**AST Sentinel 4 (Original)** 







# **Terminals**

0V Supply Gnd

12V Supply +12vdc

U Data Up

D Data Down

DOI Door Open Ind

STB Strobe Output

12V 12VDC

#### **IMPORTANT NOTE:**

- 1) Before replacing the handset make note of the wires to each terminal on the existing unit (an easy way is to cut each core off leaving a piece of the insulation in place with colour visible) twist unused cores together (so you know they are not used, <u>do not</u> short them out).
- 2) Some older systems will have cable with one coloured core and a solid white core in this case mark each core with a marker or tape.
- 3) Some systems may have <u>loop on wiring</u>, you will have 2 cables into your handset (make sure any joins remain, as these may be serving other flats on the system).

## **Phone Wiring**

Each phone has 4 connections, 0V, 12V, Up and Down (DOI optional 5<sup>th</sup>) and they should be simply connected in parallel with each other and back to the door panels. Either 'star' or 'chain' methods may be used to achieve this unless line isolation is used which will then require all entryphone cables (typically 6 core alarm cable) to be run back to the isolation card. Telephone style IDC connectors are used for speed of installation.

If DOI option is used then a fifth parallel connection needs to be made to the terminal marked 'DOI'.

The phones also have the capability of operating a 'strobe', typically a flashing xenon lamp, when the phone rings. This is connected to the 12V and Strobe terminals if required.

# Phone Coding

Each phone needs to be 'coded' with its number by cutting links on the PCB. The method of coding depends on whether the system is 'functional' or 'digital'.

# Digital Systems

Each phone is allocated a 3 digit number, consisting of a hundreds, a tens and a units digit. Each digit has a group of 4 links cut according to the following table.

```
8 4 2 1
                 where I = intact link
0
      IIII
1
      IIIX
                      X = cut link
2
      I I X I
3
      IIXX
4
      IXII
5
      I \times I \times
6
      I \times X I
7
      I \times X \times X
8
      XIII
9
      XIIX
Α
      X I X I
В
      X I X X
C
      X X I I
```

```
For example:- Flat number 107
```

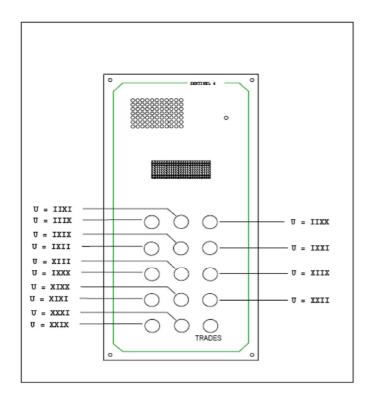
 $\begin{array}{lll} \text{Hundreds} & = & 1 \\ \text{Tens} & = & 0 \\ \text{Units} & = & 7 \end{array}$ 

```
H T U
XXXI IIII XIII
```

```
Flat number 53
 Hundreds
            = 0
 Tens
           = 3
 Units
  IIII:IXIX:IIXX
:
    Н
         Т
              U
 Flat number 21B
 Hundreds
            = 2
 Tens
            = 1
            = B
 Units
  IIXI:IIIX:XIXX
    H T U
```

## Functional Systems

<u>All</u> the hundreds and tens links are left uncut. The remaining 4 unit links (U) are cut <u>according to the button position for that phone on the panel</u> as indicated on the <u>following diagram</u>. Note that this is not related to the number engraved on the panel.



Concierge Phone
If a concierge phone is used it should have its links cut as follows: : :
I I I I:X X X X:X X X
: :
H T U

Note also that the number of buttons on a functional panel varies from system to system. The diagram above shows the maximum possible.

