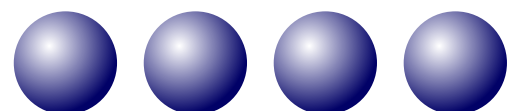


7800 Installation and User Instructions

Products Supplied and Distributed by





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Welcome to the 7800 range of systems.

If you follow the advice in this manual carefully and **adhere to our cable specifications and colour codes**, you will have a trouble free installation.

Our unique feature of FPI (*Full Peripheral Isolation*) combined with a modular design and clear board layout means our systems are easily installed and maintained giving years of trouble free service.

As you work through this manual and install the system you will become familiar with our common-sense approach to all aspects of manufacture and installation procedures. Indeed this extends right through to our **helpful and friendly Technical Support, After Sales and Planning Departments** who will be happy to assist with any queries not covered by this manual.

They are available during office hours by-

Tel: 020 8508 6700

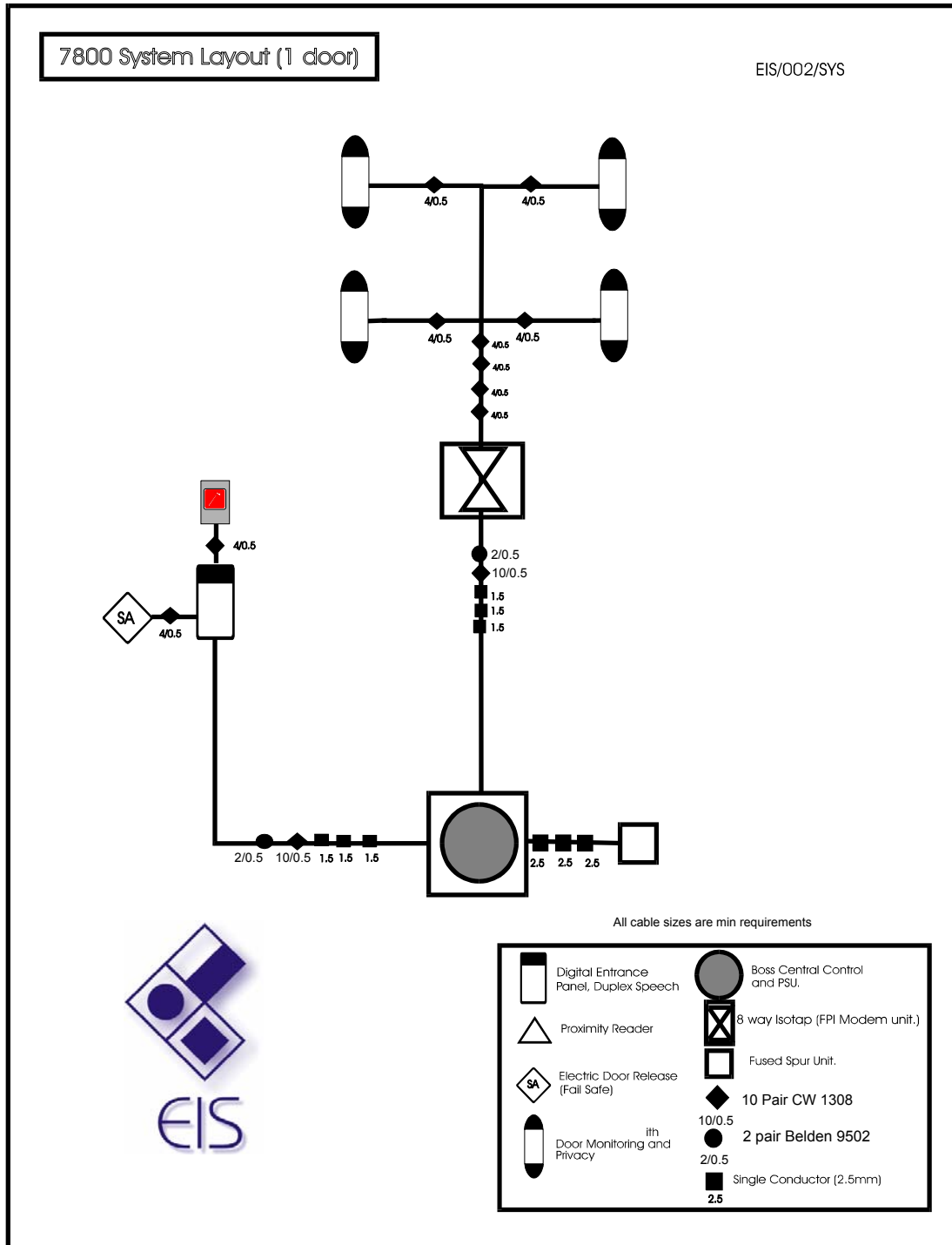




List of main features:

- **VANDAL RESISTANT ENTRANCE PANEL**
- **PRE ASSEMBLED IN SECURE, IP55 RATED, HOUSINGS**
- **MODULAR DESIGN WITH HIGH GRADE PLUG IN CONNECTORS**
- **DUPLEX SPEECH**
- **FULL PERIPHERAL ISOLATION (FPI)**
- **UNLIMITED TRADES TIME PERIODS**
- **DOOR MONITORING**
- **TIMED PRIVACY CONTROL**
- **MULTIPLE ENTRANCE CONTROL POSSIBLE**
- **COMPATIBLE WITH ALL TYPES OF LOCKING DEVICES AND PROXIMITY ACCESS SYSTEMS**
