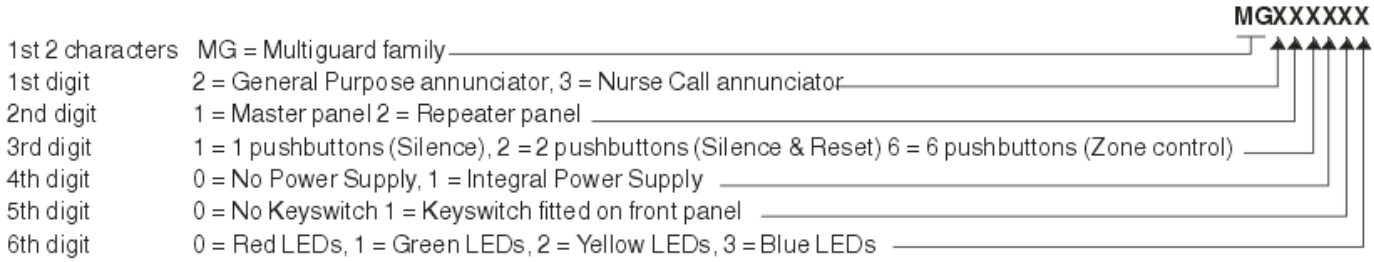
MULTIGUARD Annunciators MG212XXX & MG216XXX

The MULTIGUARD is general purpose six zone annunciator. The mark resistant decal covers a removable identification panel which can easily be created by a word processor or graphics package to enable a professional looking facia to be achieved for each installation. Blanks are supplied with these instructions. The MULTIGUARD is ideal for 24-hour monitoring of many different emergency alarms. It can be used with EXITGUARD door alarms to enable local and remote warning to be given. It is also suitable for standalone Personal Attack systems.

There are a number of variations of the MULTIGUARD and these can be identified by the following numbering system.



Operation

The basic operation of all units is the same but there are differences in the way that alarm conditions are silenced and reset. MG212XXX units have a global silence button and global reset buttons. MG216XXX units have individual silence/reset buttons for each zone. These individual buttons are also used to isolate zones in conjunction with the key switch.

When an alarm condition is detected, an audible warning is given by the integral sounder, the relevant zone LED flashes rapidly and a global relay is energised to provide volt free DPCO contacts for signalling to other equipment.

MG212XXX. Pressing F1 silences the alarm condition, restores the global relay to normal and the LED flashes more slowly. When the cause of the alarm condition has been cleared F2 can be pressed to RESET the visual indication.

MG216XXX. Pressing the relevant Z1 -Z6 button silences the alarm condition, restores the global relay to normal and the LED flashes more slowly. When the cause of the alarm condition has been cleared the relevant Z1 - Z6 button can be pressed again to RESET the visual indication.

If a subsequent alarm condition occurs before earlier ones have been reset, then all prior indications are temporarily suppressed to emphasize the latest event. After silencing all indications are displayed again as slow flashing LEDs.

If a key switch is fitted and connected to F3 (see below) zones can be omitted or isolated. Pre-selected the zones for omission by turning the key switch and pressing the relevant Z button. To complete the omission procedure, return the key to its anti-clockwise position. The zone LEDs will glow steady if omitted.

The basic mode of operation can be changed to suit other application. See function changes below for details.

Inputs

MULTIGUARD annunciators are all fitted with 16 inputs. Each input has a high impedance and will cope with high cable resistance. The inputs are capable of monitoring normally closed and normally open circuits and d.c. voltages between 2 and 30 vdc.

The 16 inputs are allocated as follows:

I1 - I6 Alarm inputs. N.C. open to alarm ie remove +ve, but see F4 below

Z1 - Z6 Zone Resets (MG212XXX). Silence, Reset and Isolate (MG216XXX) Momentary +ve applied to reset or silence etc.

