

# **MICROSOUND SYSTEMS**

**NURSE CALL CANCEL**

**MANUAL**

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# 1 General Description

The system allows a patient to call a Nurse for assistance, from a bed, toilet or bathroom unit. Ideal for use in Hospitals Day Clinics, Old Age Homes and Frail Care Centres.

## 1.1 Features

- Nurse Call.
- Emergency Call (optional).
- Reassurance Lamp.
- Pear Push Socket.
- No Mechanical Buttons.
- Easily Cleaned.
- Duct or Surface Mount.
- Pull Cords.
- Large Over Door Lamps.
- Lamp or Mimic Panel Indication.
- Buzzer or Chimes Call Tone.

## 2 Installation

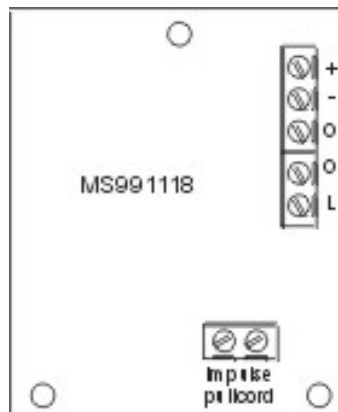
A typical system would consist of a Lamp Panel and Power Supply at the Nurses Station, and Call Units at the beds, bathrooms and toilets. Outside the Ward and Bathroom in the passage would be an Over Door Lamp.

The central P.S.U. provides 24V DC to the Lamp Panel, O/D Lamps and all the Call Units. Thick power cable must be allowed for on larger systems to prevent voltage drop at the further points.

### 2.1 Wiring

#### 2.1.1 Call Cancel Unit

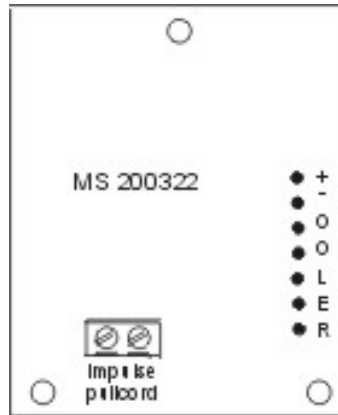
The bed, bath and toilet units all connect up the same way. The units have connection points indicated on the solder side of the P.C.B .



+ = +24V DC from the P.S.U. (com.)

- = GND from the P.S.U. (com.)
- L = Call line to the LED on the Lamp Panel.
- O = Enable line to the O/D lamp in passage (com.)
- O = Enable line to the O/D lamp in the Ward. Only used when the unit is in a bathroom in the Ward. (com.)
- (Com.) indicates that the line is common to all beds in a ward or all the units in a bathroom or toilet.

### 2.1.2 Call Cancel unit with emergency



- + = +24V DC from the P.S.U. (com.)
- = GND from the P.S.U. (com.)
- O = Enable line to the O/D lamp in passage (com.)
- O = Enable line to the O/D lamp in the Ward. Only used when the unit is in a bathroom in the Ward. (com.)
- L = Call line to the LED on the Lamp Panel.
- E = Emergency Call line from each Ward to the Emergency P.C.B. at the Nurses Station. Only used when the system has emergency call. (com.)
- R = Reading light relay.

(Com.) indicates that the line is common to all beds in a ward or all the units in a bathroom or toilet.

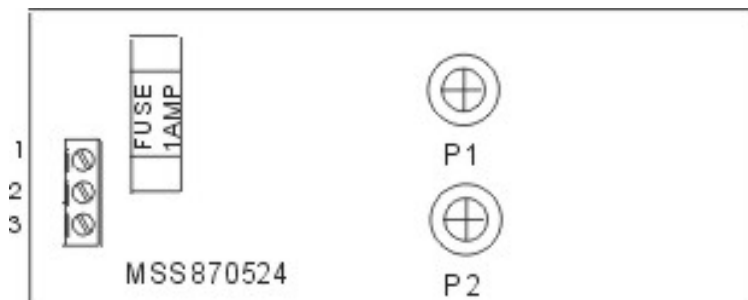
### 2.1.3 Over Door Light

The Over Door Lamp is connected between the positive line of the P.S.U. and the 'O' connection of the Call Units.