- **BATTERY BACKUP OPTION**
- **EMC TESTED**
- **YEAR 2000 COMPLIANT**
- **10 YEAR GUARANTEE**





Typical system layout:

Above is a typical system layout showing **one entrance and four flats.**

The system can accommodate **240 flats and 4 entrance panels** as standard.



CABLE REQUIREMENTS:

Set out below is the minimum cabling requirements for a standard 7800 system.

Handset - *4 Pair 0.5mm sq CW1308 telephone cable.*

Lock Release - *4 Pair 0.5mm sq CW1308 telephone cable.*

Entrance Panel - *10 pair 0.5mm sq CW1308 telephone cable.
2 pair screened cable Beldon 9502 or equivalent.
1.5mm sq Brown, Blue and Earth singles.*

Riser to Isotaps - *10 pair 0.5mm sq CW1308 telephone cable.
2 pair screened cable Beldon 9502 or equivalent..
1.5mm sq Brown, Blue and earth singles.*

CONNECTIONS AND COLOUR CODES:

On the following pages you will find the diagrams and drawings containing the connections and colour codes needed to install and maintain the system.

Careful notice should be taken of the colour code when terminating the cables.

The code makes use of the cable colour banding where the main colour is shown first followed by the band colour (*i.e BI of W is the Blue wire with a White stripe and W of BI is the White wire with a Blue stripe*).

If you see BI/W this means connect a pair of wires, in this case BI of W & W of BI, together.

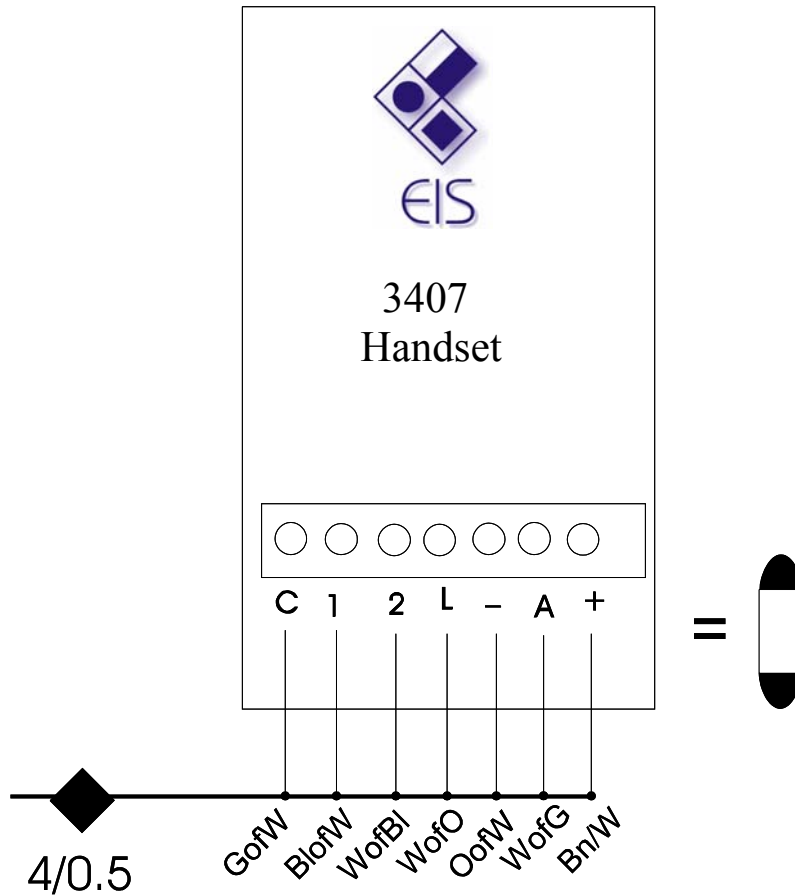
WARNING:

