

Maintaining the Display Unit

SWITCH THE POWER OFF

Keep the display unit clean, dry and free of dust and other particulates.

Check that the EEPROM and microprocessor ICs are fully inserted in their sockets.

Check tightness of field wiring terminations and that associated plugs are secure.

Replace the faceplate assembly, switch the power ON. Actuate lift to ensure that all displays work correctly.

CAUTION

- 1. SWITCH OFF** the mains supply before any installation, maintenance or repair work is carried out.
- 2. DO NOT** work on live equipment unless it is essential to do so, in which case extreme care must be taken to avoid electrical shocks, including the use of rubber mats.
3. Installation, maintenance or repair must only be carried out by a competent person who is trained on this equipment.
- 4.** Replace all covers on completion of work and ensure the unit is safe for installation and use.

EEC DIRECTIVES

These components comply with the relevant EEC Directives when used on lifts



Installation and setting instructions

Horizontal and Vertical Position Indicator Units with Parallel Inputs

ULSP32HP & ULSP32VP
ULSP52HP & ULSP52VP

Publication Number: II105/0204

Part Number: 002070-000105

Important

These instructions must remain with the product to ensure correct installation. If extra copies are required please contact Dewhurst plc and quote publication number and issue

UK Customers only

If you have any problems or questions, please contact our technical support desk direct on **t 01352 793222 f 01352 793255** during office hours.

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Introduction

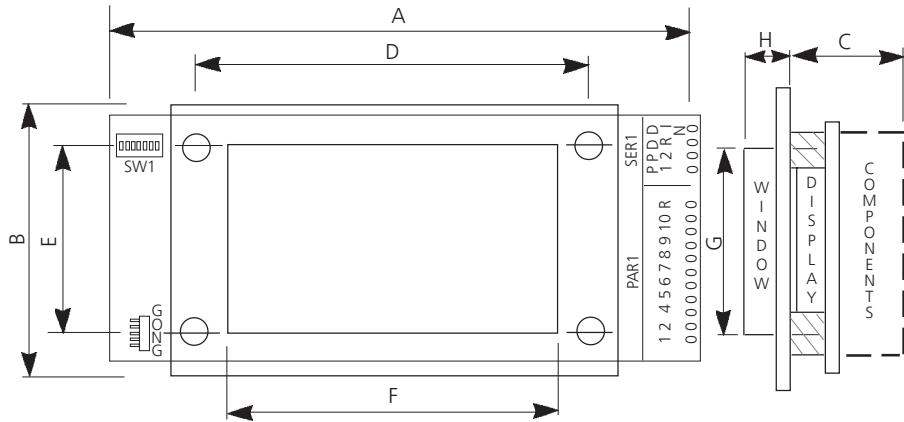
These instructions relate to Parallel Input Position Indicator Units only. For Serial Input versions refer to Publication II104.

The display units incorporate 10 photo-coupled inputs which may be connected directly to the lift controller. The displays can accept either discrete inputs or parallel encoded inputs using binary, gray code or equivalent.

For the full specification and other details refer to the publications detailed below.

DISPLAY UNITS	PUBLICATION NUMBER
ULSP32HP	PB145
ULSP32VP	PB145
ULSP52HP	PB146
ULSP52VP	PB146

Dimensional Data of Display Units with Parallel Inputs

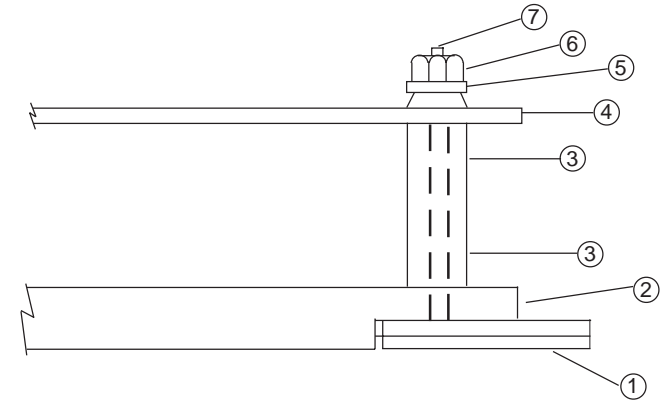


DIMENSION TABLE (mm)	SPACE ENVELOPE DISPLAY ASSY.			FIXINGS		WINDOW ** SIZE		
	A*	B	C	D	E	F	G	H
ULSP32HP	157	64	16	100	50	54.5	44.5	4
ULSP32VP	157	64	16	100	50	44.5	54.5	4
ULSP52HP	157	64	16	100	50	84.5	59.5	4
ULSP52VP	157	90	16	100	50	59.5	84.5	4

