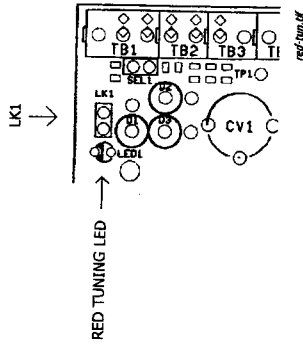


**NOTE :** All units leave the factory having been successfully tuned. If difficulty is found in meeting the requirements above it could be due to siting problems of the units, i.e. being close to metal or too close to each other. In this case try tuning units away from their permanent location. If this is successful a new siting point should be found.

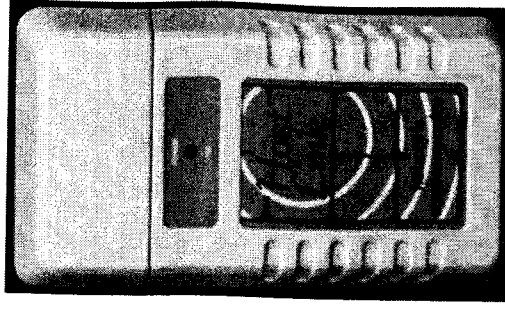
# HOST-LINK

Network Communicator

MODELS : HLE01-100  
HLE01-101  
HLE01-200



**Figure 2 : Tuning LED location on PCB**



Please advise us of any errors or omissions in this manual to enable us to improve our service to you.

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## USER / INSTALLATION MANUAL



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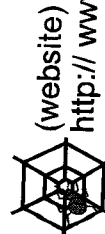
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# HOST-LINK Network Communicator USER / INSTALLATION MANUAL

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## USER INFORMATION

### OVERVIEW

The Host-Link System is the choice solution to all the access control needs in today's modern world, as it uses the latest "passive transponder proximity" tags, (electronic keys that require no batteries, and no physical contact between tag and scanner, to be read), with high reliability micro processor design, plus full feature software.

The Host-Link is the communications bridge between the Host PC and the Link-Scan system. It's function is twofold:

- [1] It converts the PC's RS232 signals to RS485
  - [2] It serves as the tag entry/edit terminal for the Local Host PC for system maintenance.
- The Host-Link is normally freestanding, but can be wall or desk mounted if desired, conveniently close to the keyboard and monitor of the Local Host PC, so that tag entry and editing can be done easily by one person.

*See next page*

## SPECIFICATIONS FOR THE HOST-LINK MODELS A AND B

The scanning system meets EN 55014 and British MPT 1337 Standards.

### PHYSICAL SPECIFICATIONS

**Size: (Approx.)** L = 161mm(6.3"), B = 90mm(3.5"), H = 45mm(1.8")

**Positioning:** is simple as most materials have no effect on performance, except metal. Screw holes are provided in reader base.

### ENVIRONMENTAL SPECIFICATIONS

**Temperature:** Temperature range: -10°C(+14F) to +70°C(+158F).

**Humidity range:** 0-95% non condensing.

### ELECTRICAL SPECIFICATIONS

**Processor:** 16 MHz CPU

**Power Requirements:** ±100 mA at 10 to 14 Volt A.C. or 12 to 16 Volt D.C.

**RS 232 Port:** Receive, transmit and data terminal ready signals to standard PC RS232 Port, 25 Pin D-type or 9 Pin D-type running at 2400/9600 baud. This is an active RS232 Port.

**RS 485 Port:** RS 485 link up to 16 Link-Scan Controller's to host @ 2400/9600 baud, 8 bit, no parity and 1 stop bit.

**Scan Channels:** One integrated into the cabinet base.

**Status:** Is indicated by one light emitting diode, indicating 'Power on'.

**Reading distances:** Approximately 100mm(4") from the coils (in base of cabinet) but depends on the type of tag used. Card / ID type tags reads slightly further than the disc type.

