



## ES Siren Value

The ES siren value range provides a robust economic solution to address wide area mass alert signalling for all industrial, civil, commercial and environmental requirement users who previously found conventional motor driven sirens acceptable for their needs but would like the advantages of battery operation and no 400Vac cabling.

The products are of modular construction which allows the sirens to be scaled and tailored to the user's specific needs in terms of signalling and omni or uni - directional sound coverage.

### Main Features

- Audibility range between 106db @ 30metres for the smallest unit to 118db @ 30metres for the largest unit. Sirens in this range in increasing order of sound output are the ES1/2V, ES1/3V and ES2V units.
- 4 user selectable & configurable emergency signals.
- Live PA via a 600 ohm balanced & isolated input.
- Battery operated from an integral battery pack to overcome AC power failure.
- Full control of a single or multiple units via an RS485 interface of up to 1.5km distance from the siren.
- Simple control and fault reporting via 5 VFC opto-coupled inputs, (Up to 4 alarm signals and PA) plus siren fault and AC power relay outputs.
- Supports a radio & modem for remote operation via an integrated RS232 interface.
- Class D 375W amplifier used in the output with self healing short circuit, thermal & over current protection.
- Active alarm signal or PA output via a set of N/O & N/C relay contacts for control of and supplementary devices. (i.e. Strobe beacon).
- Supports DT11 activation panel with microphone input facility.
- Minimum alarm signal operating time of at least 6 minutes after a 4 day AC power loss.
- Control cabinet constructed from coated steel as standard or stainless steel on request, (600 x 400 x 200mm), which provides an environmental rating of IP65 and the siren horns are manufactured of cast aluminium
- Power supplied by an integral 48Vdc battery pack and an 88-132/176-264Vac @ 47-63Hz power source.
- Operating temperature range of -20 to +60 degrees C.

## Electronic Sirens – Value Range – HMI Interfaces



### SIP-51 HMI

The basic switch & indicator HMI unit provides a means of siren control and basic supervision for a single or multiple value range siren system.

- Activation of up to 4 alarm signals.
- Test result displayed on a single indicator beacon which has been connected to the siren fault output relay.
- Smaller units available with less switches/beacons.
- Environmental rating of IP65.



### DT-11 HMI

The DT-11 HMI unit provides a means of siren activation and live voice input for a single or multiple value range siren system via its RS485 communication interface.

- Activation for up to 4 alarm signals or live PA via its keypad and integral 2 line 16 character LCD backlit module.
- Microphone input connector for live voice.
- Power for the unit is provided by the RS485 interface or via the units 12Vdc input connector, if there is to great a volt drop or used in conjunction with a radio link.
- May be linked via a uni-directional radio link to the siren controller instead of a hardwire link.
- Can be located in the siren control panel or on a convenient wall location.
- All configuration information is stored in non-volatile memory.



## Radio and Control Equipment

### Siren radio communication equipment:

- Motorola GM340 Databox. Transceiver. Operating frequencies VHF 136-174 MHz, or UHF 403-470 MHz.
- Antenna. 3-Element YAGI.
- TK401 Data Modem 1200-4800 bps.
- Cables and installation accessories.

### Base station communication equipment:

- Simplex transceiver for voice and DATA computer connection.
- Operating frequencies VHF 136-174 MHz, or UHF 403-470 MHz.
- RF power 1 to 25 W programmable.
- RJ45 input for Motorola desktop Microphone (HMN-3000B) for live voice announcements.
- External battery connection for continues operation when AC failure.
- Integrated power supply 120W - 110/230VAC for continues operating and charging battery.
- TK401 Radio-modem 1200 - 4800 Bps Transparent Mode.
- 2U 19" Rack Mountable Cabinet, with temperature control fan (Wall mounting cabinet optional).
- Antenna VHF (3DB) or UHF (5 DB) Collinear.
- 30 m coaxial antenna feeder.

### Control Station:

- DT11 HMI.
- Desk microphone.



## Sound Coverage Chart

Siren Model Audibility (db)	Configuration Omni or Uni Directional	Distance from Siren (Metres)						
		30	100	200	400	800	1000	1500
ES1/2 V	O	106	90	80	70			
ES1/3 V	U	115	98	88	78	68		
ES2 V	O	115	98	88	78	68		
ES2 V	U	118	100	90	80	70		