

## Keypad Address

For identification purposes each keypad is programmed during installation or commissioning with a 2 digit address 01, 02 etc. As supplied, each keypad is pre-programmed with address 01. To change the address proceed as follows :

- 1) Identify all keypads currently in use on the system and note their addresses, ensuring that the address is used once only.
- 2) Check that the keypad is correctly wired and that it is powered up.
- 3) Depress the right hand 'Alert' key and using the blade of a terminal screwdriver, momentarily short circuit the RESET pins. Release the 'Alert' key.
- 4) The display will now show the OLD ADDRESS and a request for the NEW ADDRESS. Enter the new address (2 digits).
- 5) The display will now show the keypad software version number and the new address. Refit the cover and returning to any previously programmed 'on line' keypad, enter menu 12 and add the new keypad to the system.
- 6) When correctly addressed and programmed, each keypad should show the time and date and allow access to menus.

## NOTE

The keypad address is held in an NVM chip and will be retained even in the event of power down or mains failure. The address may only be changed by following the procedure above.

## Specifications

Indication	32 character liquid crystal display. Green Day LED and red message warning LED.
Sounder	Miniature sounder produces key response tones.
Adjustments	Sounder volume and LCD contrast/tilt.
Supply Voltage	9 - 15V dc.
Current Consumption	Average 45mA.
Maximum Cable Length	Communications support in excess of 500m. Power supply must be calculated accordingly.
Dimensions	218mm x 103mm x 27mm



Advanced Design Electronics Ltd

TECHNICAL 051-549 1550

# Ultimate

## REMOTE KEYPAD

### General

The Ultimate control system is operated and programmed exclusively from remote keypads (RKP's). Up to 30 RKP's may be fitted per system, each offering the same facilities and flexibility in operation.

Customer operation and Engineer programming is carried out by pressing keys in response to questions or prompts shown by a 32 character liquid crystal display (LCD).

During normal Day and Set conditions, the LCD provides a continually updated time and date display. A discrete green LED indicator shows the Day condition and a red LED provides message warning.

Three 'Alert' keys beneath the LCD offer the customer instant FIRE, PA and MEDICAL call facilities for use in conjunction with a digital communicator/central station.

The RKP case is finished in white with grey and pink keys. A hinged flap at the right of the case provides an inset for the installation company sticker or card.

### Installation

The quantity of RKP's and their mounting positions is governed by the overall security system design. The usual positions however would be close to the main entry/exit door and in domestic applications on the upstairs landing or in the master bedroom. It should be noted that the remote keypad is NOT waterproof and should not be sited outdoors.

To remove the front cover, push at the top

and bottom centres and release the holding clips. Remove the printed circuit board (PCB) by pushing the holding clips to one side and lifting the board clear of the base. Keep the cover and PCB clear of brick dust and debris, whilst mounting the base to the wall.

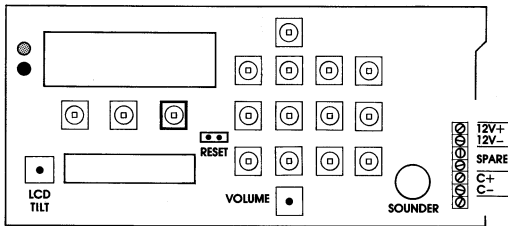
The base is provided with a large cable entry hole in the rear and several cut away sections around the outside edges, these may be carefully drilled away or removed with a junior hack saw or sharp blade as required.

Hold the base to the wall in the required position with the slotted screw hole to the right and mark the centres of the holes on the wall. Drill and plug the wall and fix the base using the appropriate size counter sunk wood screws or cavity fixings as required. DO NOT allow the screw heads to touch the back of the PCB when it is refitted.

#### Wiring

Up to 30 remote keypads may be wired into the Ultimate system. At least 4 core cable should be used, 2 cores for voltage supply and 2 cores for communications data. However where the keypad is to be sited within the entry/exit route it may be beneficial to use 6 core cable and also wire an ID sensing line to the keypad for connection to the final exit contact or PIR etc. A pair of spare terminals are available on the PCB and the keypad base has been designed with a cable clamps for either 4 or 6 core cable. It should be noted that inside sounders (extension speakers) should be wired on a separate cable and NOT in the same multicore as the keypad wiring or ID sensing lines.

The keypad communications transmitted from the CPU will operate over cable



lengths in excess of 500m. Where large quantities of keypads are to be fitted care should be taken to calculate any voltage drops which may be experienced. On larger installations, it may be advisable to fit an additional regulated power supply for the keypad(s) 12V supply. The cable returning to the CPU in this case would carry communications only.

#### Connections

The keypad terminals are clearly marked as 12V +/-, SPARE and COMMS C + / C -. Two 6 way terminals blocks at the bottom left of the CPU circuit board provide ID sensing lines L1 and L2 respectively. These blocks also provide 12V power supply and comms C + / C - connections.

All keypad wiring is in parallel, but with careful reference to observing the correct polarities. Keypads may be wired directly to the CPU or from the any other keypad.

#### Sounder.

A miniature sounder is provided on board the keypad to produce key response tones.

This sounder may be adjusted by the volume control at the bottom of the PCB. It should be noted that this sounder will NOT produce alarm or entry/exit tones. Where alarm or entry/exit warning is required in the vicinity of a keypad, an extension speaker must be fitted, wired directly to the CPU.

#### LCD Adjustment

A control is provided at the bottom left of the PCB to adjust the LCD contrast. This should be carefully set for optimum contrast and viewing angle for the average height of the end user(s).

#### Faults

In the unlikely event of a fault occurring, check that the keypad is correctly wired and that the polarities have been observed. Check that the maximum cable lengths have not been exceeded and that the supply voltage is within the specified limits. Also check that each keypad has been programmed with a different address and that the same keypad number has been entered via menu 12 to enable the keypad.