**Coil frequency:** 125 kHz & 281 kHz.

**Buzzer:** Present.

## PASSIVE I/D CARD AND DISC TAG SPECIFICATIONS

### PHYSICAL SPECIFICATIONS

**Approximate Size:** Disc : 36mm Diameter x 4mm. Card : 85mm x 52mm x 4mm.

**Slim:** 85mm (3.3") x 52mm(2") x 0.8mm (0.03").

**Fastening Method:** Disc : 2 x 3.5mm holes plus watch strap slots. Card : 2 x Coat clip holes.

**Slim:** 1 x Coat clip hole on request.

**Life span:** Due to non-contact and professional quality components internally an indefinite life-span is possible.

### ENVIRONMENTAL SPECIFICATIONS

**Temperature Range:** Storage: -40°C + 120°C. Operating: -10°C to +70°C.

### ELECTRICAL SPECIFICATIONS

**Inductively powered :** Requires no internal battery or other power connection.

**Tag Codes:** Are factory set. The code is not alterable to ensure device security, and is unique, being one of a set of 94 billion discreet numbers, with no two alike.

## **OPTIONAL EXTRAS**

### **AC ADAPTOR (See power requirements)**

A quality wall (mains) plug-in unit capable of continuous operation.

### **BATTERY CHARGER**

Two types are available, with adjustable float output of 13.5 to 13.8 Volts D.C.

- [a] Maintains a Link controller plus one Scan terminal, using 0.5 to 6.8 Ah lead-acid gel battery, plus one Host-Link.
- [b] Maintains a Link controller plus seven Scan terminals, using 6.8 to 25.0 Ah lead-acid gel battery, plus one Host-Link.

Both units have input and output fuses plus thermal shutdown, and includes circuitry to prevent severe battery discharge due to prolonged mains power failure, by shutting down the output before battery damage occurs. The backup time depends on the Amp-hour rating of the battery, and can be from a few hours to days.

### **FUSES**

Fuse = F1, This fuse is rated at 2A, should this fuse blow, it should be replaced with the type, pico-fuse, of an equivalent rating.

