

# MSS Professional

## IPA 125 INSTALLATION INSTRUCTIONS

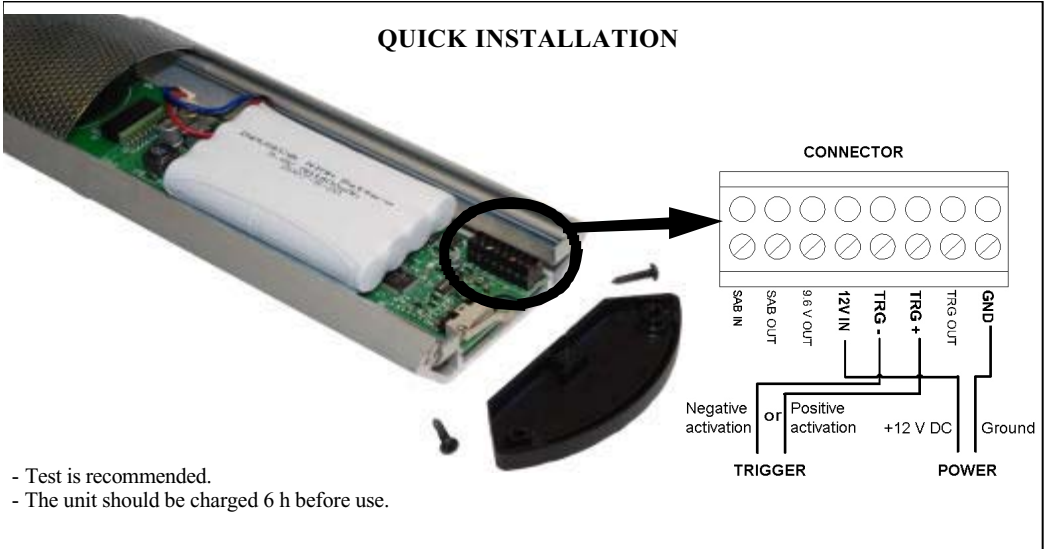
The IPA125 sounder is intended for professional use only and should be handled and installed by authorized installers.

- Do not connect the unit to other supplies than 12 (9-18) V DC.
- It will not work properly before the unit has been charged for 6 hours.
- The battery must be changed every third year.
- While dealing with the PCB's inside the unit, precautions must be observed for handling electrostatic discharge sensitive devices.
- It's recommended to use earplugs when installing

Tools needed:

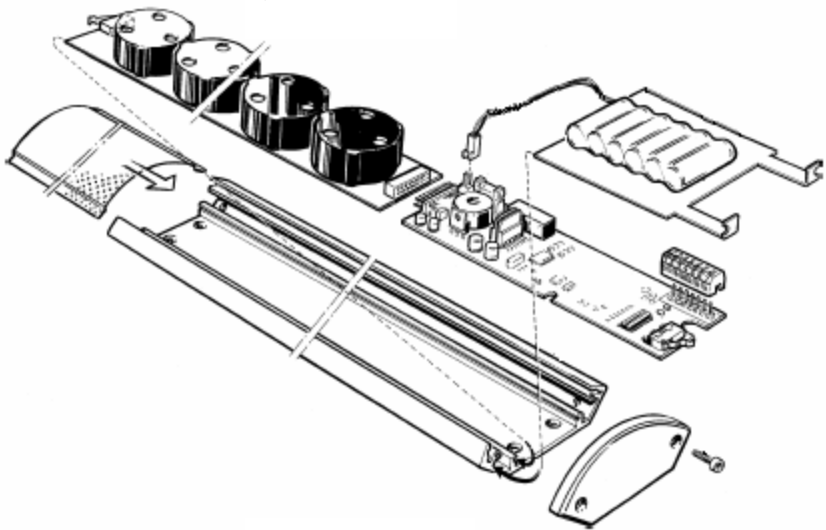
- Screwdriver
- Torx wrench
- Screws and drill for mounting the unit

### QUICK INSTALLATION

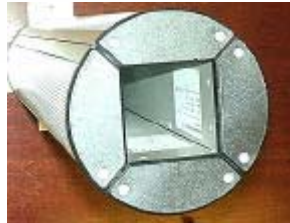
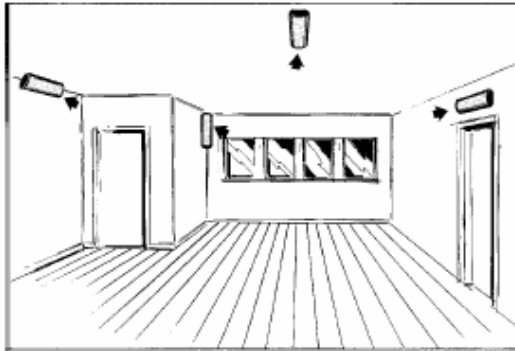


- Test is recommended.
- The unit should be charged 6 h before use.