### 2.1.4 Lamp Panel

The Lamp Panel LED's negative side is connected to the 'L' connection of the Call Units. The positive side of LED's are all common via a resistor to the output of the buzzer PCB.

### 2.1.5 Buzzer Board

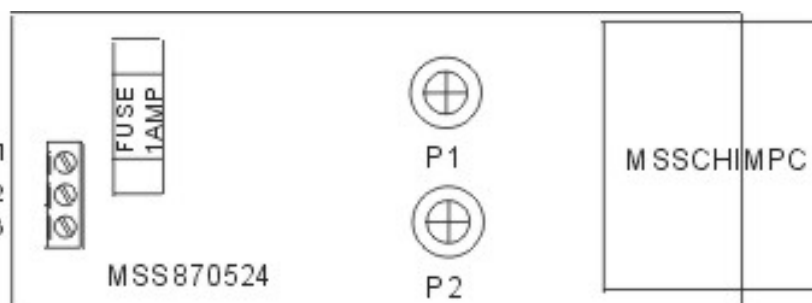


**MSSBUZCS0 Buzzer board with current sensing**

The Buzzer PCB has three connections indicated on the solder side of the PCB.

1. Power supply +24vdc.
2. Power supply ground.
3. Positive to lamp panel LED's.

- P1. Buzzer on time (clockwise for max).  
P2. Buzzer off time (clockwise for max)