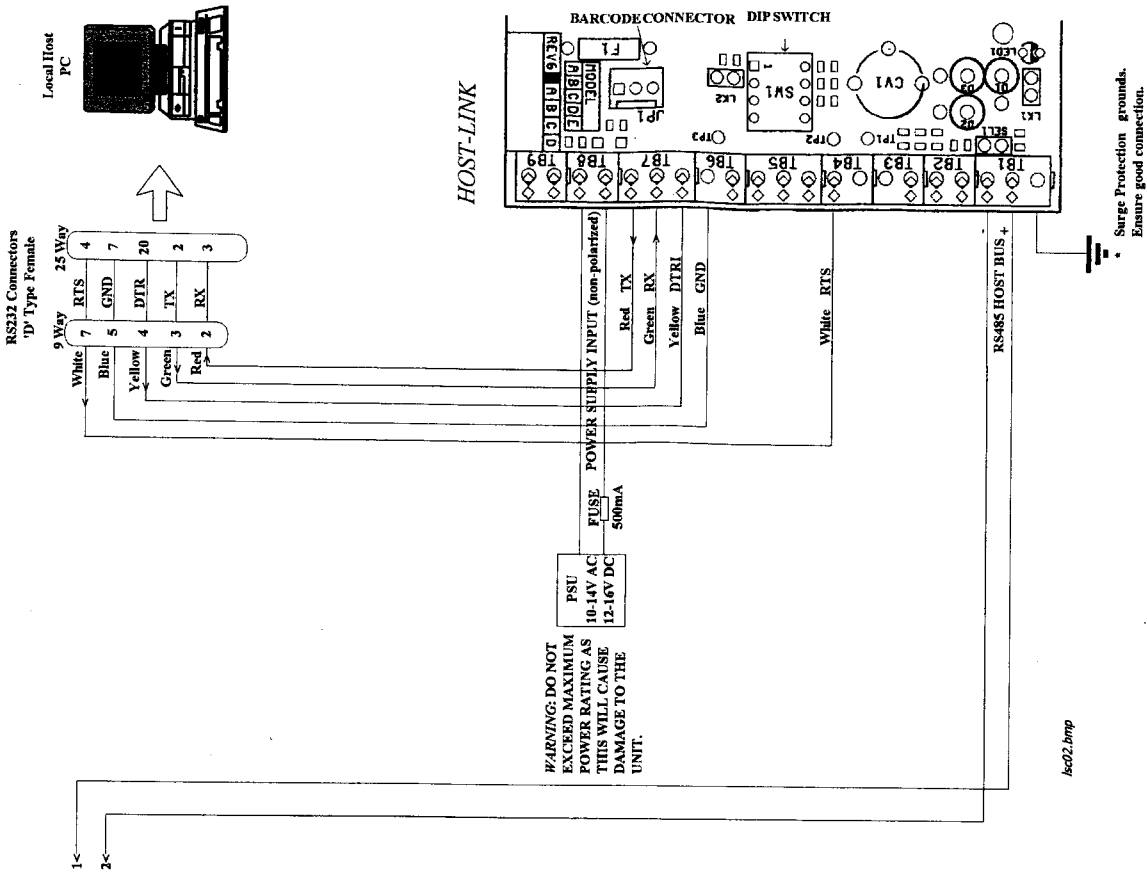
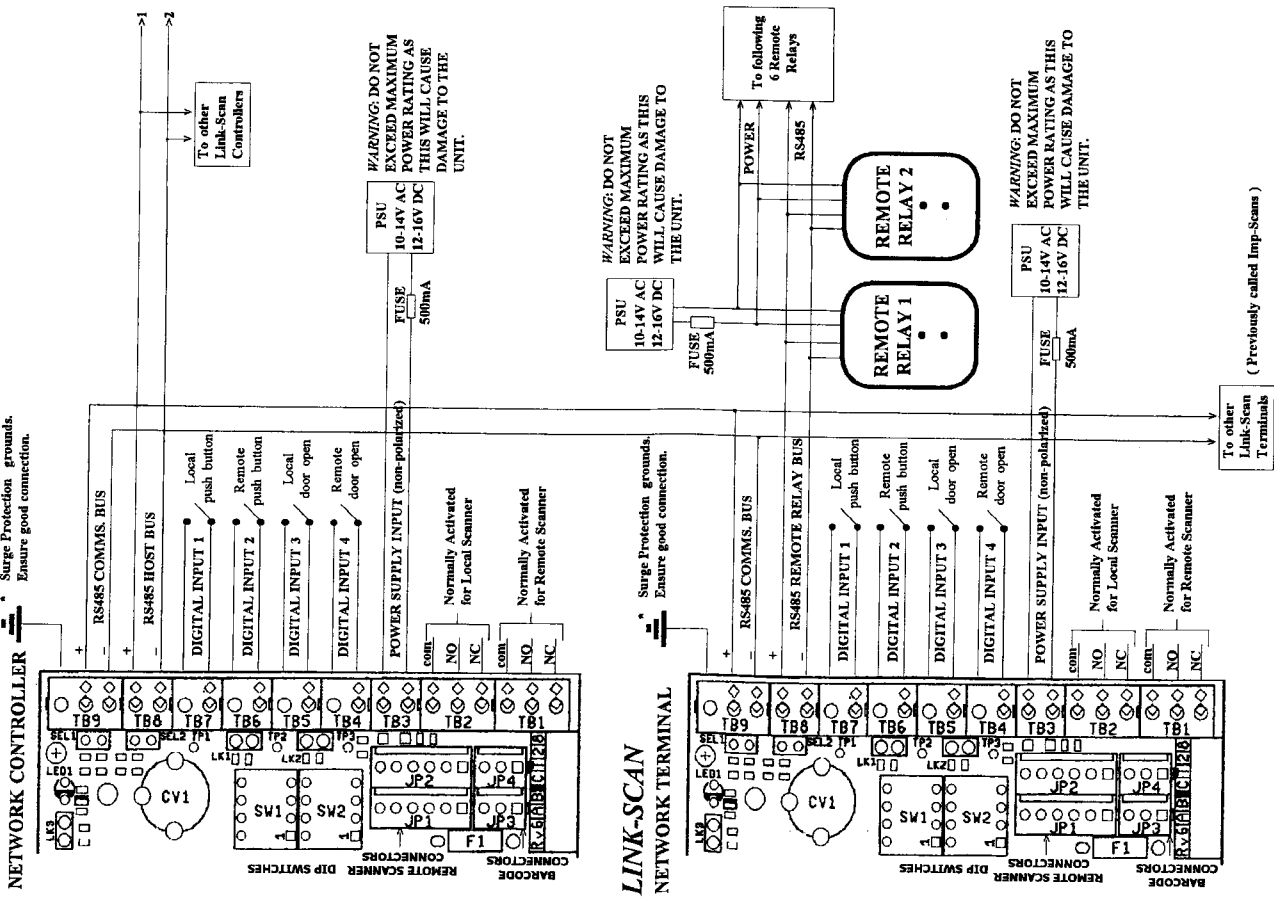
### **HOST-LINK CONNECTIONS TO A LINK-SCAN SYSTEM**