Any damage resulting from the use of cables or connections other than specified in this manual will invalidate your warranty.






EIS 3407 Handset Connections



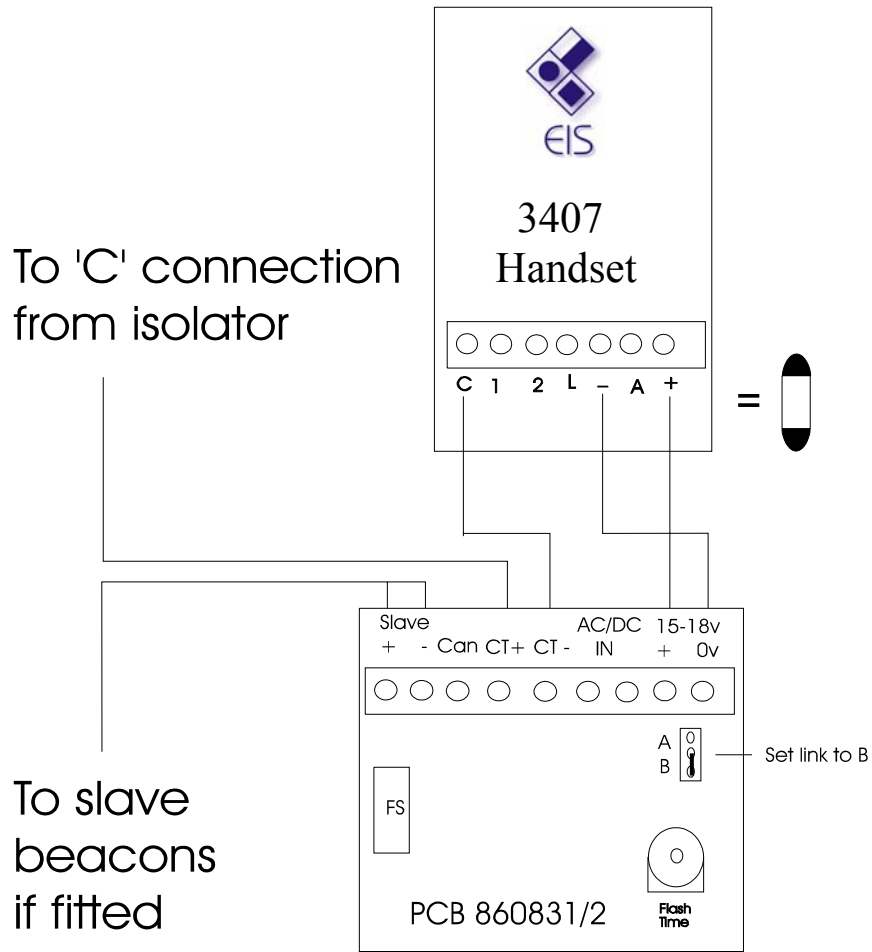
Notes: First colour is the main colour, the second colour is the stripe.
Brown and White are used as a pair.


