCS/ PSTN)
- Parapet mounting variant (GSM)
- Wall mounting variant (GSM)
- Tunnel variant (2/4 wire NMCS/PSTN) Module Assembly
- Recess variant (2/4 wire NMCS/PSTN)



For NMCS or PSTN variants of Type 354 ERTs the user simply lifts the handset to initiate a call and to connect to the control facility. In addition, there is a variant of ERT known as the 'user service selection' which allows the user to select a service prior to the initiation of a call and the ERT dials the appropriate telephone number for the service selected.

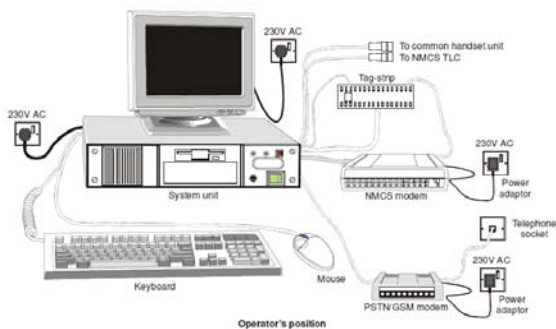
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Control System

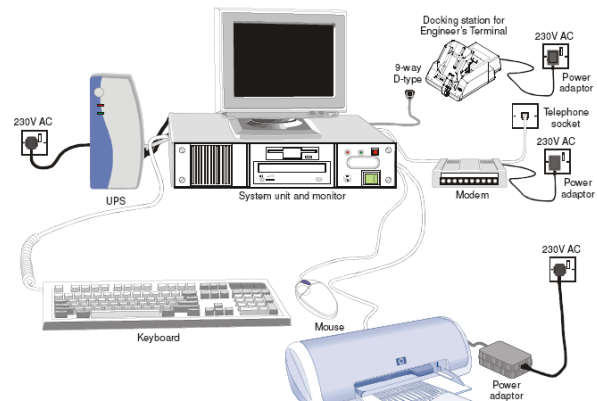
The development of the Type 354 ERT included the parallel development of a number of supporting sub-systems:

- Telephone Text Controller (TTC). This PC based system is designed to initiate and manage calls from ERTs where the operator has selected that the call should be switched to a text mode call.
- Maintenance Depot Terminal Equipment (MDTE). This PC based system provides the means to collate configuration parameters used by the ERT software. The MDTE also records fault log information gathered by ERT units.
- Engineer's Terminals (ET) are handheld units. ETs permit the collection of fault logs and the downloading of new software and configuration parameters.

Telephone Text Controller System



Maintenance Depot Terminal System



Maintenance

GAI-Tronics can provide various packages for all telephones currently used in the UK including the new Type 354 Emergency Roadside Telephone. Service levels are generally based on our three levels of service, platinum, gold and silver, but can be customised to meet individual customer requirements. GAI-Tronics also has the facility to monitor the Type 354 via our Highways Agency Maintenance Depot Terminal Equipment.

