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MHA-100MK

Main Features

- ✓ **Compact: 120x 100mm x40mm**
- ✓ **Ideal for smaller houses, garden flats, outbuildings, caravans**
- ✓ **Two wired PIR channels plus panic button channel**
- ✓ **Relay output to trigger other systems**
- ✓ **Relay output for a siren and strobe light**
- ✓ **Solid state output for unacknowledged alarm indicator**
- ✓ **12vdc operation**
- ✓ **LED diagnostics**
- ✓ **Very low power consumption**
- ✓ **Easy to install**
- ✓ **No remotes, armed by our MagKey**
- ✓ **Adjustable siren time**
- ✓ **Locally manufactured**
- ✓ **12 month warranty**

Small Size. Big Security.

The **MHA-100 Mini House Alarm** is a compact, locally manufactured security solution designed for smaller homes, apartments, garden flats, outbuildings, and caravans. Measuring just **120 x 100 x 40mm**, it delivers reliable protection without the bulk or cost of traditional systems.

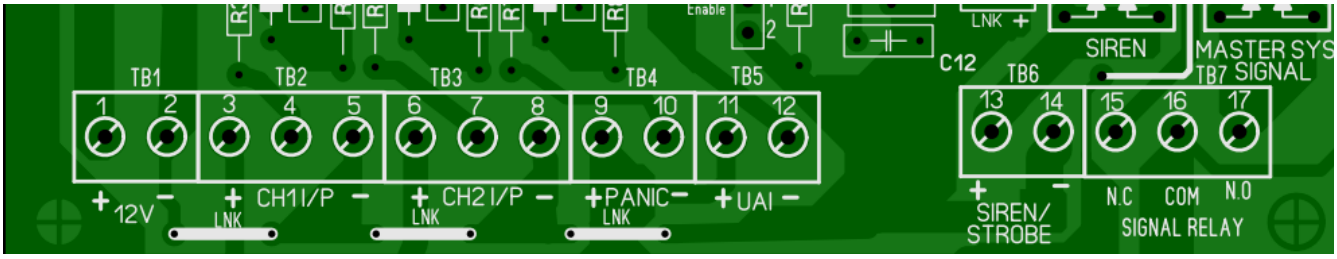
With **two channels** for PIR sensors or magnetic switches, plus a **panic button channel**, the MHA-100 offers flexible coverage. It features **relay outputs** for sirens, strobes, or integration with other systems, and a **solid-state output** for alarm status indication. Armed by a **MagKey switch**, the system is simple to operate, while the **diagnostic LED** keeps you informed at a glance.

Powered directly from **12V DC**, the MHA-100 runs efficiently from SLA, lithium, or solar-charged batteries. Its low power consumption means smaller, lower-cost batteries can provide extended backup, making it ideal for off-grid or energy-conscious setups.

Designed to work **independently** or connect to a **main alarm system**, the MHA-100 is easy to install, uses freely available components for servicing, and comes with a **12-month warranty**.

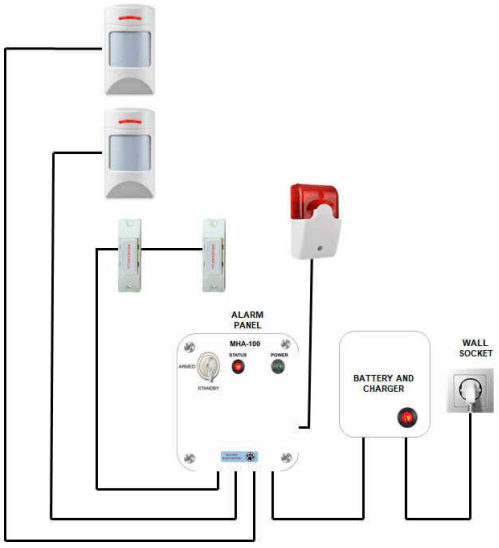
Affordable. Efficient. Reliable. The MHA-100 delivers peace of mind in a compact package.

PCB Connections



Terminal	Use	Description
1	+12v	Connect to the +12v of the alarm power supply or back-up battery
2	0v	Connect to the 0v of the alarm power supply or back-up battery
3	Ch1 +12v	+12v supply to PIR sensors, the terminal is also used to provide +12v to the PIR or magnetic switch contact.
4	Ch1 I/P	Input signal from a PIR sensor or magnetic switch contact NB: If the channel is not used, connect the terminal to the channel +12v.
5	Ch1 0v	0v connection to the PIR sensor.
6	Ch2 +12v	+12v supply to PIR sensors, the terminal is also used to provide +12v to the PIR or magnetic switch contact.
7	Ch2 I/P	Input signal from a PIR sensor or magnetic switch contact NB: If the channel is not used, connect the terminal to the channel +12v.
8	Ch2 0v	0v connection to the PIR sensor.
9	Panic +	Connect the + terminal to the N.O terminal of a panic switch, and the – terminal to the Com terminal of a panic switch.
10	Panic -	
11	UAI +	Connect to the +v (red) wire of the unacknowledged alarm indicator to the + terminal, and the 0v (black) wire of the LED light - terminal
12	UAI -	
13	Siren/Strobe +	Connect to the +v (red) wire of the siren / strobe to the + terminal, and the 0v (black) wire to the - terminal
14	Siren/Strobe -	
15	Relay N.C	Terminals 15,16,17 are used to signal another alarm system. This is useful if the alarm is installed in a garden flat and needs to trigger an alarm in the main house.
16	Relay Com	
17	Relay N.O	

Typical System



Adjustments

The circuit board has one trimpot to adjust the siren time plus a jumper to disable the entry delay on channel 2. The trim-pot allows the siren time to be adjusted. Turning the adjustment clockwise increases the time. The alarm is supplied with the adjustment in the centre.
Jumper JP1 enables an entry delay on channel 2. The board is supplied with the jumper in the right hand position (towards the relays). This enables a 10sec entry delay for channel 2 when entering the area. Moving the jumper to the left disables the entry delays.

SPECIFICATIONS	
	MHA-100
Sensor Channels	Chan 1 N.C. instantaneous trigger Chan 2 N.C. instantaneous trigger / entry delay selected by JP1
Panic Alarm Channels	1x N.O panic alarm channel active in armed and armed and standby mode
Exit/Entry Timer	Exit timer fixed at 20s Entry timer fixed at 10s
Siren time	Panic 2s – 4min Adjustable. Intrusion 2s-3min Adjustable. The minimum time setting is useful when setting up a new system.
Strobe Output	No longer used
Siren/Strobe Output	12v dc to power a 20w max siren/strobe
Relay Output	24vdc 2amp SPCO contact
Supply Voltage	Minimum 9.5 VDC Maximum 14.5 VDC
Power Consumption	Main Unit approx. 15mA PIR Sensors..approx 15mA each
Battery Standby Time	Armed and not triggered … 1.3A/hr battery with 2x PIR sensors…12hrs min. NB Battery age will affect standby time.
Accessories	We can supply the following for a complete system. Contact us for pricing
	Battery Charger with internal battery
	Larger capacity battery for extended standby time
	Sirens
	Combined siren / strobe light
	UAI LED light
	PIR sensors
	Panic buttons
	Remote panic buttons
	Sensor and siren cabling, cable glue