TITLE	H/SET	Date	30\4\98
CLIENT			
CONTACT	REF	3406	
 EIS			





Connections for flashing beacon to audio handset



TITLE	FL BEACON	Date	30\4\98
CLIENT			
CONTACT	REF	860831/MD	
			





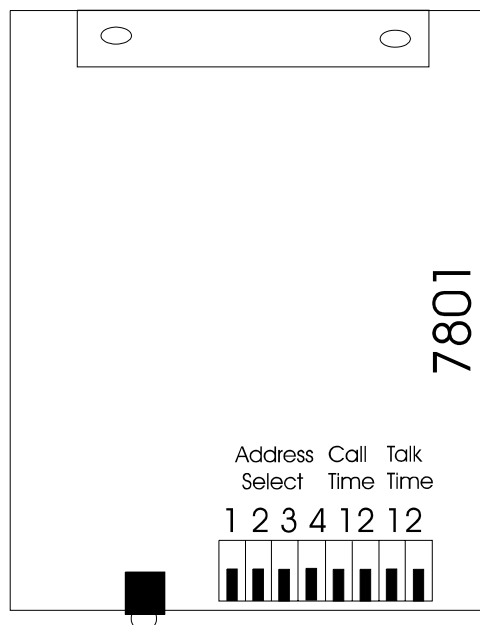
SETTINGS AND ADJUSTMENTS

The main adjustments and system programming are performed on the **7800** pcb located in the entrance panels and the digitiser pcbs at the 8 way Isotap units. There are also a number of Leds on these pcbs which indicate the system status.

Adjustments can be made to most system settings allowing your set up to be linked to site requirements.

SETTING THE ISOTAPS

Each Isotap unit has an associated, removable digitiser unit. Located on the digitiser PCB (7801) is a dip switch. With the component side facing towards you and the plug in connector at the top the sequence of the switches are as shown below.



The address select switches follow a binary code format and the least significant bit is switch number one.

Note Adjacent to the Led there is a jumper link which, should be **open** for isotaps 1-15 and **made** for isotaps 16-30.

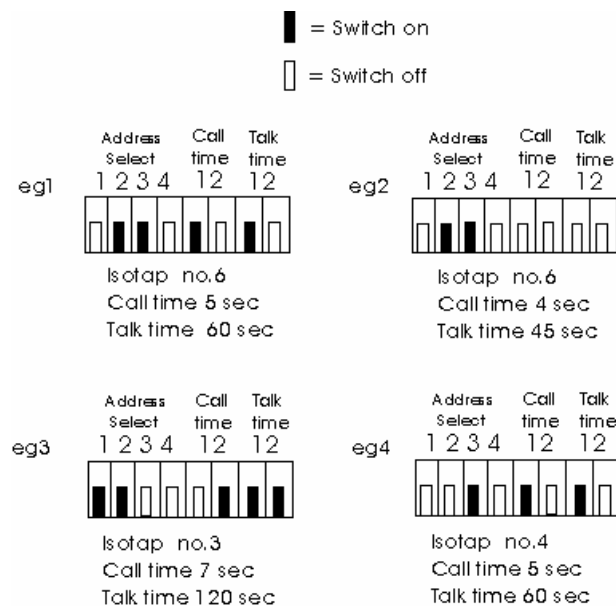




DIP SWITCH SETTINGS

The call time and talk timings are set up with the switches shown.

The examples below demonstrate the setting operations.



NOTE - System must be powered down and up before changes will be registered.

MULTI-DOOR SET UP

If more than one entrance panel is fitted to the system the two links on the riser connection pcb, which is located within the psu, must be removed and a 7803 multi-entrance pcb plugged in to the adjacent socket. Once fitted the 7803 pcb gives the capability for up to four digital entrance panels to be fitted.

Each entrance panel must be programmed individually with the flat Nos or they will not be available to be called from that entrance. This individual entrance panel programming allows for **zoned** calling and door release i.e. it may not be desirable for an flat to be able to be called from all entrances.





SPEECH LEVELS

The speech volume is adjusted via the pots on the panel amplifier which is located within the door panel. The pot marked **INT** adjusts volume to the flat and the one marked **EXT** adjusts the volume to the door. Care should be exercised when making these adjustments or feedback will be experienced. The adjustment of speech levels should always be a balance between the needs of the visitors and the residents.

