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TECHNICAL MANUAL FOR THE ILE SERIAL COMMUNICATION/ PROGRAMMABLE PRODUCTS

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Issue details

- 1) Digital indicator,Speech Synthesiser & Control Unit.
- 2) This Front Page added.
- 3) Updated,speech synthesiser Standard Phrase list.
- 4) Updated, speech synthesiser / Indicator Default Settings

WE RESERVE THE RIGHT TO ALTER WITHOUT GIVING PRIOR NOTICE TECHNICAL
DATA, DIMENSIONS AND WEIGHTS DESCRIBED IN THIS MANUAL.

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1)

INTRODUCTION

The serial products have been designed using surface mount component technology to be small and compact so that they will fit comfortably inside their relevant lift car push stations, control panels and landing push stations.

LED indication is provided to indicate processor running and serial communication with the control unit.

The units may have up to 60 floors, 7 messages, separate messages also for doors opening, doors closing, going up and going down. The 7 main messages have priorities to differentiate between levels of importance i.e. "Lift Overloaded" would have a higher priority than "Lift On Fire Control". These priorities also eliminate the need for extra relays in the control panel. All these are fully re-programmable via the control unit, when it is connected to a P.C. or lap top computer and when using the windows application software.

The windows application software will work on any IBM compatible P.C. or lap top (486, 33MHZ or higher) with windows version 3.11, windows 95 or higher. The software has been designed to encourage and allow the user to change the lift installation set-up as required and to reduce the need for special software. However if special software is required ILE will only be pleased to accommodate.

Information is transmitted serially to the units using CAN (controller area network) technology. The protocol is very intelligent and counteracts noise corruption of data, by re-transmitting data that may have been corrupted or lost. Therefore message transfer is guaranteed as long as the devices are connected properly.

Other features include:-

Door sequence control via the control unit / speech unit (i.e. "Please Mind the Doors").

Hall lantern relay output fitted as standard with the indicator, for use with arrival gongs and passing chimes.

The speech unit "speech", has been taken from a professional C.D. voice recording and sampled at a high rate to give a clear and concise voice re-production that is near the original C.D. quality. Also fitted as standard are 2 volume controls for Normal and Hush modes of operation.

2)

List of Equipment

- 1) Control Unit.
- 2) Cable Terminators
- 3) Digital Indicators (if fitted)
- 4) Speech Synthesiser (if fitted)
- 5) Lap top / P.C. for programming the control unit (if desired)
- 6) 1 Serial Communication Cable (RS232 (non crossed Male/Female) link between control unit & lap top).

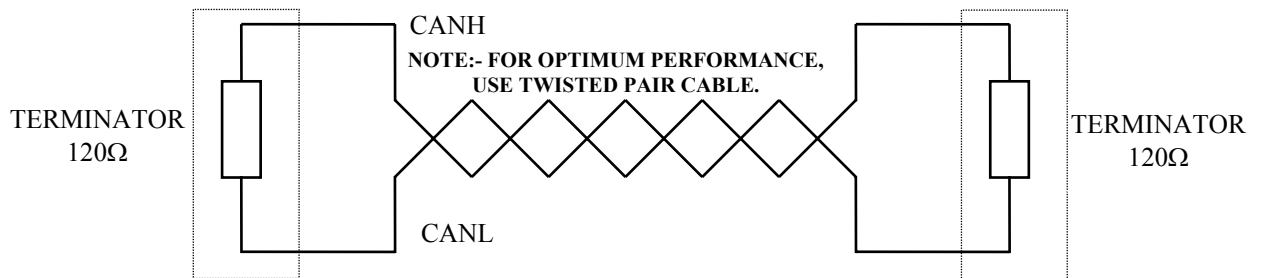
3) CAN fieldbus Connection Variations

3.1) Bus Connections

The CAN fieldbus consists of two wires named CAN HIGH (**CANH**) and CAN LOW (**CANL**). These two wires carry all the serial information to the ILE 4 wire products, and must be wired correctly for proper operation of the CAN fieldbus. In the event of a wiring error however, they can withstand short circuits to either +24V supply or 0V supply.

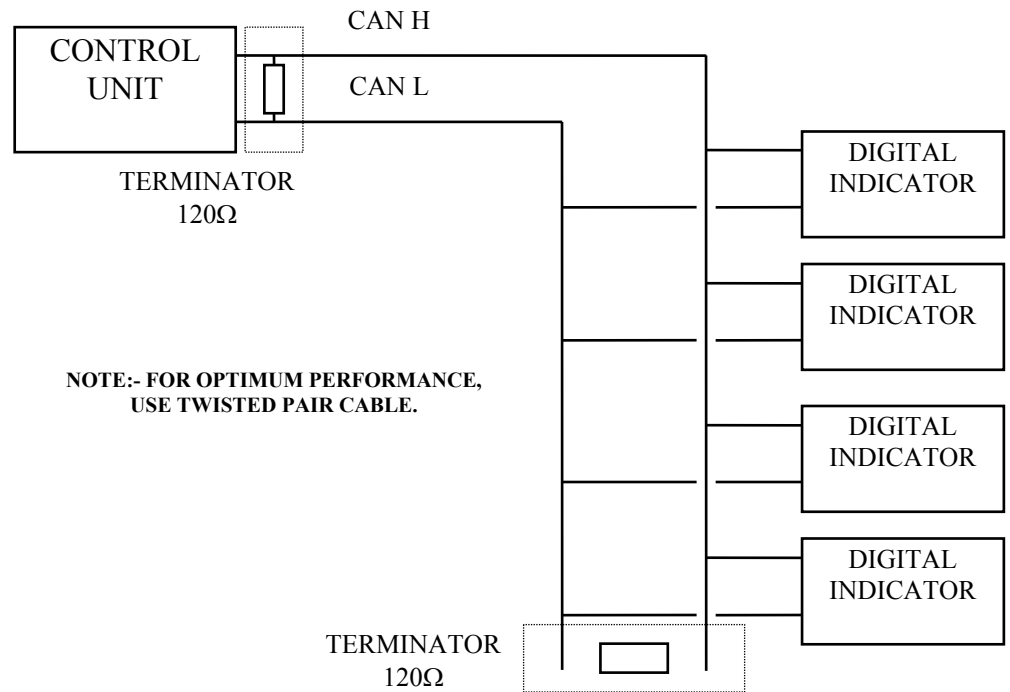
3.2) Importance of Bus Terminators.

It is vital for correct operation that the **bus terminators** provided are connected to either end of the CAN fieldbus as shown below. These terminators are simply resistors of value 120Ω which are used to match the impedance of the cable.