F1 - F 4 Function inputs. +ve applied to operate function

MG212XX Inputs F1 and F2 are connected to function buttons on the front panel. F1 is a SILENCE button F2 being RESET.

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MG216XXX Inputs Z1 - Z6 are connected to six buttons marked Z1 - Z6 on the front panel. Thus, it is possible to silence and reset the system from a remote point if necessary.

Outputs

There is a DPCO (1A 30Vdc) global relay output which follows the sounder. Whenever the sounder operates the relay is energised. A serial output is also provided to transmit data to a remote repeater(s), driver(s) or relay card(s).

Function Changes

The function terminals can be linked to +ve either permanently or through switches to achieve different results:

Link F1 to +ve. to achieve silent operation. (MG212XXX & MG216XXX)

MG212XXX

Link F2 to +ve. If an alarm condition is detected the MULTIGUARD will sound and the relevant zone LED will flash rapidly. This visual and audible indication will continue until the cause of the alarm condition has been cleared.

Link both F1 & F2 to +ve. If an alarm condition is detected the MULTIGUARD remains silent and the relevant zone LED will flash slowly until the cause of the alarm condition is cleared.

F3 is a global isolate facility. By holding this terminal at +ve the system will be isolated. Any alarm conditions which existed at the time of isolation will remain in memory and will re-indicate when the system is restored to normal monitoring.

F4. By linking F4 to +ve the alarm inputs I1 - I6 become N.O. instead of N.C.

MG216XXX

Link F2 to +ve. If an alarm condition is detected the MULTIGUARD will sound and the relevant zone LED will flash rapidly and the relay will operate. Pressing Zn will Silence the buzzer and de-energise the relay. If the alarm input is restored the LED will extinguish, if the alarm input is still present the LED will continue to flash but slowly until the input is restored.

Link both F1 & F2 to +ve. If an alarm condition is detected the MULTIGUARD remains silent and the relevant zone LED will flash slowly and the relay will not operate. When the cause of the alarm condition is cleared the zone fully resets automatically.

F3 is usually connected to a panel mounted key switch (standard on MG216X1X) to enable buttons Z1 - Z6 as isolate buttons.

By linking F4 to +ve the alarm inputs I1 - I6 become N.O. instead of N.C.

IT IS IMPORTANT THAT THE MULTIGUARD IS FIXED TO A FLAT SURFACE. IF THE BOX DISTORTS IT WILL BE DIFFICULT TO CLIP THE VARIOUS COMPONENTS TOGETHER TO FORM A SECURE HOUSING.

Connection & Power Up Sequence

The MULTIGUARD has a short test or verification sequence on power up. You should verify that the unit as supplied is functioning normally before making any connections.

1. Plug in the battery. The plug is polarised to maintain the correct polarity. Ensure F4 is linked to +ve. The integral sounder will beep at 1 second intervals.

MG212XXX

2a. Press the SILENCE button F1. The LED's will flash twice and then remain steady. Press the RESET button F2. The unit is now ready to accept connections.

MG216XXX

2b. Press any button Z1 -Z6. The LED's will flash six times and then extinguish. The unit is now ready to accept connections.