TRADES CLOCK

Please read the instruction leaflets for the particular time clock supplied.

FIREMANS SWITCH

To use this facility connect a normally open switch across the **Fire/Sw** and 0v terminals which, when closed, will give a lock release. For some installations, eg magna locks, you may need to run the lock positive directly through a normally closed switch instead.

If you are in any doubt then consult your local fire officer.

TESTING THE SYSTEM

Before switching on the power all non-connected flat cables must be unplugged at the 8 way isolators. Switch on the power and check there is **12v** at the supply terminals, if not switch off immediately and unplug the panel and isolator riser connections at the 7800 psu. If when switched back on the supply is now good then check your connections are correct. It may then be advisable to add the isolators and panels one at a time until the problem is localised.

After establishing the correct voltage at the supply terminals you can begin programming the entrance panels.





PROGRAMMING THE SYSTEM

The **7800** door entry system utilises an **Embedded Programming Interface (EPI)**. This eliminates the requirement for additional programming devices or fixed one time programmable components. The **EPI** is operated by using the digital panel keypad and three buttons on the door panel PCB. We recommend that you complete your apartment designation chart, found at the back of this manual, prior to commencing installation. The apartment and output information is detailed on the chart and this is used when programming the system.

Note - Whilst programming is extremely straight forward, it is recommended that it is only performed by personnel with suitable electrical experience.

7800 SYSTEM PROGRAMMING PROCEDURE

The programming of the output to the apartment numbers can now be performed. To do this carry out the following procedure.

- Ensure all connections are completed correctly and any non connected flat cables have been unplugged
- Power up system
- Remove the digital panel securing screws and support the panel, taking care not to stretch the keypad and display cables.
- Check that the display shows **Dial**
- The **7800 PCB** is located on the back box rear plate. You will observe on the PCB Three buttons labelled **Alter Reset and Program**.
- Simultaneously press the Reset and Program buttons for 2 seconds then release **only** the Reset button. After a further 2 seconds release the Program button. The Display will show 'Prog'. (If this does not happen repeat this procedure).
- By pressing the **call** button the display will scroll through the various memory locations and the contents.

- Pressing the call button will first display the first memory location. Eg. **D001**, pressing the call button again will display the contents of this location, which in this case will normally be **0199**. This code is a factory default and should not be altered.
- Location **D002** is the lock time and is normally set to **0707** (7 seconds)





- Location **D003** can be programmed with a four digit trades access code number which when entered and the call button pressed during the active trades time period, will activate the Locking device.
- **D004** to **D008** are unconditional access code facilities and can be programmed with a four digit access code number which will activate the Locking device at any time.
- **D101** to **D108**. represent the First Isotaps 8 outputs.
- **D201** to **D208**. represent the Second Isotap 8 outputs and so on.

Note - the Isotaps number D1-D9 then DA-DF giving 15 in all.

- To set the output to the correct apartment number press the call button until the location is displayed *Eg. D102* press once more and the current apartment number will be displayed *Eg. 34* to alter this number press the **Alter** button and then key in the new number and then press call. Pressing call again will verify the alteration. Continue scrolling through the locations and alter any required numbers until all the changes have been made. Press the reset button when you have completed the programming sequence. Any unprogrammed outputs will be displayed as four dots. The scrolling process is a one way routine and mistakes can only be remedied by scrolling through from the start.

TESTING THE HANDSETS

After programming the system you should go to a handset and check the *privacy indicator* illuminates when used. If it does not then check the *isolator fuse*, if all flats have no privacy then re-check voltage supply as above. Turn the privacy off and, once programmed, call the handset from the door panel and adjust the speech levels and lock release time if necessary. When releasing the door check that the Red Led flashes with the door closed and remains steady with it open. Test all remaining handsets as above.

Note: If door monitoring contacts are not connected then DS1 & DS2 will need to be linked at the 7800 panel terminals to prevent permanently lit Red door open indicators at the handsets and shortened lock release time.