3.3) Bus incorporating Control unit & landing devices only

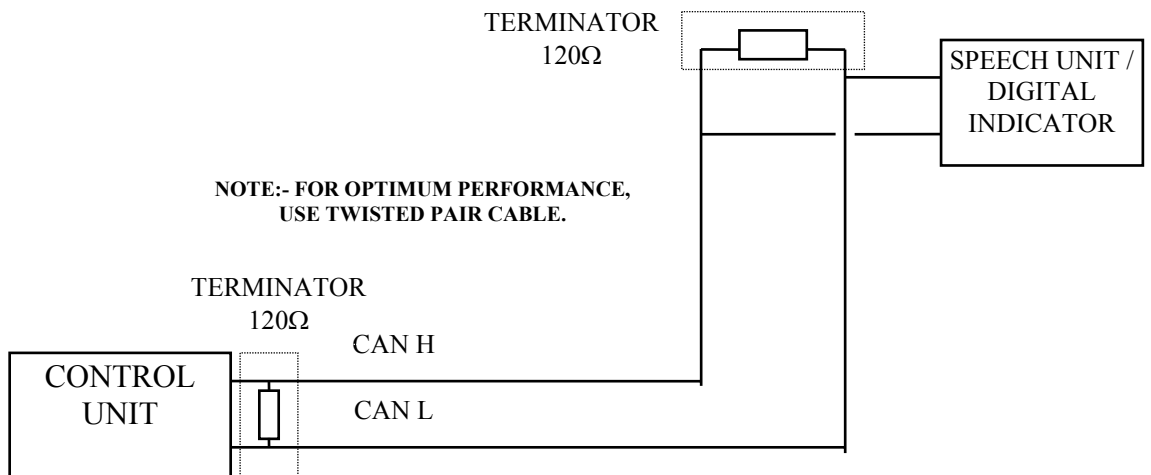
When there are no devices in the lift car, the control unit is positioned at the beginning of the bus, therefore one terminator must be placed at the control unit or as close as possible to it. The other terminator must be placed at the other end of the bus, or as close as possible to the last device as shown.



3.4) Bus incorporating Control unit & lift car device(s) only.

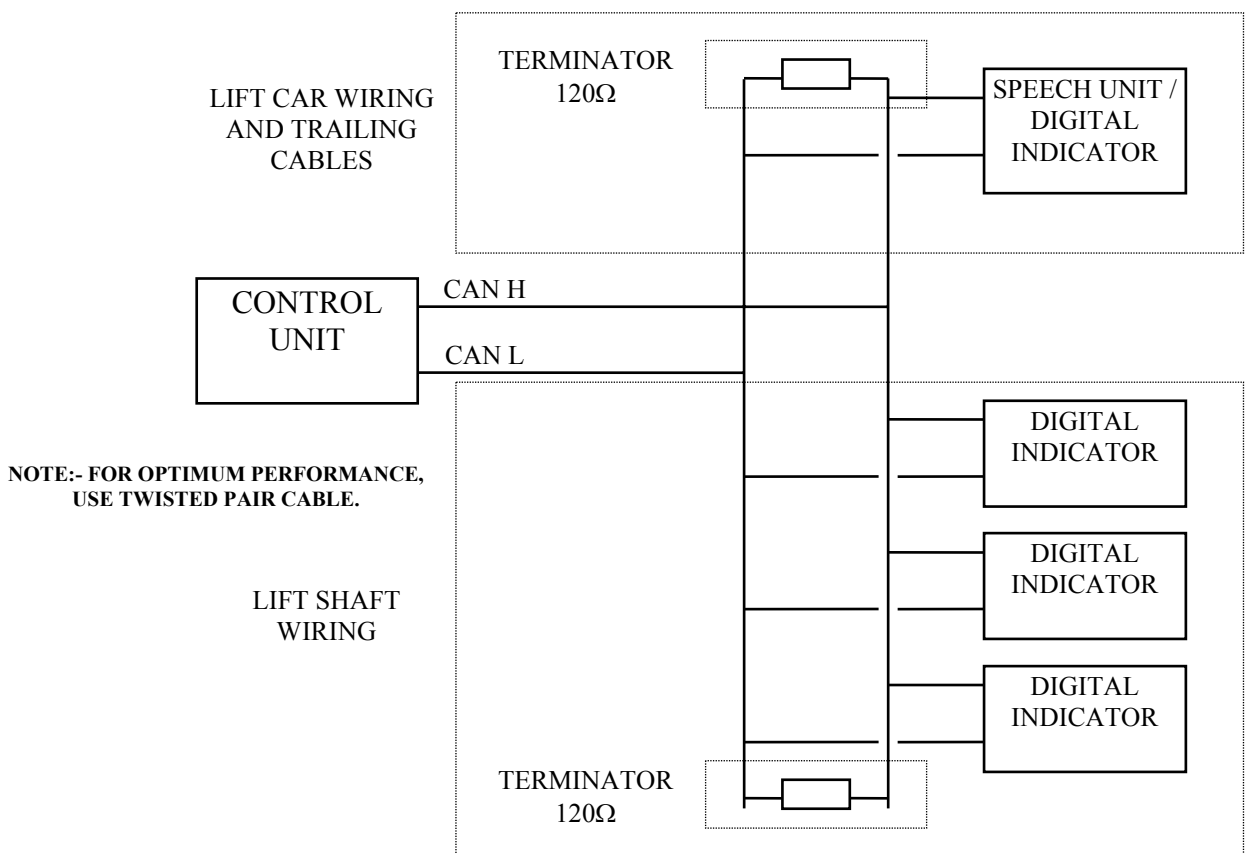
When there are no devices on the lift landing, the control unit is positioned at the beginning of the bus, therefore one terminator must be placed at the control unit or as

close as possible to it. The other terminator must be placed at the other end of the bus, or as close as possible to the last device as shown.



3.5) Bus incorporating Control unit, lift car & landing device(s).

When there are devices on the lift landings and in the lift car, the control unit is positioned in the middle of the bus, therefore the terminators must be placed as close as possible to the last devices as shown below.



3.6) CAN fieldbus fault finding

The CAN fieldbus driver components that reside on each of the serial products are very robust, as they can withstand short circuits to each other (CH to CL), and short circuits to either supply rail i.e. 0V & 24V. However they are not indestructible, and the fault finding

procedure below, is intended for the rare case that one or more driver components may have got damaged, on one or more of the serial products.

Firstly if there is a fault, the chance of anything working correctly on the bus is rare, and the majority of the time communication will cease.

To identify a fault on the bus is quite simple, as the LED indication on each of the boards will flash in a specific way to indicate a CAN bus fault. The “LOOP” light LED, which is “GREEN” in colour will flash faster than normal to indicate a CAN bus fault. The Led should flash “ON” at a rate of once per 2 seconds if **normal** and once per 0.2 second if there is a **fault**.

The “RED” LED “COMMS” may be flashing to indicate that it is trying to establish communications.

The following will establish whether or not a device is faulty:-

- 1) Remove the power from that device.
- 2) Remove the CAN connections from that device (i.e. CH & CL).
- 3) Re-connect the power.
- 4) If the LED “LOOP” is flashing “ON” once per 2 seconds, that device is OK!
- 5) If the LED “LOOP” is flashing “ON” once per 0.2 seconds, that device is FAULTY!

This procedure should be repeated for all devices on the bus, until all faulty devices have been identified.

Faulty devices cannot be repaired easily on site and should be returned to ILE for repair.

4) CONTROL UNIT

4.1) Control Unit Features

The control unit has been designed using surface mount component technology to be small and compact so that it will fit inside any control panel. The unit is mounted inside plastic "WEB" housing so that it may be clipped directly onto "DIN" rail.

LED indication is provided to indicate processor running and communication with the control unit.