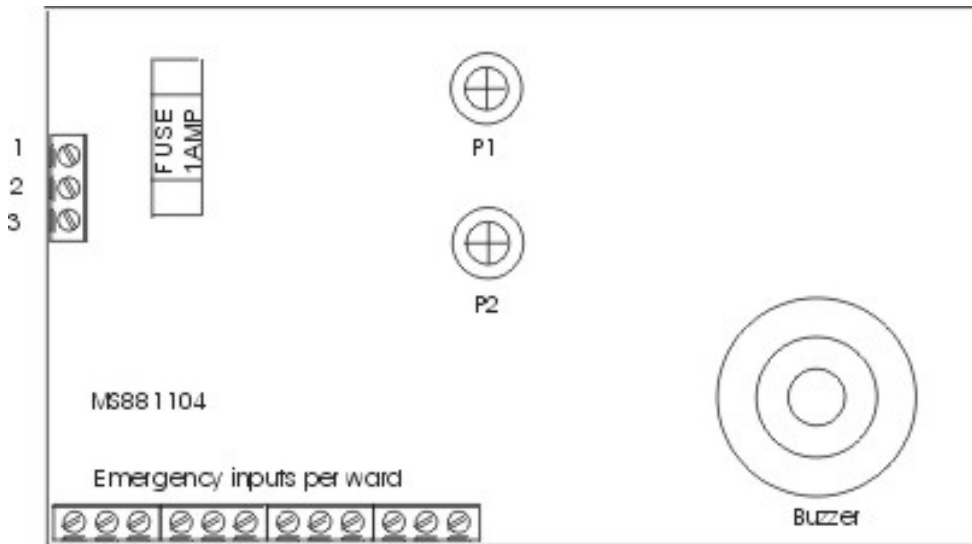


**MSSBUZCS0 + MSSCHIMPC Current sensing board with chimes**

1. Power supply +24vdc.
2. Power supply ground.
3. Positive to lamp panel LED's.

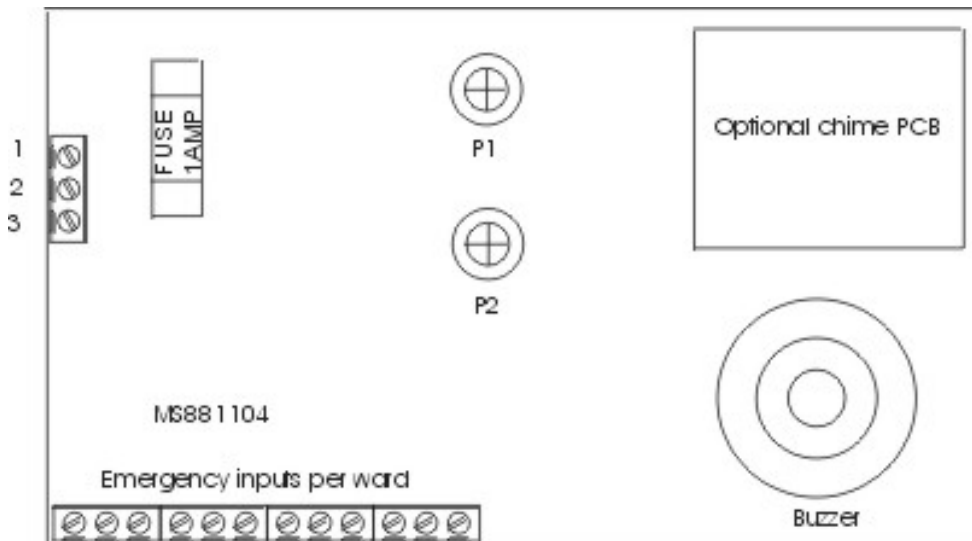
- P1. Buzzer on time (clockwise for max).  
P2. Buzzer off time (clockwise for max)

### 2.1.6 Emergency Buzzer Board



**MSSEMEBUZ Emergency buzzer for systems with emergency**

1. Power supply +24vdc.
  2. Power supply ground.
  3. Positive to lamp panel LED's.
- P1. Buzzer on time (clockwise for max).  
P2. Buzzer off time (clockwise for max)



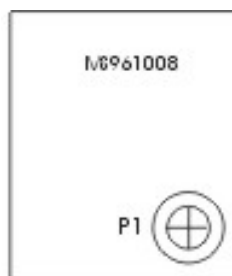
**MSSEMECHM Emergency chimes with current sensing**

1. Power supply +24vdc.
  2. Power supply ground.
  3. Positive to lamp panel LED's.
- P1. Buzzer on time (clockwise for max).  
P2. Buzzer off time (clockwise for max)

The Emergency Buzzer PCB also has 11 connections down the side of the PCB. Each connection must be connected to the E line of the beds and bathroom/toilet units of an individual ward. This input switches off

the normal Call buzzer and switches on the emergency Call buzzer when a Emergency Call is made in any Ward.

### 2.1.7 Chime Board



1. 1 chime (single tone trigger)
2. 2 chime (dual tone trigger)
3. 3 chime (triple tone trigger)
4. Chime common to trigger
5. Speaker -
6. Speaker +
7. Positive 2.7v - 18v
8. Ground
9. Amp +
10. Amp ground

## 3 Operation

### 3.1 Normal Call

When a Normal Call is made from a bed, bathroom or toilet the following happens.

The Reassurance Lamp lights up at the unit.

The Over Door Lamp lights up in the passage.

The LED on the Lamp Panel lights up.

The Buzzer at the Lamp Panel turns on.

The Call can only be cancelled by pressing the cancel button on the unit that initiated the Call.

All functions return to normal.

### 3.2 Emergency Call

This feature only applies to systems with Emergency.

When a Emergency Call is made from a bed, bathroom or toilet the following happens.

The Reassurance Lamp flashes at the bed.

The Over Door Lamp flashes in the passage.

The LED flashes on the Lamp Panel.

The Emergency Buzzer turns on permanently.

The Emergency Call can only be cancelled by pressing the cancel button on the unit that initiated the Call.

All functions return to normal.

Please note, a bed unit can have normal call only or normal and emergency call. Normal call from the pear push and emergency call from the bed head unit. A bathroom or toilet can only have either normal or emergency call.

## **4 Specifications**

### **4.1 Call Cancel Unit**

Power Requirement.

24V DC @ 30 ma. Idle.

And 80 ma. Operated.

The Over Door output can drive two 3 watt 24V globes

The Lamp Panel output can drive two LED's.

Call Button.

Reassurance Lamp.

Pear Push socket.

Duct Mount.

Standard 2x4 or 4x4 Mounting.

### **4.2 Power Supply**

Input is 220/50 VAC selectable with 1 amp. Fuse protection.

Output is 24V DC 100VA max. 2 amp continuous load, 5 amp fuse protection.

The input and output is lightning protected.

### **4.3 Over Door Lamp**

Globe 24V 3 watts.

Red Prism shaped Lens.

One side is always common to positive.

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2016

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