OPERATION OF THE 3406 HANDSET



The handset is equipped with two buttons labelled **LOCK** and **ON/OFF** and with two Leds.

When called a tone will sound at the handset. When the handset is lifted two way speech is established to the door panel. If the caller is to be admitted one press of the **LOCK** button will release the door for the set time and the Red Led on the handset will flash. If the door is not shut or is propped open the Red Led will be permanently on in all dwellings.

The **ON/OFF** button operates the privacy function when it is pressed the Green Led will come on indicating that the handset is in privacy mode i.e. it will not receive any calls. The privacy mode can be switched off at any time by pressing the **ON/OFF** button again it will also reset itself after a preset period.

DDA ENHANCEMENTS

For those with hearing difficulties we can supply either an extension sounder or a flashing beacon. The beacon has adjustable flash time and can have extra slave beacons added to it. Please state your requirement at time of order.

PARTS RE-ORDER LIST

PCB 7800	Panel Control PCB
PCB 3401	8 way isolator
PCB 7801	Digitizer
PCB 7802	PSU connection board
PCB 7803	Multi door control board
PCB 7804	Panel display board
HS 3406	Audio handset
AK 5251	Speech amplifier
PCB 860831	Flashing beacon
TC 100	Trades clock





7800 FLAT DATA LOCATION									
Block Name :					Client :				
EIS Job Number :					Date :				
Lock Release Time : (Seconds)					Trades Code :				
Access Codes 1 :			Access Code 2 :			Access Code 3 :			
Decoder 1	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									
Decoder 2	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									
Decoder 3	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									
Decoder 4	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									
Decoder 5	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									
Decoder 6	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									
Decoder 7	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									
Decoder 8	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									
Decoder 9	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									
Decoder 10	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									
Decoder 11	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									
Decoder 12	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									
Decoder 13	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									
Decoder 14	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									
Decoder 15	Output 1	Output 2	Output 3	Output 4	Output 5	Output 6	Output 7	Output 8	
Flat Number									





EIS Limited Automatic BST Time Clock

The EIS time clock has been designed to auto-change from summer to wintertime and back without the need to manually adjust the clock. The clock can be used in many applications, from door entry, access control, when the doors need to be opened at an exact time, to lighting controls and processing systems.

Technical details:

- 12VDC operation
- 2A 240AV or 30VDC changeover relay
- Clock and program battery back-up
- Multi program
- Sunday cut-out
- Manual programme reset



Programming Instructions:

The Time clock is factory set to GMT, you should not have to adjust the clock. However if you need to adjust the time carry out the following procedures:-

To set the clock

- 1) Press the **Reset** button for 3 seconds
- 2) Press the **Time and Date** button once, **Set up Time & Date** will be displayed for 3 seconds, followed by the **Time 12:00:00** display.
- 3) Press the **ALT** button to change the minutes, then press the **(NEXT)** button to move the cursor to the hours, follow the same procedure as minutes. Press the **(NEXT)** button and the **Date 29/11/02** will be displayed press the **ALT** button to change the day, press **(NEXT)** to move the cursor to the month, follow the same procedure as Day.
- 4) To change the year follow the same procedure, press **Time and Date** button again and **Day Fri** will appear, press **ALT** to change the day. Press **Time and Date** to start the clock.

Program Time clock

- 5) To change the program press the **Set-up button** once, **Set-up programs** will appear for three seconds, followed by **P1=ON 00:00** press **ALT** to change the minutes, then press the **(NEXT)** button to move the cursor to the hours, follow the same procedure as minutes. Press **NEXT** again and **P1=OFF 00:00** will appear Follow the same procedures to change the time. Press **(NEXT)** for additional program.
- 6) The DLC clock has a Sunday cut-off which stops the programs operating. This can be switched ON or OFF during the set-up procedure.
- 7) Press **(NEXT)** **Sunday Service *ON*** will appear. Press **ALT** to change to OFF or ON. press **(NEXT)** to start program.
- 8) At any time during the set-up procedures you can go back to the start by pressing the **Cancel**.
- 9) To operate the manual override press the **ALT key once**, **"M"** will appear next to **P1,P2** press **ALT** to switch manual override of