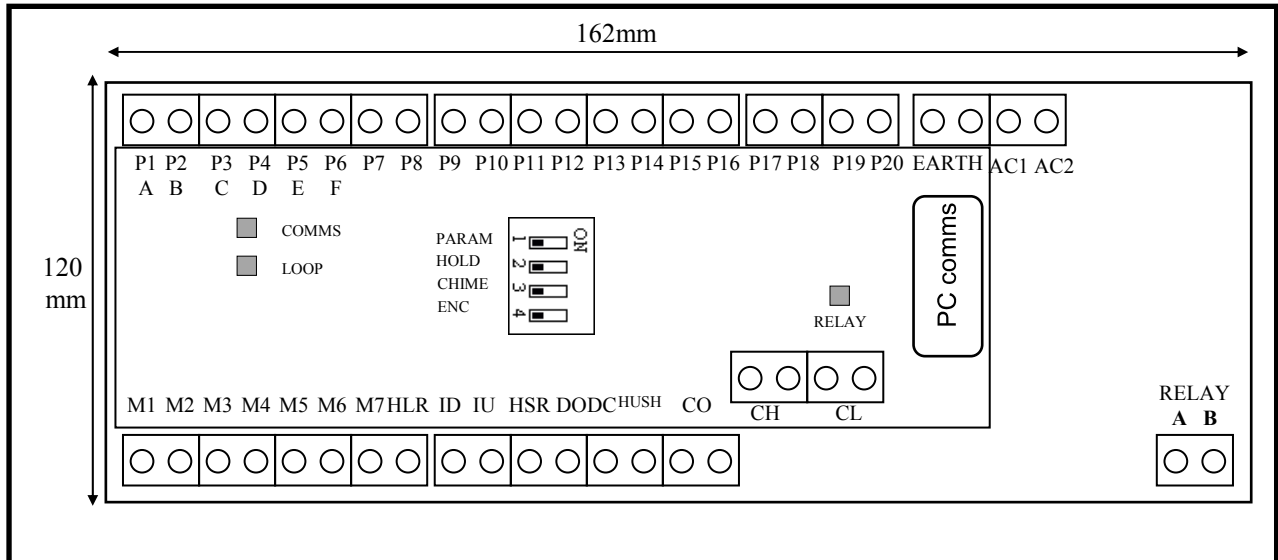
The unit has provision for up to 60 floors (encoded) or 20 floors(non-encoded). Other inputs include 7 messages, hall lantern signal input, high speed signal input, direction inputs (UP/DN), doors opening / closing inputs, and "hush" input for selecting an alternate volume control on the speech synthesiser.

DIL Switches are provided to enable / disable features such as default parameters, passing chime output, encoded inputs and hold scrolling arrows when not on high speed. Also a door control relay is available to provide closed loop control between control unit and speech unit, when an announcement is to be said before the lift doors are to close, i.e. "Please Mind the Doors".

The 7 main messages have priorities to differentiate between levels of importance i.e. "Lift Overloaded" would have a higher priority than "Lift On Fire Control". These priorities also eliminate the need for extra relays in the control panel.

The control unit is fully programmable for floors / messages via a P.C. or lap top computer. The information can be downloaded to the non-volatile memory (i.e. not affected by power down) of the control unit, or alternatively information may be extracted from the control unit for examination or changes.

- 4.2) Control unit power supply & input specifications.
 Power supply & input voltage range = **12 - 24V A.C. or D.C.**
 Power Supply peak current = **250mA**
 Relay “N/O volt free contact” specification = **5A@250V A.C.**
- 4.3) Control unit layout / connections.



Inputs and Outputs.

AC1 & AC2	Power supply connections.	P1-P20	Non encoded positions inputs.
Earth	Earth connection.	A-F	Encoded position inputs.
CH / CL	Connections for serial communications.	M1-M7	Prioritised message inputs.
Relay A/B	Volt free contact for door control	HLR	Hall lantern signal input
PC comms	Connection for programming via a personal computer.	HSR	High speed signal input
		IU/ID	Direction inputs
		DO/DC	Doors opening / closing inputs.
		Hush	Speech unit alternate volume input.
		COM	Common terminal for all inputs.

4.4) Control unit DIL switch settings.

PARAM

When in the “ON” position, default parameters will be used, otherwise the information downloaded to the control unit via a lap top or P.C. will be used. Note this also includes the factory settings.

HOLD

When in the “ON” position, the direction arrows will only scroll when the HSR input is on as well as the direction. Otherwise the arrow will scroll all the time a direction input is on.

CHIME

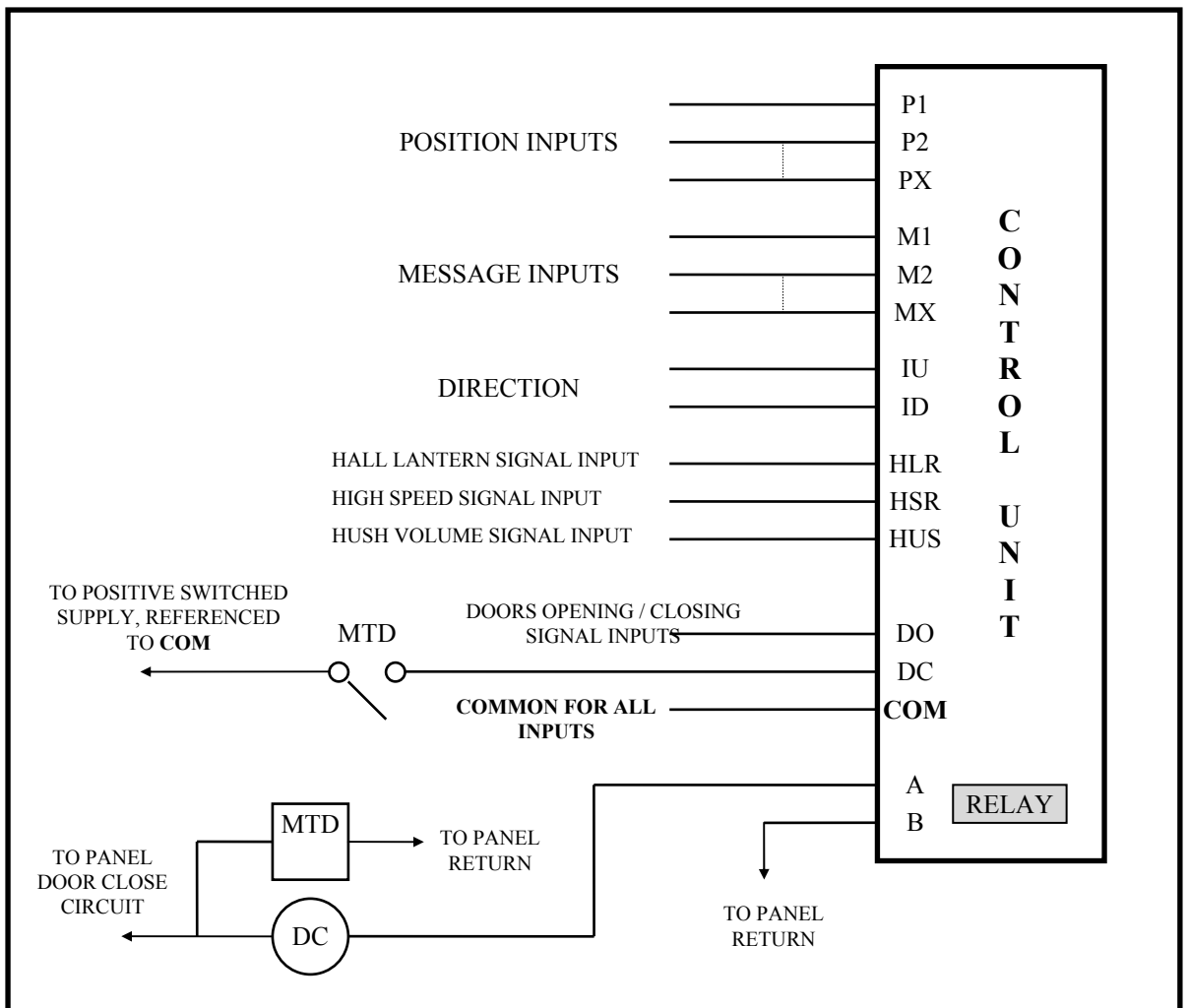
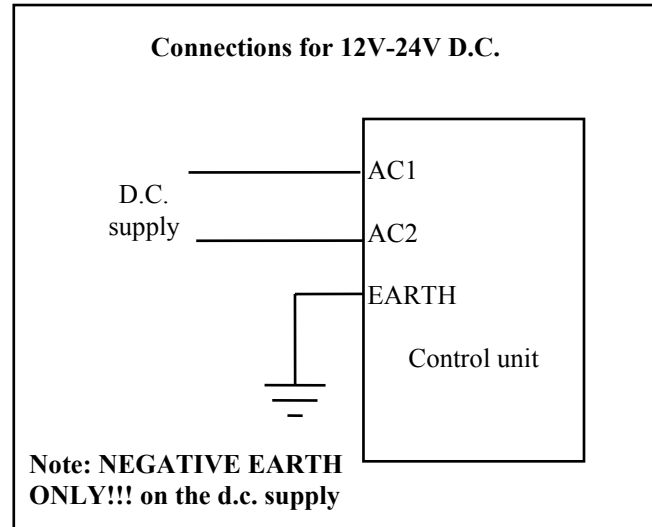
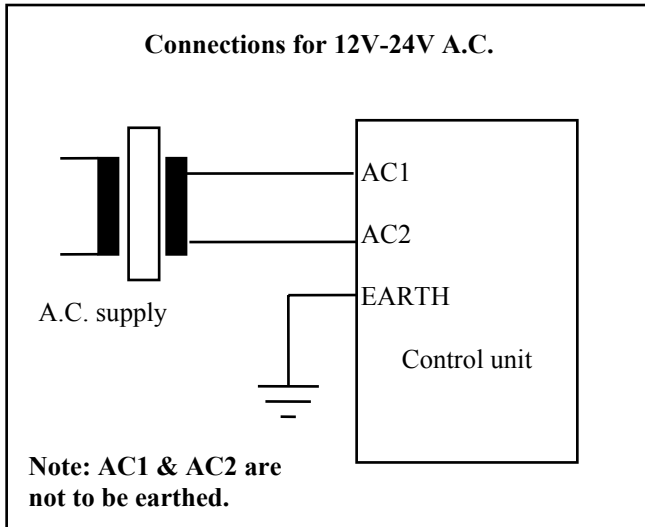
When in the “ON” position, the relay on the digital indicator within the lift car will operate whenever the “HLR” input is on (**i.e. passing chime**). Otherwise the relay will operate when the “HLR” input is on and the “HSR” input is off (**i.e. arrival gong output**).

