

B. SIGNAL GENERATOR UNIT

The Signal Generator shall have a single or multiple transmit frequency. The power output must be adjustable. The Signal Generator must be capable of applying its' signal to a cable using direct connection methods, a Signal Clamp and by remote induction without the use of connection methods or external aerials. The signal generator should have a dual option for signal output – pulsed & continuous to allow for It must have a storage compartment capable of storing all connection leads, earth stake and signal clamp.

Technical Specifications

- Power Supply:** 4 x D cells batteries.
- Battery life:** >= 40 hours.
- Low Battery Indication:** Audible and transmitted to receiver
- Power output :** Four user selectable output levels
- Case Sealing:** Case to be sealed to IP65 or higher.

Controls:

- 1/ On/Off
- 2/ Increase Power setting
- 3/ Decrease Power setting
- 4/ Pulsed or continuous signal output setting
- 5/ Audio mute facility

Connections:

- 1/ 3 pin socket for connection leads or signal clamp
- 2/ Green 4mm earth socket for connection of 10m earth extension lead

Audio Response: Audio response via an integral loudspeaker having the following characteristics:

- 1/ Pitch that varies in response to output current (connected mode) or selected output power level (induced mode)
- 2/ Indicates pulsed or continuous mode
- 3/ Signals low battery condition
- 4/ Mute facility to reduce output volume where necessary.

Visual Response: Liquid Crystal Display showing;

- 1/ Continuous display of battery condition
- 2/ Output level selected
- 3/ Signal strength indicator
- 4/ Mode selected.

Standard accessories: The Signal Generator must be supplied complete with:

- 1/ Combined direct connection lead and earth lead
- 2/ Auxiliary earth lead of 10 metres length
- 3/ Earth stake of at least 250mm in length


The direct connection lead and auxiliary earth lead must have magnets attached to their respective crocodile clips. The Signal Generator must have provision to store all accessories including the Signal Clamp.

C. SIGNAL CLAMP

A signal clamp must be provided to enable the Signal Generator signal to place its signal onto cables where a direct connection cannot be made.

The Signal Clamp must;

- 1/ Be large enough to fit around a 100mm diameter cable.
- 2/ Have a connecting lead at least 2 metres in length.
- 3/ Be designed to be resistant to the ingress of dirt into the moving parts such as the hinge and any moving cores.
- 4/ Operate when immersed up to 1m deep in water without deterioration. (e.g. in a flooded manhole)


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