## 1) THE UNIT



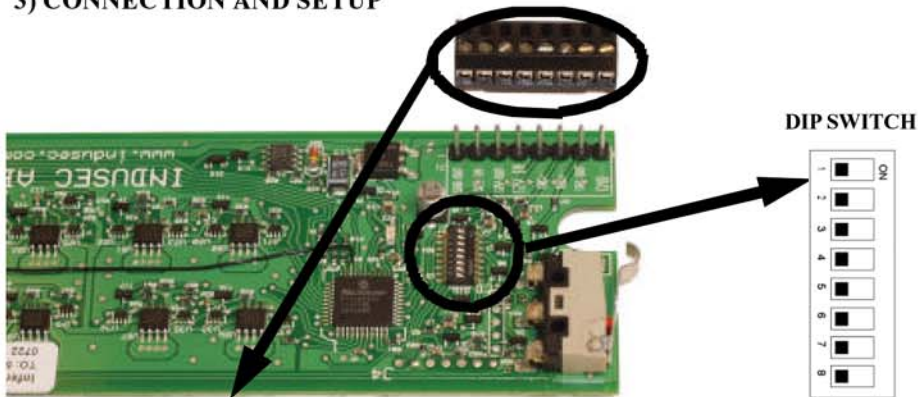
## 2) MOUNTING



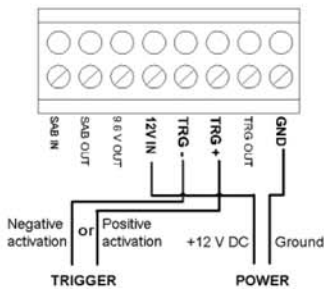
### Option: Multiple units

Multiple units can be attached together forming either a semi circle or a full circle. The Semi-circle unit can be mounted either on the wall or the ceiling while the Omni version works best hanging from the ceiling.

### 3) CONNECTION AND SETUP



**CONNECTOR**



- GND = Ground
- TRG OUT = Bad battery signal, see below
- TRG + = Positive activation
- TRG - = Negative activation
- 12 V IN = Charge +12 V DC
- 9.6 V OUT = Reserve
- SAB OUT = Tamper out
- SAB IN = Tamper in

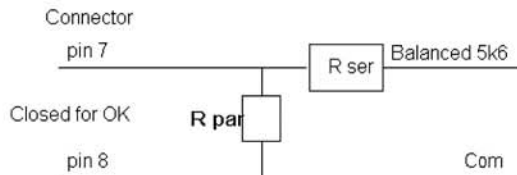
**DIP SWITCH**



1. Charging Indication  
ON = A red light will lit when charging.  
OFF = No indication when charging. (default)
2. Delay between received trigger signal and the alarm sounding.  
ON = 30 s  
OFF = 0 s (default)
3. Test Mode  
ON = Test mode, four short different-pitched sound signals.  
OFF = Normal mode (default)
4. Alarm Signal Length  
ON = Infinite alarm  
OFF = 3 min, after a new trig is needed (default)
5. Reserve
6. Fixed Alarm Signal Length  
ON = 45 s  
OFF = Normal mode (default)
7. Sound level  
ON =  $127 \pm 1 \text{ dB(A) @ 1m}$ . 20 s and then  $124 \pm 1 \text{ dB(A) @ 1m}$ . NOTE! Very high sound level.  
OFF =  $125 \pm 1 \text{ dB(A) @ 1m}$  (default)
8. Automatic Battery Check  
ON = Bad battery signal on pin 7 on Connector, see below  
OFF = Led flash => Bad battery (default)

#### Bad battery signal

- Dip switch: 8 ON
- Connector: pin 7 and 8 (TRG OUT and GND)



## Option: Tamper

The tamper loop is an extra mechanical security protection. It is not needed for the function of the siren.

The tamper loop consists of a series connection that enters at the Connector at SAB IN goes through the microswitch at the end of the board, runs through the CPU board through the middle connector to the speaker board through the microswitch on that very end and back to the Connector at SAB OUT.

The loop can contain other normally-closed switches such as magnetic contacts or mercury tilt switches in the alarm set-up.

## 4) ASSEMBLING THE UNIT

1. Before applying power to the unit, ensure that Dip switch 3 is in the ON position = Test mode.
2. Assemble the two PCB's and the battery. Attach the battery cable to the connector.
3. Power can now be applied.
4. Set Dip switch 1 to ON. A red LED on the CPU circuit board should light up.
5. Dip switch 1 can be in either in ON or OFF mode.
6. Set the Dip switch 3 to OFF = Normal mode. Attach the grid and the two end caps.
7. The Inferno is assembled and ready for use.

## 5) TEST

We recommend testing the unit either before mounting or during assembling.

Without a connected Tamper loop it is only necessary to connect the two PCB's, the battery and power.

Test procedure (The battery will need about 20 minutes to charge before testing.):

1. Set Dip switch 3 to ON position.
2. Activate either Trigger signal.
3. The unit should generate four short different-pitched sound signals indicating that the unit works.
4. Switch off the Trigger signal.
5. Set Dip switch 3 to OFF position. (Normal operation mode)
6. The test is complete.

## 6) SPECIFICATIONS

<b>Coverage</b>	Up to 150 cubic meters (60 square meters x 2.5)
<b>Electrical interface</b>	
Power Supply	9 – 18 V DC, < 150 mA
Activation Signals	Trig (-): 0 – 0.5 V, (10 mA) Trig (+): 9 – 18 V, (10 mA)
Cables	0.25 – 1.0 square mm, ( AWG 22 – 18 )
<b>Battery</b>	9.6 V Ni-MH, NI-MH batteries performance is improved if charged/discharged.
Capacity	1800 mAh, (sufficient for 30 minutes continuous alarm)
Charge time	The unit should be charged 6 hours before use.
Standby w/o battery charge	1 month
Life time	3 years, then it has to be replaced
Sound output	125-127 ± 1 dB(A) @ 1m, user selectable
Output frequency	2—5 kHz