The interconnections between the Host-Link unit and external equipment when the Host-Link is used with a Link-Scan system are shown in Figure 1.

*See next page*

*See next page*

**LINK-SCAN**



**Figure 1 : Host-link connections when used with Link-Scan**

## INSTALLATION INFORMATION

### POSITIONING THE HOST-LINK

The Host-Link should be positioned on or near the desk/table on which the Host PC is located. The table should not be metal if the Host-Link is to be placed upon it. Possibly not near to monitor as this causes interference.

It may be desirable to mount the Host-Link on a wall next to the Host PC.

**NOTE :** *The system cannot operate through metal.*

#### CAUTION :

- [a] Avoid Mounting units close to a metal surface or steel reinforcing rods.
- [b] The distance between any two units must be at least than 500mm.

### CONNECTING UP THE HOST-LINK

#### CABLING REQUIREMENTS

##### Power Connections

10 V to 14 V AC or 12 V to 16 V DC must be connected to the unit at TB8-1 and 2. The input is non-polarized. For distances up to 25 m, 2-core cable rated at 5A is recommended. For longer distances 2-core cable rated at 15A should be used, to prevent excessive voltage drop.

**NOTE :** *If units are separated by long distances that make the use of a common power supply difficult, they may be individually powered at their location.*

##### Communication Bus (Host RS485)

For all communications a screened, twisted pair cable (minimum 0,2mm<sup>2</sup> conductor) should be used. The drain wire for the screen should be connected to the ground point at TB1, which in itself should be connected to a good EARTH ground. Individual, separated earth connections for each unit should be made to prevent possible ground loops.

##### RS232C (Local Host)

A suitable length of screened 4-core cable (min 0,2mm<sup>2</sup> conductor) should be used. A suitable D-type connector must be soldered onto the Host PC.

##### Relay Output

Not currently used.

### DIP-SWITCH MODE SETTINGS

There is one pack of DIP-switches the unit, labelled SW1. S3 is only available on Rev 6 and above Host-Link units.

SWITCH	SW1(MODE SWITCH)	
	ON	OFF
S1	-	SET OFF
S2	-	SET OFF
S3	HOST BAUD -9600	HOST BAUD - 2400
S4	-	SET OFF

**Table 1: Mode switch settings**

**NOTE :** [1] Any changes to DIP-switch settings will require the unit to be powered down and then up again, in order for the DIP-switch setting to be "read" into the unit's memory.

[2] The default baud rate is 2400. The Host software must be configured for 9600 baud if S1 is set on.

### DIGITAL INPUTS

Although digital inputs are indicated, none are currently used, and will only be available on models with modem support.

### TUNING PROCEDURES

#### INTERNAL SCANNER

LK1: Located near the Tuning LED (Red) - LED1.  
OPEN - Internal Scanner Disabled.  
CLOSED - Internal Scanner Enabled.

[1] Make sure (LK1) is in place, LED1 should glow.

[2] Turn CV2 using a small terminal screwdriver until LED1 glows brightest. At this point the internal scanner is tuned correctly.

*See next page*