ENC

When in the “ON” position, the inputs P1 - P6 become encoded inputs A - F. These can be either “binary” encoded or “Gray code” depending upon the setting when programmed. Note the default is binary encoded.

4.5) Control unit wiring

A.C. / D.C. Power Supply Connections



Notes:-

Message inputs should not require relay contacts to set their priority, since this is done via software control. MTD = Mind the doors relay, DC = door close relay / contactor.

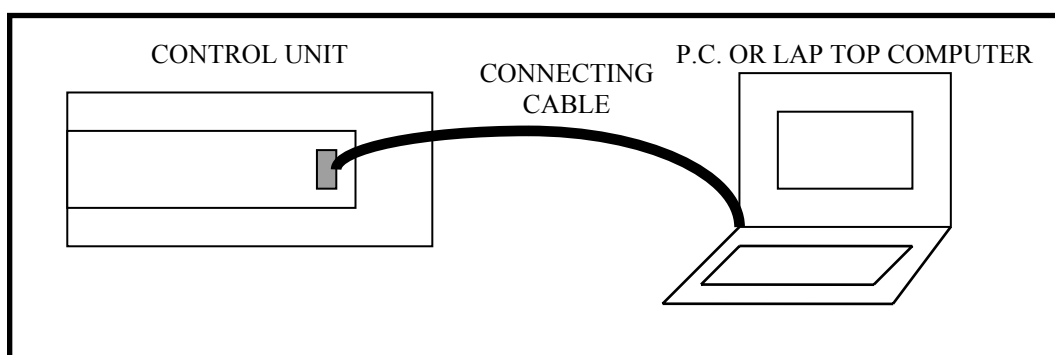
Note when encoded inputs are required positions A to F (P1-P6) are only required. Using standard ILE binary encoders, would allow 15 floors per encoder.

4.5.1) Control unit relay operation.

The control unit relay is used to control the door closing sequence as follows:-

- i) The DC input is applied via the contact of the MTD relay.
- ii) The MTD message is announced. (i.e. “please mind the doors”).
- iii) When the MTD message has completed, the relay contact will close, allowing the doors to close. While the doors are closing the DC message will be announced.(i.e. “doors closing”).
- iv) If any message input is on, or if no MTD message is selected, there will be no MTD announcement and the relay contact will close as soon as the DC input is applied.(i.e. on fire control, doors do not want to delay closing).

4.6) Control unit set-up with P.C. or lap top computer.



The control unit must be first connected to a power supply, before then connecting to a P.C. or lap top computer. Connection to the computer is made via the connecting cable and connects from the control unit “D-type” socket, to a serial port on the computer (i.e. COM1 or COM2). Once the connection is made, the control unit may now be used in conjunction with the windows application software.

4.6.1) Software Download

Once the job incorporating floors / messages has been set up via the windows application software. The information can then be downloaded from the computer to the control unit. This information is then stored in non-volatile memory (i.e. not affected by power down). For further information see windows application software (section 7).

4.6.2) Software Upload

Extract information from the control unit to the computer is known as uploading. This may be carried out in order to view or change the information via the windows application software.

For further information see windows application software (section 7).

4.7) Default Settings.

Below is a listing of the default settings of the control unit, which may be selected by setting the DIL switch "PARAM" to ON. The list refers to both encoded / non encoded inputs and assumes that the standard speech unit ROM memory is fitted. The messages are in order of priority i.e. M1 = 1st priority and M7 = 7th priority etc....

	<i>Digital Indicator</i>	<i>Speech Unit</i>
P1	Floor Zero	Floor Zero
P2	Floor Minus One	Floor Minus One
P3	Basement Floor	Basement Floor
P4	Floor Minus Two	Floor Minus Two
P5	Ground Floor	Ground Floor
P6	Floor 1	Floor 1
P7	Floor 2	Floor 2
P8	Floor 3	Floor 3
P9	Floor 4	Floor 4
P10	Floor 5	Floor 5
P11	Floor 6	Floor 6
P12	Floor 7	Floor 7
P13	Floor 8	Floor 8
P14	Floor 9	Floor 9
P15	Floor 10	Floor 10
P16	Floor 11	Floor 11
P17	Floor 12	Floor 12
P18	Floor 13	Floor 13
P19	Floor 14	Floor 14
P20	Floor 15	Floor 15
	<i>Note have to be encoded after this point !</i>	
P21	Floor 16	Floor 16
P22	Floor 17	Floor 17
P23	Floor 18	Floor 18
P24	Floor 19	Floor 19
P25	Floor 20	Floor 20
P26	Floor 21	xxxxxxx
P27	Floor 22	xxxxxxx
etc...		
P60	Floor 55	xxxxxxx
M1	LIFT OVERLOADED	THIS LIFT IS OVERLOADED
M2	FIRE CONTROL	THIS LIFT IS UNDER FIRE CONTROL OPERATION
M3	EVACUATION CONTROL	THIS LIFT IS UNDER EVACUATION CONTROL
M4	MAIN EXIT FLOOR	MAIN EXIT FLOOR
M5	ALARM ACTIVATED	THE ALARM HAS BEEN ACTIVATED
M6	LIFT RETURNING UNDER FIRE SERVICE	THIS LIFT IS RETURNING UNDER FIRE SERVICE
M7	OUT OF SERVICE	THIS LIFT IS OUT OF SERVICE
IU	SCROLLING UP ARROW	GOING UP
ID	SCROLLING DN ARROW	GOING DOWN
HLR	HALL LANTERN DIRECTION ARROW	xxxxxxx
DO	xxxxxxx	DOORS OPENING
DC	xxxxxxx	DOORS CLOSING
MTD	xxxxxxx	PLEASE MIND THE DOORS

xxxxxxx = no function or not available

5)

