

# UK OPERATION GUIDE



## 200 Watt Digital Siren (MCS-DDSA200)

Part number: UNI-SIR-D20

### SUMMARY

This document serves to describe the way in which the specific version of firmware operates on the MCS-DDSA200. Below the operation of the UK version is outlined.

**Current Version at time of going to press:**

**MHE2\_MCS-DDSA200\_UK\_1V57\_3MAR2021\_151153.eHex**

### WIRING AND CONNECTIONS

The guidelines for wiring and pinout of the MCS-DDSA are described in document C-10734-A, Installation Guide. Please refer to this document when connecting up the device.

### GENERAL OPERATION

The MCS-DDSA is a 200W amplifier with 3 positive inputs, 2 positive/negative inputs and 3 auxiliary outputs. The function of all the inputs and outputs is defined by the firmware which the device is running. The operation switch is a positive switched input that is devoted to waking the unit and keeping it active, its functionality is maintained through the different versions.

The device has two 100W channels which can be run simultaneously at 100W each or one at a time at 200W. The MCS-DDSA200 has a wide range of frequencies supported and can be used to produce a low frequency "Rumble" provided the correct speakers are utilized.

*Note: All testing of the MCS-DDSA200 have been carried out using the MHE standard speakers. Performance and functionality may vary if speakers other than the specified ones are used. The part numbers of the specified speakers are LSP-210-01, LSP-108 and LSP-204.*

### UK VERSION OPERATION

The MCS-DDSA200 is normally asleep which is indicated via a red status LED which will double flash continuously when sleeping. Upon a positive signal at the operation switch the unit will be in the active/armed state and the status LED will remain steady on.

If the HRT input is either positively or negatively triggered the siren will begin to run. The output of this will depend on the DIP switch configuration selected at powerup. While the siren is running a single trigger of the HRT will scroll to the next tone in the tone sequence, where as a double trigger of the HRT will stop the siren.

If the Airhorn input is either positively or negatively triggered, regardless if the siren is running, the Airhorn will sound. When the signal is released, the Airhorn will turn off. If the siren was running prior to the Airhorn the system will continue to run the current siren tone when the Airhorn is released.

Positively triggering Input 1 will activate the radio rebroadcast function. The active channels will be dependent upon the DIP switch settings selected. Radio will not use Channel 2 in Mode 3 and 4.

Positively triggering Input 2 will activate city mode function. This will reduce the output to 50% as long as this input is active.



Positively triggering Input 3 will activate the Rumble tone. This function is only active in Mode 3 and 4 of the DIP switch setting. The Rumble tone will last for 8 seconds and requires the siren to be running a tone. This can only be triggered again after the release of the input. The Rumble tone is only ever played on Channel 2.

If a fist mic or handset is used with PTT function this will override any output except Airhorn. The order of precedence is Airhorn, PTT, Radio and lastly siren tone.

### MODES OF OPERATION

The DDSA has 4 modes of operation set with the use of the DIP switches on the device.

#### Mode 1

In Mode 1 the siren tone is played on both channels and there is no rumble function. PTT and Radio also utilize both of the output channels.

#### Mode 2

In Mode 2 only Channel 1 is used. This will run the siren tones, PTT and radio. There is no rumble function in this mode.

#### Mode 3

In Mode 3 while a tone is playing on channel 1, a trigger of input 3 will run a low frequency version of the current tone on Channel 2. This will last for 8 seconds and then turn off channel 2.

#### Mode 4

In Mode 3 while a tone is playing on channel 1, a trigger of input 3 will run a low frequency version of the current tone on Channel 2. This will last for 8 seconds and then turn off channel 2. While the rumble tone is sounding, channel 1 will be deactivated to avoid an overcurrent event as the siren has a net output capacity of 200W and in mode 4 both channels are set to produce 200W with the specified speakers.