



EWS4 ELECTRONIC WARNING SIGNAL

High power multi-mode electronic warning signal



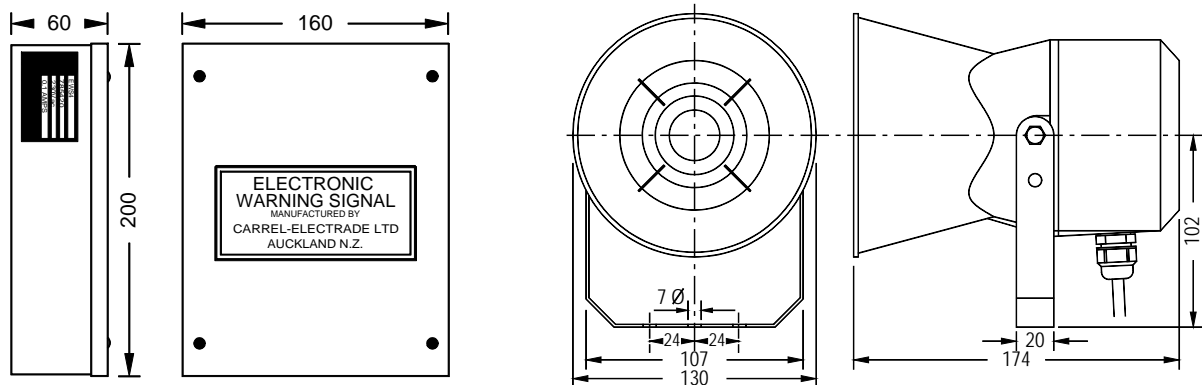
Specifications

EWS4

Tones	: 15 pre-selectable by internal DIP switch : Provision for external switching - remote control
Volume	: Internal adjustment from zero to full power
Output	: 117dB at 1m
Rating	: Continuously rated
Voltage	: 24V ac/0.7A, 110V ac/0.2A, 230V ac/0.1A : 12V dc/1.5A, 24V dc/0.7A
Weight	: 24Vdc 1.3kg, all other models 2kg
External Speaker	: 8 Ohm >15W (Required extra)

MPH-5308 Horn Loudspeaker

Impedance	: 8 Ohm
Rating	: 30W rms
Environment	: IP66
Frequency Range	: 500Hz to 7kHz (-10dB)
Efficiency	: SPL (1W/1m) 106dB
Material	: High impact ABS UV resistant
Mounting	: U type stainless steel bracket
Weight	: 1.4kg



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Installation and Operating Instructions

Supply Voltage

Connect supply voltage to terminals marked P N E

Loud Speaker

Connect an 8 Ohm re-entrant horn type loud speaker to terminals marked SPEAKER

N.B. Do not use a speaker or speaker combination presenting an impedance of less than 8 Ohms as damage may result.

Control - On/Off

The warning signal can be switched on and off by either of the two following methods.

- (a) making or breaking of the supply voltage.
- (b) Making or breaking of a pair of switch or relay contacts across the terminals marked CONTROL. Contacts open, signal "on", contacts closed, signal "off". (contact rating 100mA/12Vdc)

Volume Control

Turn clockwise to increase, anti-clockwise to reduce.

Fuse

The unit is protected by a 1A fuse, do not replace with a higher rating as damage may result.

Tone Selection

Signal tone selection is made by positioning the DIP switches as shown in the tone selection chart.

External/Remote Tone Selection

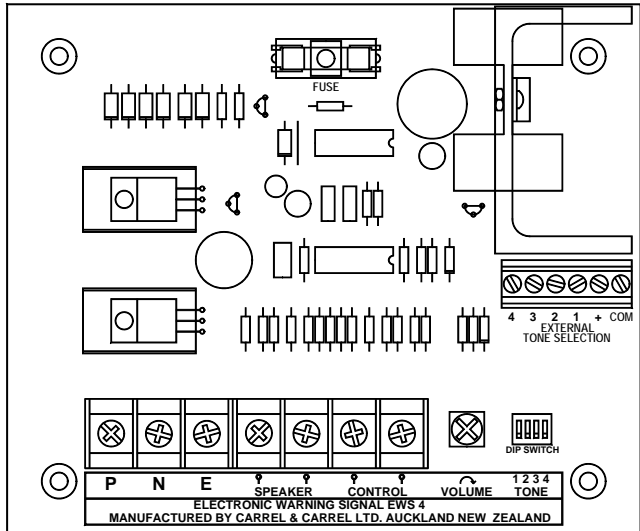
- (1) Place each of the tone DIP switches marked 1 2 3 4 in the down position as shown in the first line of the tone selection chart.
- (2) Select the tone or tones required from the tone selection chart.
- (3) Arrange relay or switch connections to the EXTERNAL TONE SELECTION connection block marked 4 3 2 1 + COM so the corresponding DIP switch numbers shown in the up or top position on the TONE SELECTION CHART are switched to COM.

e.g. an alternating two tone unequal phase ratio requires terminals 4 and 3 to be switched to COM.

N.B. Wiring between EXTERNAL TONE SELECTION terminal block 4 3 2 1 + COM and the switch or relay should be kept as short as possible, preferably less than 1 metre.

A relay may be powered from the 30Vdc/50mA unregulated auxiliary supply voltage at the + and COM terminals of the connection block.

EWS4 Printed Circuit Board Showing Connection Terminals and Tone Switch



Tone Selection Chart

Tone Selection	Phase Ratio	Frequency Modulation	Switch			
			1	2	3	4
Fast rising high tone pulses	Unequal		↓	↓	↓	↓
Alternating sliding two tone	Unequal		↓	↓	↑	↑
Fast pulses high tone	Unequal		↓	↓	↓	↓
Alternating two tone	Unequal		↓	↓	↑	↑
Fast rising low tone pulses	Unequal		↓	↓	↓	↓
Rise and fall high/low tone	Unequal		↓	↓	↑	↑
Fast pulses low tone	Unequal		↓	↓	↓	↓
Continuous low tone			↓	↓	↑	↑
Slow rising high tone pulses	Equal		↓	↓	↓	↓
Alternating sliding two tone	Equal		↑	↑	↑	↑
Slow pulsing high tone	Equal		↑	↑	↓	↓
Alternating two tone	Equal		↑	↑	↑	↑
Slow rising low tone pulses	Equal		↑	↑	↓	↓
Rise and fall high/low tone	Equal		↑	↑	↑	↑
Slow pulsing low tone	Equal		↑	↑	↓	↓
Continuous low tone			↑	↑	↑	↑