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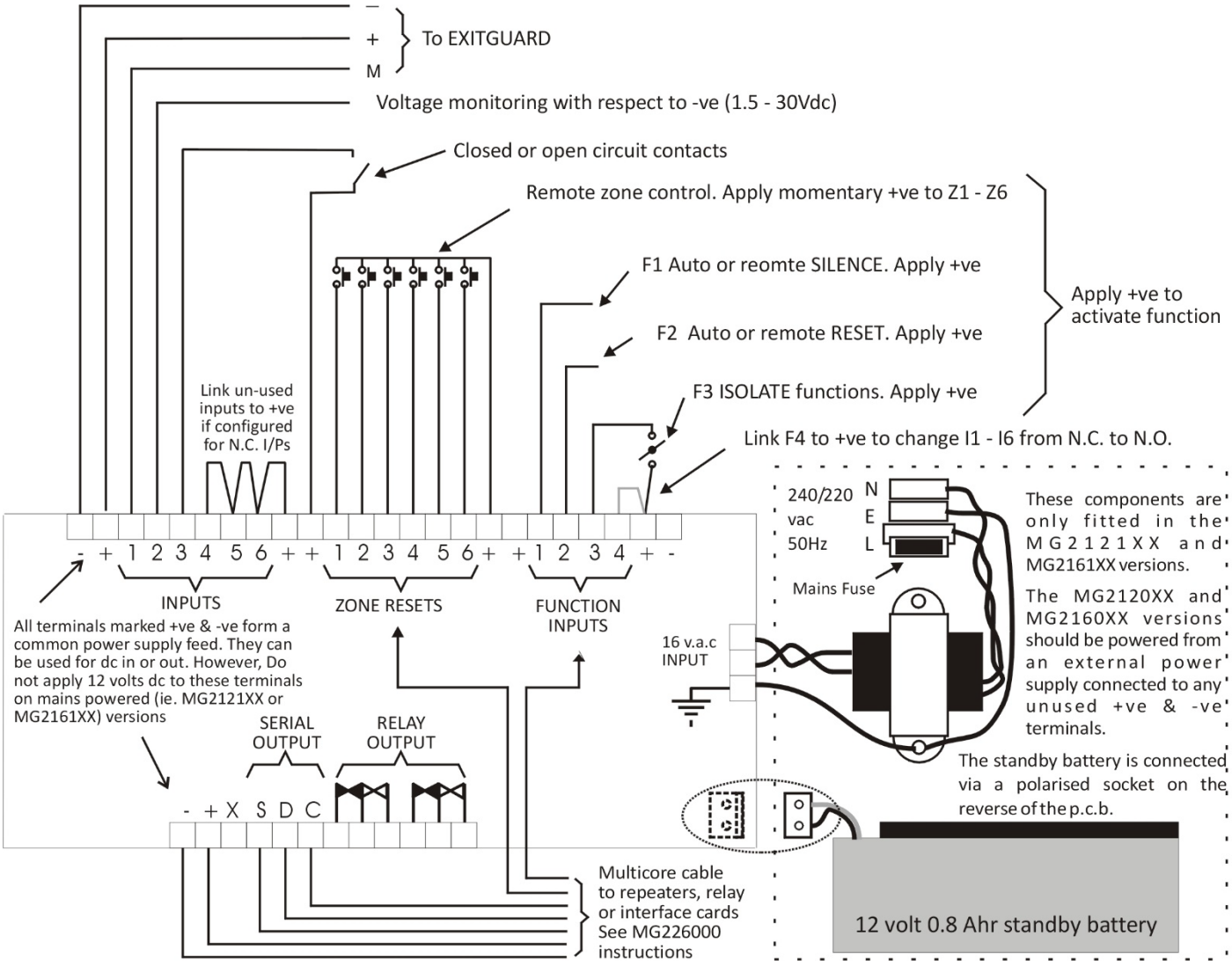
3. Connect the 220/240vac mains to the Live, Neutral & Earth terminals. Ensure the mains fuse is fitted and the transformer leads (Blue & Yellow) and earth lead (Green) are connected to the PCB.

4. Clip the PCB assembly onto the back box.

5. Switch on the power. Observe the green Mains On LED.

6. Dress the cable into the cable channel, trim to length and terminate as appropriate. Remove link F4 if monitoring closed circuits.

7. The system can now be tested and the decal and lid clipped into place.



Power Supply

The integral 13.8vdc power supply (if fitted) is rated at 250ma and is supplied with a rechargeable 0.8Ahr standby battery. The MULTIGUARD circuitry has a maximum power requirement of 60ma. The integral power supply will therefore support its own six zone electronics plus a further three units or repeaters and/or relay cards.

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