DIGITAL INDICATOR

5.1) Digital Indicator Features

The digital indicator has been designed using surface mount component technology to be small and compact so that it will fit comfortably inside a lift car/landing push station. Also the new design is fully compatible with the previous design, as it uses the same lens. Therefore site modifications/upgrades can be made without the need to replace the whole unit.

LED indication is provided to indicate processor running and communication with the control unit.

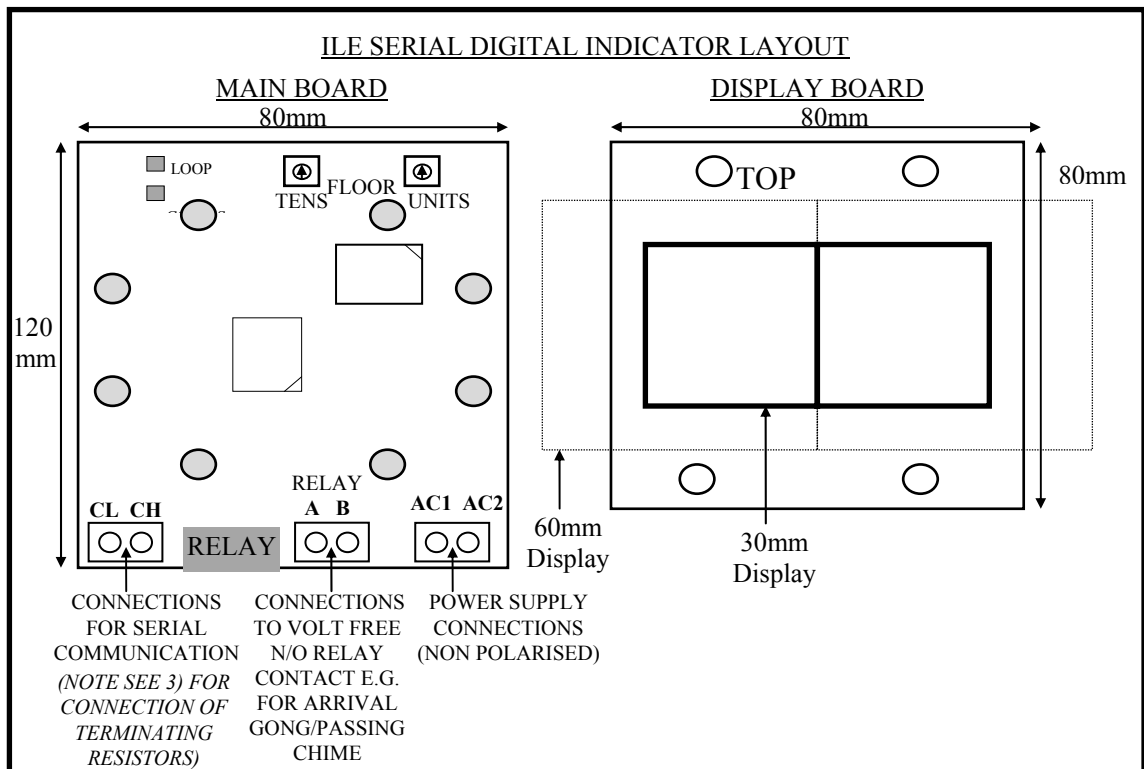
The unit may have up to 60 floors, 7 messages, and 32 user defined characters. These user defined characters may be used where a special floor designation is required. Messages and floor positions may be typed as required. Direction arrows, Hall Lanterns and user defined characters may be custom made as required.

The 7 main messages have priorities to differentiate between levels of importance i.e. “Lift Overloaded” would have a higher priority than “Lift On Fire Control”. These priorities also eliminate the need for extra relays in the control panel.

5.2) Digital Indicator power supply input & output specifications.

- Supply voltage Range :- **12 to 24V a.c or d.c.**
- Power Supply peak current@12V :- **500mA**
- Power Supply peak current@24V :- **250mA**
- Relay “N/O volt free contact” specification :- **5A@250V A.C.**

5.3) Digital Indicator layout / connections.



Notes

The display board mounts on top of the main board via the pillar fixings and 8 way connector. The main board may be turned 90° in the case where the back box is mounted vertically, and will be connected via the second 8 way connector.

Connections:- AC1 AC2

These are the power supply connections and can be 12 to 24V a.c. or d.c. Also it does not matter which way the connections are made since they are non polarised.

Connections:- CL CH

These are the CAN communication connections, CL = CAN LOW and CH = CAN HIGH. It is important that these are wired correctly for successful communication, otherwise no information will be passed to the unit.

5.4) Relay output connections / operation.

Connections:- A B (RELAY)

These are volt-free connections to a normally open relay contact, which may be used to connect to an arrival gong or other external device. The relay contact works differently for indicators fitted in the car and landing.

The indicator in the lift car will operate the relay when the “HLR” input is on and the “HSR” input is off at the control unit (i.e. arrival gong output). However if the DIL switch “CHIME” is on at the control unit, the relay will operate the same except that “HSR” input does not affect the output (i.e. passing chime).

The indicator on the landing will operate the relay when the “HLR” input is on, “HSR” input is off at the control unit and the floor position setting matches the lift position (i.e. hall lantern/arrival gong output). Therefore each indicator has to be set correctly for floor position for this to work correctly.

5.5) Digital Indicator floor position settings for car and landing

Lift Car Indicator set-up

The digital indicator within the lift car should have the floor position DIL switches (TENS /UNITS) set to “00”.



Landing Indicator set-up

If the operation of the relay is to be required for hall lantern / arrival gong output, the floor position DIL switches (TENS /UNITS) need to be set to the floor position the indicator is at, i.e. floor 5 = “05”.

Otherwise the operation of the relay can be inhibited by setting the floor position DIL switches to “61”.



5.6) Digital Indicator operation.

General

The digital indicator operates in conjunction with the control unit. Floors/ messages are selected depending upon the information sent to it by the control unit. The control unit will store information sent to it via the windows set-up software or otherwise it will have default settings.

Direction Arrows

Direction arrows will scroll according to the direction of the lift. However with the “HOLD” DIL switch set to on at the control unit, the direction arrows will only scroll while the lift is in high speed (i.e. “HSR” is on at the control unit). This has the advantage of showing that the lift is slowing in at a floor as well as indicating direction.

Hall Lanterns

Hall lanterns will only be displayed at the floor the lift is slowing into or at. The hall lantern is similar in appearance to a direction arrow except it is larger and overrides the position indication on the display. The floor position switches need to be set correctly for this operation see (5.5 Digital Indicator floor position settings for car and landing).