* Allow an additional 10mm minimum for wiring space

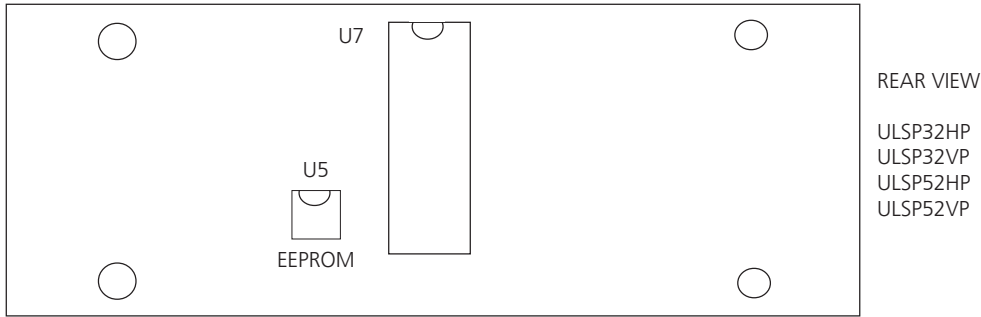
**For window cutout details refer to Publication No: PB130

Typical Display Faceplate Assembly



ITEM	DESCRIPTION
1	Faceplate
2	Window
3	Insulated Spacer
4	Display PCB
5	Plain Washer M4
6	Full Nut M4
7	Weldstud M4

Generic Wiring of Display Units with Parallel Inputs



SW1 Switch Settings

If "Flashing Arrows" are specified, to simulate "Hall Lantern Indicators" when the lift car arrives at a landing entrance, it is necessary to set SW1 switch of the landing display to the encoded address of the floor legend for that floor.

The table defines normal binary and gray code formats.
The switch positions are defined as 0 = OFF and 1 = ON.

FLOOR NO. DECIMAL	BINARY		GRAY CODE	
	MSB	LSB	MSB	LSB
	5	4 3 2 1	5	4 3 2 1
Car Unit				
1	0000		0000	
2	0001		0001	
3	0010		0011	
4	0011		0010	
5	0100		0011	
6	0101		0010	
7	0110		0101	
8	0111		0100	
9	1000		0110	
10	1001		0111	
11	1010		0111	
12	1011		0101	
13	1100		0101	
14	1101		0100	
15	1110		0100	
16	1111		1100	
17	1000		1100	
18	1001		1101	
19	1010		1101	
20	1011		1110	
21	1100		1111	
22	1101		1110	
23	1110		1010	
24	1111		1010	
25	1000		1011	
26	1001		1011	
27	1010		1010	
28	1011		1001	
29	1100		1001	
30	1101		1000	
31	1110		1000	
	1111		1000	

If fitted, switch contacts 6, 7 and 8 are reserved for other uses.

Display Capabilities

Features Available	Terminal Allocation PAR1: 10 Available
UP & DN Arrows	2
Scrolling Arrows	1
Flashing Arrows	1
Floors: Encoded	2
1-3	3
1-7	4
1-15	5
1-31	1 each
One per floor	1-8
Message Triggers	1 each

Testing the Display Unit

SWITCH THE POWER OFF

Carefully dismantle the faceplate to permit access to the display's field wiring terminals. Ensure that all potentially live parts are temporarily insulated from earth.

SWITCH THE POWER ON

NOTE: Never apply power directly to the SER and PAR1 socket pins as they may be damaged. Always connect to the actual field wiring plugs or spare plugs which are easily replaceable.

Measure the applied power between a.c. - a.c. field terminals, using a digital multimeter or equal, set to an appropriate range. Check that the measurement meets the display unit specification.

Check the gongs between G1-GND and G2-GND respectfully using a digital multimeter or equal, set to an appropriate range. Check that the arrows flash and the gong actuates when the floor number = installed floor only. Check SW1 switch setting if necessary.

Measure the applied power between the R field terminal and each PAR1 field terminal (1-10) in turn, making a note of each reading. Check that all measurements meet the display unit specification.

Identify each PAR1 field terminal that was live and compare with the resulting arrow and floor displays. If the floor displays are encoded use the SW1 switch settings table to identify the appropriate binary or gray code.

SW1 SWITCH SETTINGS

Check that the arrows flash when the floor number = installed floor only.

SWITCH THE POWER OFF

Remove, replace or reinstall display unit complete with field wiring.

Changing Preprogrammed Memory Integrated Circuits

The EEPROM Memory Integrated Circuits are preprogrammed by **Dewhurst/LiftStore** with the software required to drive the displays.

