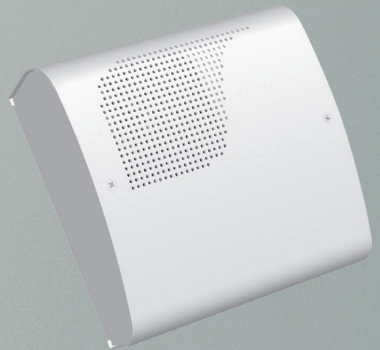




# IPA117 V3 Manual

INSTALLATION AND OPERATING INSTRUCTIONS



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# **PLEASE READ AND SAVE THESE INSTRUCTIONS**

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# Manual

IPA 117 V3



**Indoor siren and self-powered – VERY POWERFUL!**

The IPA 117 V3 is compliant with EN 50131-4 grade III

**CNPP Certification (centre national de prévention et de protection):**

<http://www.cnpp.com>

**AFNOR Certification :**

<http://www.marque-nf.com>

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The products of the range altec are designed and made in France by the company MSS Professional A/S. IPA 117 V3 and altec are registered trade-mark of MSS Professional A/S.

# Description

The IPA 117 is the ideal solution for deterring intruders thanks to its very high power sound output and strong metal housing.

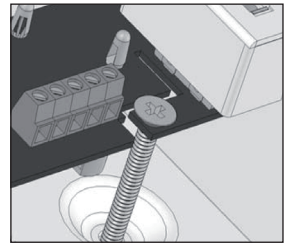
In alarm the IPA 117 draws its power from the battery to prevent unnecessarily high power requirements from the power supply.

An automatic limitation of the charging current of 200ma allows several IPA 117s to be supplied from the same power supply without risk of overload.

The ISBC function (Intelligent System of Battery Charging) automatically adjusts the charging voltage of the battery to 13.8V, this ensures the correct charging voltage even if the external power supply only delivers 12V.

# Installation

The IPA 117 is designed for indoor use only. It should be fixed to a vertical wall with at least 2cm on each side for clearance. The backplate of the IPA 117 is fixed to the wall using 4 screws with a head diameter of 4-5mm (not supplied).



The removal tamper is enabled by fitting a screw of 60-70mm length with a head diameter of 4-5mm (not supplied) positioned as shown in the drawing to the left. It must be screwed into the wall until its head comes into contact with the PCB but not applying any pressure to it.

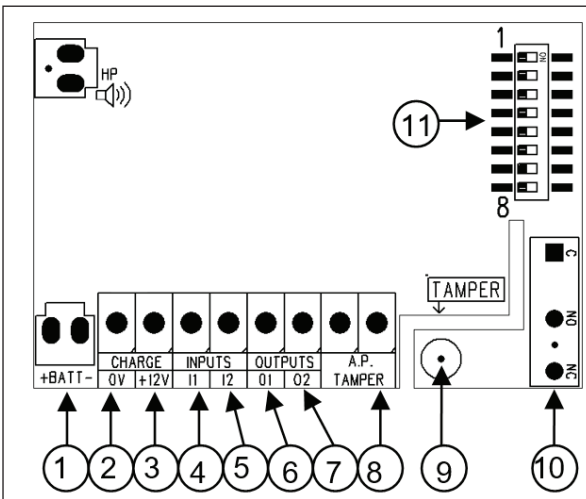
The cover tamper switch is closed when the cover screws are tightened.

It is essential to test and verify the correct operation of the siren and tamper circuits after installation is complete.

It is strongly recommended to periodically check the operation of the unit and the status of the backup battery and replace it if necessary.

# Wiring

1. Backup battery connector
2. Power Supply 0V
3. +12V charging input
4. Input 1 high power siren
5. Input 2 optional pulsed warning siren (Switch 5 must be ON to enable this)
6. Output 1 for PSU failure
7. Output 2 for Battery failure
8. Tamper circuit
9. Position of the screw for the removal tamper
10. Fault output operation switches
11. Configuration dipswitches



- Before wiring the tamper, check that the circuit does not exceed 60Vdc/0.1a.
- Check the correct operation of the tamper after the installation by lifting the cover.
- Ensure that the charging voltage and the trigger signals come from the same equipment.

## **WARNING!**

The IPA 117 will not trigger without the internal battery connected.

# Operation

The IPA 117 has two inputs that can be configured to suit the requirements of the installation. Input 1 is used to trigger the high power siren. Input 2 is used to trigger a pulsed warning siren.

The operation of each input can be configured as per the table below.

Function	Input 1		Input 2		
position	switch1	switch 2	switch 3	switch 4	switch 5
on	negative	applied	negative	applied	activated
off	positive	removed	positive	removed	deactivated

By default input 1 will trigger by removal of a positive signal, input 2 is disabled. It can be enabled by switching on switch 5.

When powered up the IPA 117 will not trigger regardless of the input state. The inputs must first be armed for at least 1 second to permit triggering. If an input is set to applied, the IPA 117 triggers when the control voltage is applied.

When triggered the IPA 117 is activated for a period of 15 minutes or until the signal is returned to its normal state.

This can be shortened to 3 minutes by switching dipswitch 8 on. Input 1 has priority and will interrupt the alarm triggered by input 2.