Test Operation (floor position switches set to 80)

This is a feature for testing the operation of the DIL switches. After selecting 80 via the floor position switches and after waiting a delay of 1 second approx., the display will indicate the DIL switch settings. Therefore the switches can be tested from 00 to 99.

Test Operation (floor position switches set to 91 - 97)

By selecting 91-97 via the floor position switches “MESSAGES 1-7” from within the indicator memory, will be scrolled on the indicator display.

Test Operation (floor position switches set to 98)

By selecting 98 via the floor position switches the “user defined characters” from within the indicator memory, will be displayed in turn on the indicator display.

Test Operation (floor position switches set to 99)

By selecting 99 via the floor position switches the “floor positions” from within the indicator memory, will be displayed in turn on the indicator display.

6) SPEECH SYNTHESISER

6.1) Speech Synthesiser Features

The speech synthesiser has been designed using surface mount component technology to be small and compact so that it will fit comfortably inside a lift car push station or lift control panel. The speech has been taken from a professional C.D. voice recording and sampled at a high rate to give a clear and concise voice re-production that is near the original C.D. quality.

A mono earpiece is supplied and socket fitted so that the speech can be heard, for test purposes, when the speaker is remote from the unit. A test speech link is fitted so that the speech memory can be tested independent of the control unit.

LED indication is provided to indicate processor running and communication with the control unit. Fitted as standard are 2 volume controls for Normal and Hush modes of operation.

The unit may have up to 60 floors, 7 messages, separate messages also for doors opening, doors closing, going up and going down. The 7 main messages have priorities to differentiate between levels of importance i.e. "Lift Overloaded" would have a higher priority than "Lift On Fire Control". These priorities also eliminate the need for extra relays in the control panel.

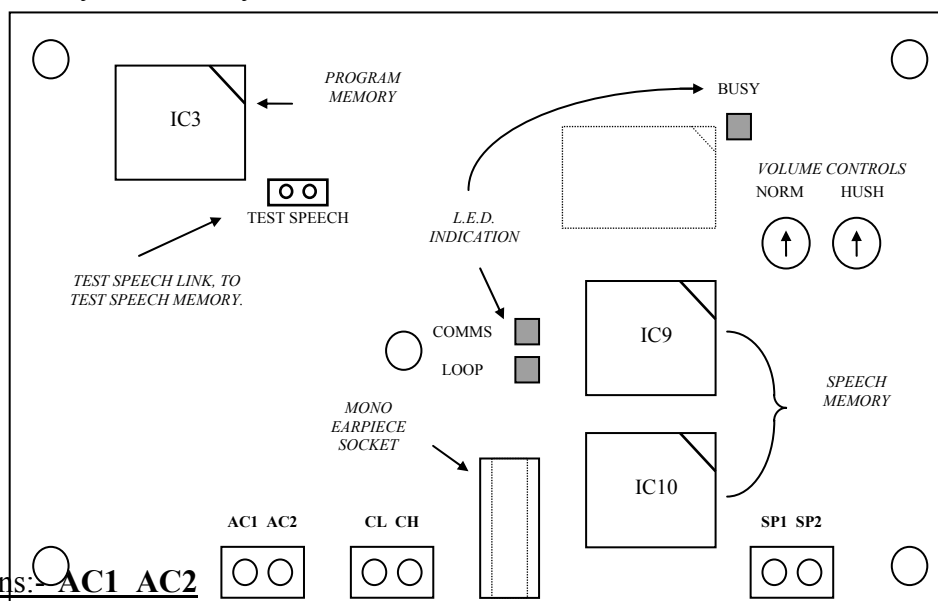
Speech phrases are selected by linking together phrases, so that the users may create their own messages according to their preference. Up to 5 phrases may be linked together for any message annunciation and 3 for any floor annunciation.

A feature has been included to enable the user to switch off speech in between floors (if desired). A contact of the high speed relay will allow this function to operate, when wired to the control unit.

6.2) Speech Synthesiser power supply input & output specifications.

Supply voltage Range :- **12 to 24V a.c or d.c.**
 Supply current Peak :- **0.5A.**
 Supply current standby :- **80mA.**
 Output power max (8Ω load) :- **2W**

6.3) Speech Synthesiser layout / connections.



Connections: **AC1 AC2**

These are the power supply connections and can be 12 to 24V a.c. or d.c. Also it does not matter which way the connections are made since they are non polarised.

Connections:- CL CH

These are the CAN communication connections, CL = CAN LOW and CH = CAN HIGH. It is important that these are wired correctly for successful communication, otherwise no information will be passed to the unit.

Connections:- SP1 SP2

These are the speaker terminals and should be wired to a speaker of type 8Ω, 3W. However a 4Ω, 3W speaker may also be used.

Connection:- Mono Earpiece Socket

The Mono earpiece as supplied with the speech unit may be connected to this socket for test purposes. The audible volume at the earpiece is of a fixed level.

6.4) Speech Synthesiser operation.

The speech synthesiser operates in conjunction with the control unit. Phrases are selected depending upon the information sent to it by the control unit. The control unit will store information sent to it via the windows set-up software or otherwise it will have default settings.

The control unit will send a set of phrase references (referring to speech unit memory) to make up a complete phrase. A complete phrase may consist of up to 5 phrase references.

Phrase references are sent from the control unit to the speech synthesiser to initiate a speech message. If a floor position phrase is to be said, the phrase will only be said once at the slowing point of the lift journey. If a main message is to be said, it will be repeated as long as the input for the message is still on. The number of repeats will be 5 at different interval times of 10, 15, 20, 25 & 30 seconds. If two or more messages inputs are on with the same priority, all messages will be repeated in sequence 5 times at the specified interval times.

Two way communication between the 2 units provides feedback for uses such as the door closing sequence. e.g. the units may operate as follows:-

- i) The control panel initiates the door closing sequence and provides inputs to the control unit.
- ii) the control unit sends a message to the speech unit,
- iii) a phrase such as “Please Mind the doors” is said,
- iv) the speech unit then sends a message to the control unit to say it has finished saying that message,
- v) the control unit energises a relay to close the doors and also sends a message to the speech unit.
- vi) the speech unit says “Doors Closing”.

Depending upon the set-up of the control unit with the windows software, speech may or may not be inhibited during lift travel i.e. on high speed.

With regards to the volume control, only one can be selected at any one time. If the input “HUSH” at the control unit is off, normal volume (NORM) is selected else if “HUSH” is on, hush volume (HUSH) is selected. Hush volume is usually required to select a different audible volume of speech at specific times during the day, i.e. quieter at night-time.

L.E.D. indication is provided to inform the user of the following: -

- i) LOOP:- this flashes every second, indicating that the main micro processor is running. (see also CAN fieldbus fault finding)
- ii) COMMS:- this is illuminated when a message is being received or sent in conjunction with the control unit.
- iii) BUSY:- this is illuminated when a phrase is being processed by the speech processor.

Other Info

A position phrase is never said again until after another position has been announced.

A door message has priority over all other phrases.

Direction messages will be announced (i.e. going up / down) when applied, and after a door message if a direction input is still on.

6.5) Speech Synthesiser standard phrase list.

The list below is a selected list of phrases stored in the speech memory to create a standard version of the most common phrases used. However, there are many more phrases in the

speech vocabulary, and International Lift Equipment will be only pleased to accommodate alternative phrases if required.