The EEPROM may be fitted in various locations, will be socketed, have the same number of pins and will be labelled in a similar manner to its new replacement.

It is important to carry out the following instructions carefully to ensure that components are not damaged.

SWITCH THE POWER OFF

Since the devices are sensitive to static electricity the pins should not be touched by hand. The EEPROMS **must** be inserted with correct orientation, represented by a small notch on one end of the device to match a similar notch on the socket.

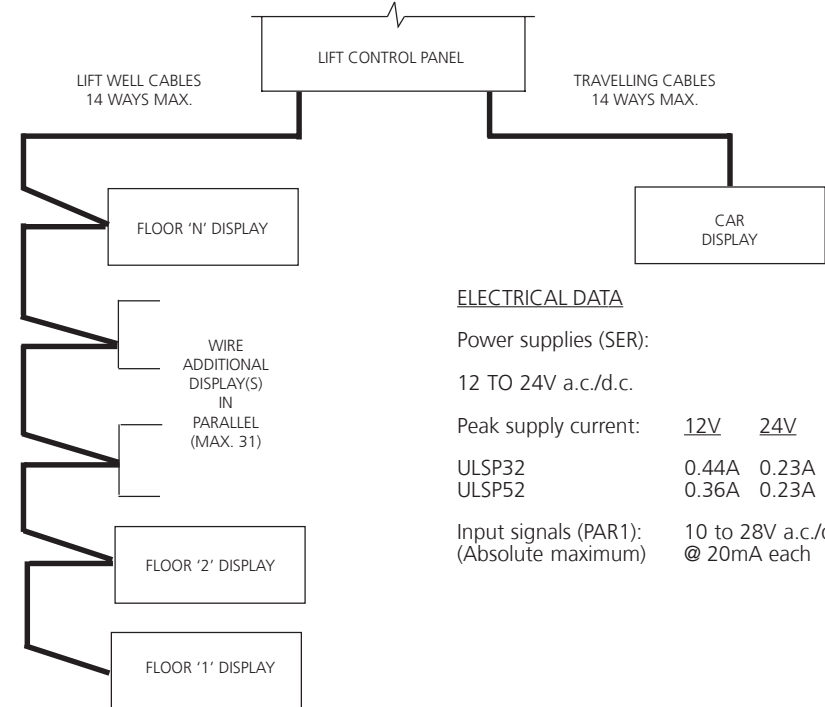
INCORRECT INSERTION WILL INSTANTLY DESTROY THE EEPROM

Use an IC extraction tool (or small screwdriver if available). Carefully insert the tool between the EEPROM and its socket and remove the EEPROM. If using a screwdriver take care not to damage PCB tracks beneath and around the socket.

Check that the pins on the replacement EEPROM are in line, correct as necessary. Offer the EEPROM to the socket whilst checking orientation. Carefully align all pins along one side to the socket then align other side.

Check all pins are properly engaged then gently push the EEPROM into the socket. Check all pins are engaged correctly then push firmly to ensure full insertion. Finally recheck orientation and ensure all pins are fully inserted and undamaged.

Generic Wiring of Display Units with Parallel Inputs



ELECTRICAL DATA

Power supplies (SER):

12 TO 24V a.c./d.c.

Peak supply current: 12V 24V

ULSP32 0.44A 0.23A
ULSP52 0.36A 0.23A

Input signals (PAR1): 10 to 28V a.c./d.c.
(Absolute maximum) @ 20mA each

DESIGNATOR	LABEL	DESCRIPTION
SER	P1	Supply voltage a.c. or d.c.
SER	P2	Supply voltage a.c. or d.c.
SER	DR	Data Return
SER	DIN	Data Input
		Accepts either polarity
		Not used with parallel displays
PAR1	1	Floor Input (LSB)
PAR1	2	Floor Input
PAR1	3	Floor Input
PAR1	4	Floor Input
PAR1	5	Scroll Arrow <u>or</u> Floor input
PAR1	6	Flash <u>or</u> Scroll Arrow <u>or</u> Floor Input
PAR1	7	Up Arrow <u>or</u> Floor Input
PAR1	8	Down Arrow <u>or</u> Floor Input
PAR1	9	
PAR1	10	
R	R	Common return for floors/arrows/messages
SW1	1	Display Selectable Address (Binary, LSB)
SW1	2	Display Selectable Address
SW1	3	Display Selectable Address
SW1	4	Display Selectable Address
SW1	5	Display Selectable Address (Binary, MSB)
SW1	6	
SW1	7	
SW1	8	
GONG	G1	Gong for down direction
GONG	G2	Gong for up direction
GONG	H1	Lantern for down direction
GONG	H2	Lantern for up direction
GONG	GND	Ground return