Function	Sound Volume (I/P 1)	Default O/P Settings	Siren Duration (I/P 1 & I/P 2)
Position	Switch 6	Switch 7	Switch 8
ON	MIN	Normally Open (1)	3 min
OFF	MAX	Normally closed	15 min

## The IPA 117 has two transistorised 0V default outputs:

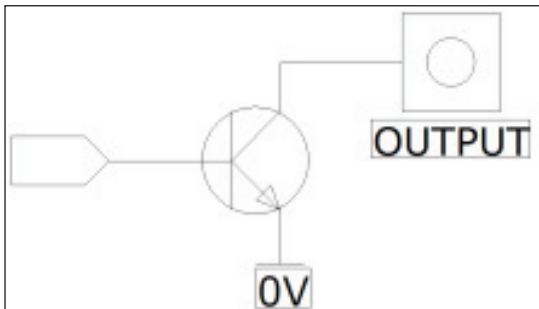
**The First (O/P 1)** is enabled (disappearance of the 0V) 5 seconds after the external power voltage disappears.

**The Second (O/P 2)** is enabled (disappearance of the 0V) when the internal battery fails (battery flat or absent). The failure test is carried out every 24 hours.

This output is also enabled if the battery is low following an external power cut.

**When replacing the battery, all power must be removed from the siren to ensure the battery default output is reset.**

To simplify wiring, outputs can be configured to be normally open by raising configuration switch No. 7



# Safety Instructions

- During tests wear ear defenders or ensure you are at a reasonable distance from the IPA 117.
- Do not perform any operation of the IPA 117 in stormy weather.
- Use only the types of batteries indicated in the specifications table.

## Disposal of the batteries

The backup battery for the IPA 117 is not supplied by MSS Professional A/S. However, please do not dispose of them in the trash, it is forbidden to cremate, bury or throw them into landfills. Dispose of batteries in accordance to the current laws and regulations in your country. Please contact the relevant authorities for further information if unsure.

## Disposal of the product

As required by the WEEE (Waste electrical and electronic equipment), electrical and electronic equipment must be disposed of separately from normal household garbage to promote their re-use, recycling and other forms of recovery, as well as to limit the amount of waste requiring disposal and thereby reduce landfill. When disposing of such products, please follow the instructions of local authorities and/or check with your provider when purchasing a new product



# Warranty

MSS Professional A/S provides a guarantee of 5 years from the date of the manufacture. The year and month of manufacture appear on the label serial number placed inside the device.

The warranty does not cover non-functional damage such as scratches, broken by a fall or shock or degradation caused by abnormal use. The warranty applies only to cards and electronic assemblies and does not cover damage caused by natural or artificial surges.

The warranty applies only if the electronic part has not been dismantled, disturbed or transformed. The warranty is strictly limited to repair or exchange parts that we found defective. Return costs are still born by the sender.

The detention of equipment under warranty won't give rise to any compensation for any reason whatsoever.

The responsibility of MSS Professional A/S is limited to the repair of products and do not extend to the consequences of their use, their implementation or their non-functioning.

# Technical Features

<b>Power supply voltage to +12V CHARGE:</b>	10.8 to 14.5 VDC
<b>Charge current limiter on CHARGE:</b>	200 mA
<b>Output voltage on +BAT:</b>	13.8 VDC (+/-0.2 VDC)
<b>Permitted Residual ripple:</b>	250mV
<b>Power consumption during standby (on battery):</b>	5 mA
<b>Standalone autonomy on internal battery:</b>	60 hours
<b>Maximum alarm duration:</b>	15 minutes / 3 minutes
<b>Power consumption when alarm is sounding &amp; acoustic power: (on INPUT1, the acoustic power given falls after 3 mn. to increase the duration)</b>	INPUT 1: 1.7A 114 dBa at 1m / 3mn. (+/-2dBa) 1.0A 107 dBa at 1m / 12mn. (+/-2dBa) INPUT 2: 0.2A 103 dBa at 1m (+/-2dBa)
<b>Maximum acoustic power according to old NF standard:</b>	117 dBa (+/-2dBa)
<b>Maximum control voltage "INPUT 1 / 2":</b>	16 VDC (0.1 mA)
<b>Triggering voltage "INPUT 1 / 2":</b>	Disappearance: <1VDC (positive) / >3VDC (negative) Appearance: >3VDC (positive) / <1VDC (negative)
<b>Resetting voltage "INPUT 1 / 2":</b>	Disappearance: >3VDC (positive) / <1VDC (negative) Appearance: <1VDC (positive) / >3VDC (negative)
<b>Remote power failure trigger level:</b>	< 10.5 VDC
<b>Low battery failure trigger level:</b>	< 11 VDC
<b>Maximum current for transistorised outputs:</b>	50 mA
<b>Voltage of switched transistorised outputs:</b>	0.3-0.5V
<b>Output timeout (triggering / resetting):</b>	5 seconds
<b>Level of protection:</b>	IP 40 IK 08
<b>Environment:</b>	Class II – General internal use
<b>Temperature for use:</b>	-10°C to +55°C
<b>Relative humidity:</b>	25 to 93%
<b>Weight:</b>	1.65 kg.
<b>Dimensions (L x l x p):</b>	191 X 176 X 68mm
<b>Type of connection cable:</b>	Rigid 4 pair cable: Ø >= 0.5 mm Flexible: Ø >= 0.2mm
<b>Types of backup batteries:</b>	12V 2.1Ah YUASA NP2.1-12FR 12V 2.1Ah YUCELL Y2.1-12FR 12V 2.0Ah POWERSONIC PS 1220 V0 12V 2.3Ah ACD ST20 12V 2.1Ah SUNLIGHT SP 12-2.1V0 12V 2.0Ah SEPTAM SP020 12V 2.2Ah ENERGY POWER EPW12V2.2Ah

Electromagnetic compatibility: compliant with the NF EN 50130-4(08/11) + A1 and NF EN 55022 standards  
Electrical security: compliant with standard EN 60950-1 + A1 + A2 + A11 + A12

# Notes

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