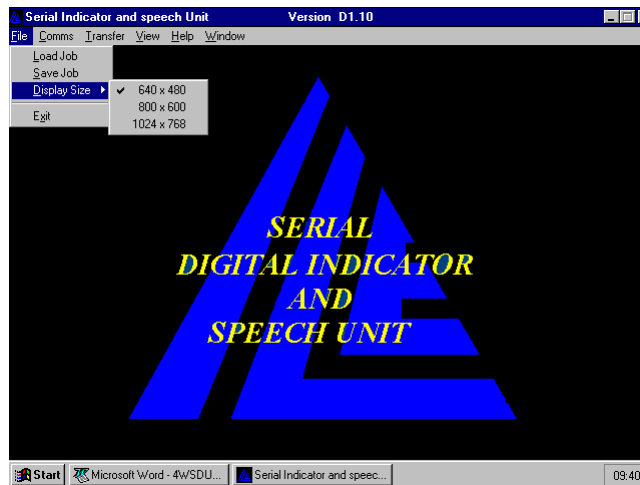
Version:- SRS16F30A

1)	THIS LIFT IS OVERLOADED	65)	17
2)	THIS LIFT IS UNDER MAINTENANCE CONTROL	66)	18
3)	THIS LIFT IS OUT OF SERVICE	67)	19
4)	THIS LIFT IS UNDER FIRE CONTROL OPERATION	68)	20
5)	THIS LIFT IS UNDER EVACUATION CONTROL	69)	20X
6)	MAIN EXIT FLOOR	70)	30
7)	THIS LIFT IS RETURNING	71)	30X
8)	TO	72)	40
9)	TO THE	73)	40X
10)	THIS LIFT IS RETURNING UNDER FIRE SERVICE	74)	50
11)	THIS LIFT IS	75)	SUB BASEMENT
12)	ARRIVING AT	76)	THIS IS THE WAY OUT
13)		77)	1ST
14)	THE ALARM HAS BEEN ACTIVATED	78)	2ND
15)	ACCESS	79)	3RD
16)	UNDER GOODS CONTROL	80)	4TH
17)	THIS LIFT IS UNDER SERVICE CONTROL	81)	5TH
18)	UNDER FIRE FIGHTERS CONTROL	82)	6TH
19)	CAR	83)	7TH
20)	PLEASE MIND THE DOORS	84)	8TH
21)	LIFT	85)	9TH
22)	ON TEST	86)	10TH
23)	FAILED TO START	87)	11TH
24)	COMING	88)	12TH
25)	DOORS OPENING	89)	13TH
26)	DOORS CLOSING	90)	14TH
27)	STAND CLEAR	91)	15TH
28)	STAND CLEAR OF THE DOORS	92)	16TH
29)	PLEASE REDUCE WEIGHT IN LIFT	93)	17TH
30)	PLEASE EXIT LIFT	94)	18TH
31)	GOING UP	95)	19TH
32)	GOING DOWN	96)	20TH
33)	UNDER EVACUATION CONTROL	97)	
34)	UNDER PRIORITY SERVICE	98)	A
35)	UNDER FIRE SERVICE	99)	B
36)	UNDER FIRE CONTROL OPERATION	100)	C
37)	UNDER FIRE CONTROL	101)	D
38)	UPPERX	102)	E
39)	LOWERX	103)	F
40)	XFLOOR	104)	G
41)	FLOORX	105)	H
42)	XLEVEL	106)	I
43)	LEVELX	107)	J
44)	ZERO	108)	K
45)	MINUS ONE	109)	L
46)	BASEMENT	110)	M
47)	MINUS TWO	111)	BEING SERVICED
48)	GROUND	112)	UNAUTHORISED CAR TOPACCESS
49)	1	113)	PENTHOUSE
50)	2	114)	PODIUM
51)	3	115)	CAR PARK
52)	4	116)	MEZZANINE
53)	5	117)	RECEPTION
54)	6	118)	SERVICE
55)	7	119)	SHOP
56)	8	120)	FRONT
57)	9	121)	REAR
58)	10	122)	MINUS
59)	11	123)	BING (ARRIVAL GONG)
60)	12	124)	BONG “ ”
61)	13	125)	BING/BONG “ ”
62)	14	126)	WAYOUT
63)	15	127)	PAUSE (100ms)
64)	16		

7) Windows Application Software

7.1) Setting the display size.

The display size should be set to correspond with the display configuration of the P.C. or lap top being used. This will ensure that the application window will remain central at all times within the display screen. The picture below illustrates the display menu options and its' location.



7.2) Setting the Communication port.

The communication port must be set ensure successful communication of data between P.C. and Control Unit. The picture below illustrates the COMM port options and its' location. Note the baud rate is fixed at 9600 baud.



7.3) Setting up Inputs for Encoded Binary or Gray Code.

If the control unit is set for encoded inputs (via the DIL switch), these can be either Binary or Gray code as shown below.



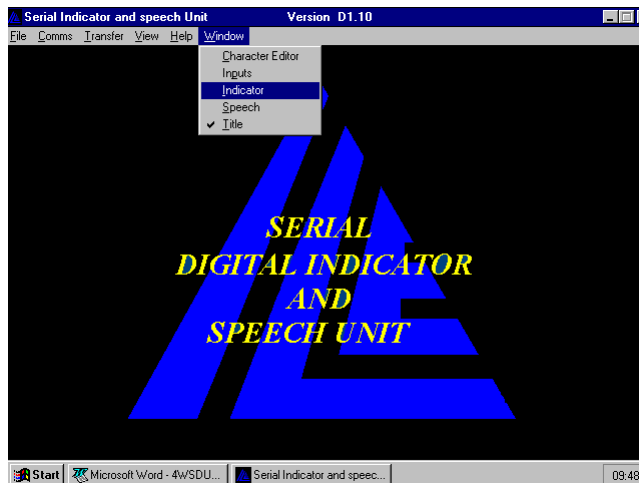
7.4) Creating a job.

To create a new job, select “File” from the menu bar and pick the item “Load Job”. Select a job from the current directory or the default “default.job”. This job will then be used as a template to create the new one. The job must then be saved under the required filename by selecting “File” from the menu bar and picking the item “Save Job”.



7.5) Digital Indicator set-up

To select the Digital Indicator set-up choose “Indicator” from the Window menu bar as shown below.

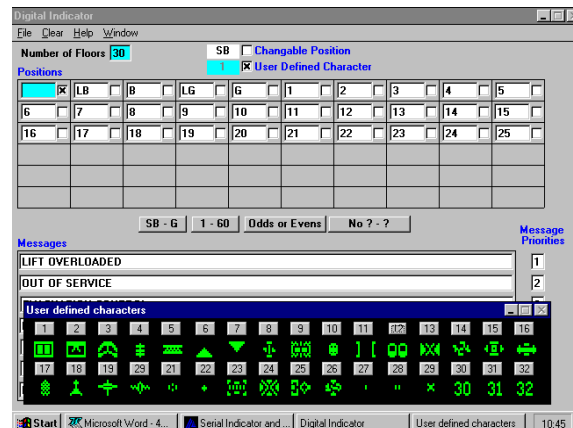
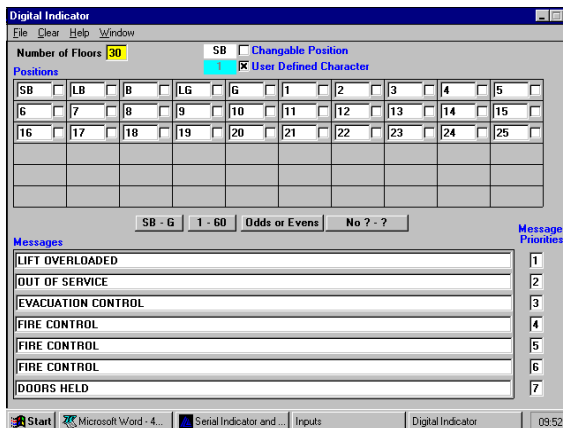


7.5.1) Setting up floors, messages and message priorities

The picture below shows the screen layout for setting up floors and messages. Provision is given to set the number of floors (up to 60).

Options are given to set the floor sequence i.e. starting with SB, 1, odds/evens or a desired number. Otherwise 2 characters may be typed to set each floor. Also user defined characters may be used by clicking the box attached to the floor. A menu will then be displayed as below (right) illustrating all the user defined characters.

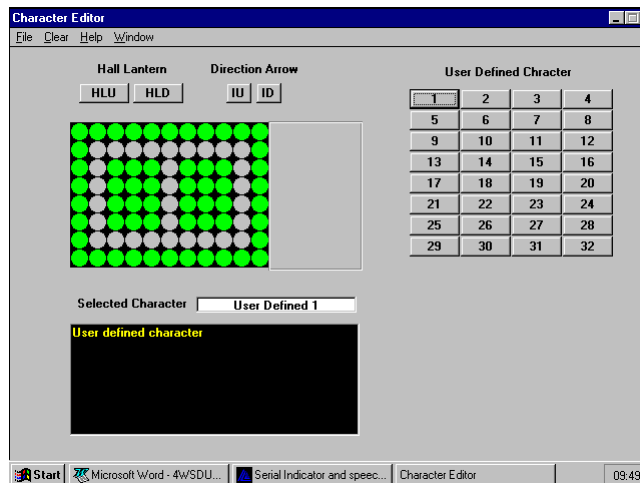
Messages are to be typed as required, and each message should be given a priority level in the range 1-7. Note messages with the same priority will be displayed in turn by the indicator.



7.5.2) Character Editor

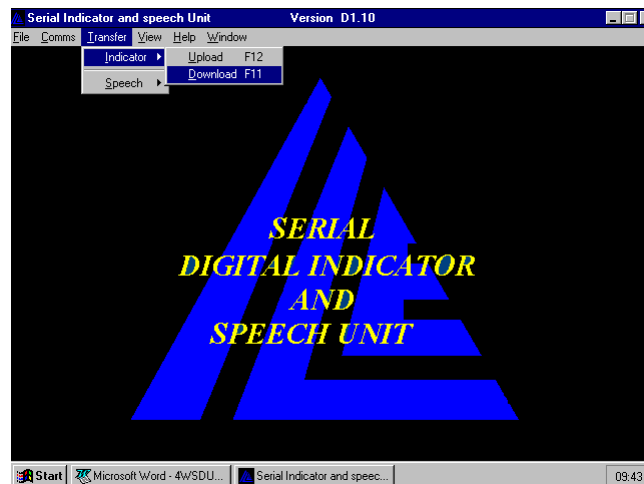
The picture below shows the screen layout for setting hall lanterns, direction arrows and user defined characters. By selecting any of the labelled boxes, a picture will appear in the form of

a dot matrix (as shown). By clicking on these dots user defined characters may be formed to suit specific requirements.



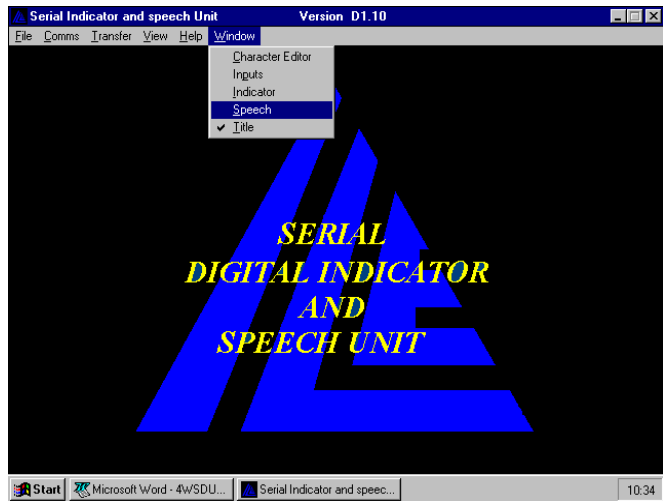
7.5.3) Software Upload / Download

The Indicator software set-up may be uploaded from or downloaded to the control unit by selecting from the transfer menu as below. Indication is given of transfer status and when completed.



7.6) Speech Unit set-up

To select the Speech Unit set-up choose “Speech” from the Window menu bar as shown below.

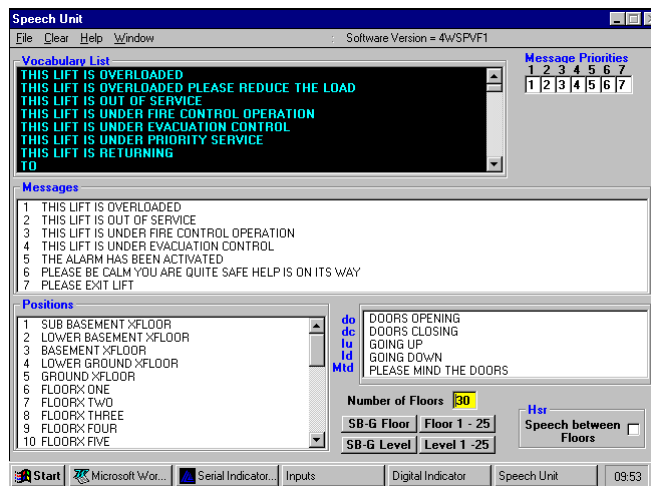


7.6.1) Setting up floors, messages and message priorities

The picture below shows the screen layout for setting up floors and messages. Provision is given to set the number of floors (up to 60).

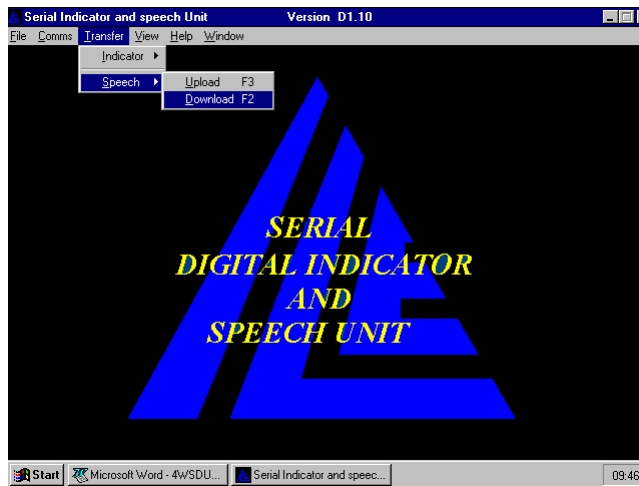
Options are given to set the floor sequence i.e. starting with SB, 1, odds/evens or a desired number. Otherwise a maximum of 3 phrases may be selected for one floor position, by double clicking on phrases from the vocabulary list. Note the existing floor information must first be cleared using “clear” from the windows menu

Messages are to be selected as required and can be up to 5 phrases long, also each message should be given a priority level in the range 1-7. Note messages with the same priority will be announced in turn by the speech unit.



7.6.2) Software Upload / Download

The Speech software set-up may be uploaded from or downloaded to the control unit by selecting from the transfer menu as below. Indication is given of transfer status and when completed.



7.7) Help File

Due to the amount of information required to support the software, a help file has been included as shown below to provide step by step support. This can be accessed by selecting help from the main menu bar.

