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

dewhurst

Installation and setting instructions

Horizontal and Vertical Position Indicator Units with Parallel Inputs

ULS32HP & ULS32VP
ULS34HP
ULS42HP
ULS43HP
ULS52HP & ULS52VP
ULS54HP

Publication number: II091/0517
Part Number: 002069-000091

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

If you have any problems or questions, please contact our technical support desk direct on **+44 (0)20 8744 8283/8227/8240** during office hours.

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Introduction

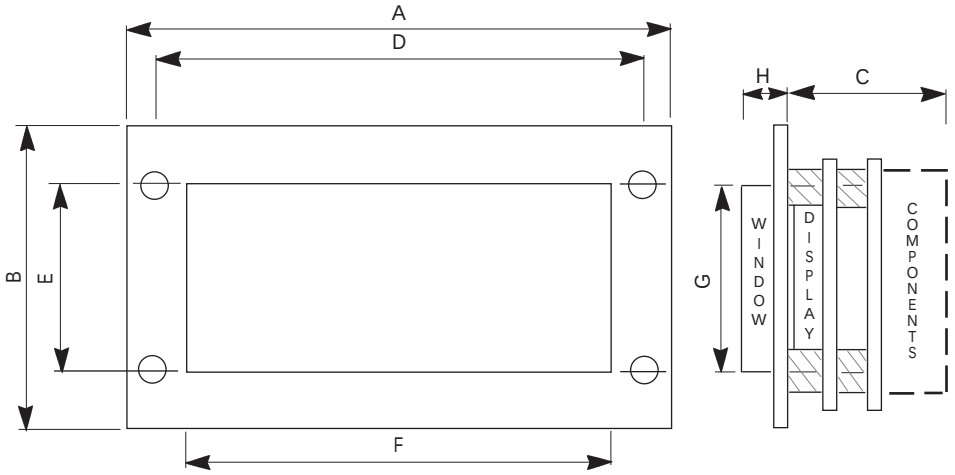
These instructions relate to Parallel Input Position Indicator Units only. For Serial Input versions refer to Publication II092.

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
ULS32HP	PB127
ULS32VP	PB127
ULS34HP	PB127
ULS42HP	PB126
ULS43HP	PB126
ULS52HP	PB125
ULS52VP	PB125
ULS54HP	PB125

Dimensional Data of Display Units with Parallel Inputs

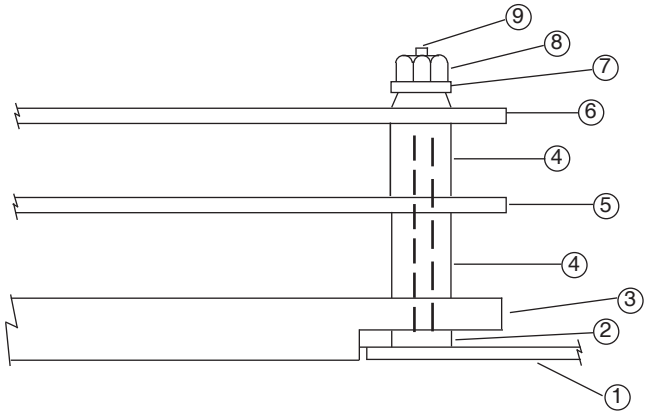


DIMENSION TABLE (mm)	SPACE ENVELOPE DISPLAY ASSY.			FIXINGS		WINDOW ** SIZE		
	A	B	C*	D	E	F	G	H
ULS32HP	122	39	44	112	29	54.5	44.5	6
ULS32VP	45	122	44	29	112	44.5	54.5	6
ULS34HP	122	39	44	112	29	96.0	44.5	6
ULS42HP	150	45	44	140	35	89.5	49.5	6
ULS43HP	150	45	44	140	35	129.5	49.5	6
ULS52HP	122	45	46	112	29	84.5	59.5	6
ULS52VP	59	122	46	29	112	79.5	59.5	6
ULS54HP	182	45	46	172	35	161.5	59.5	6

* Allow an additional 10mm minimum for wiring space

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

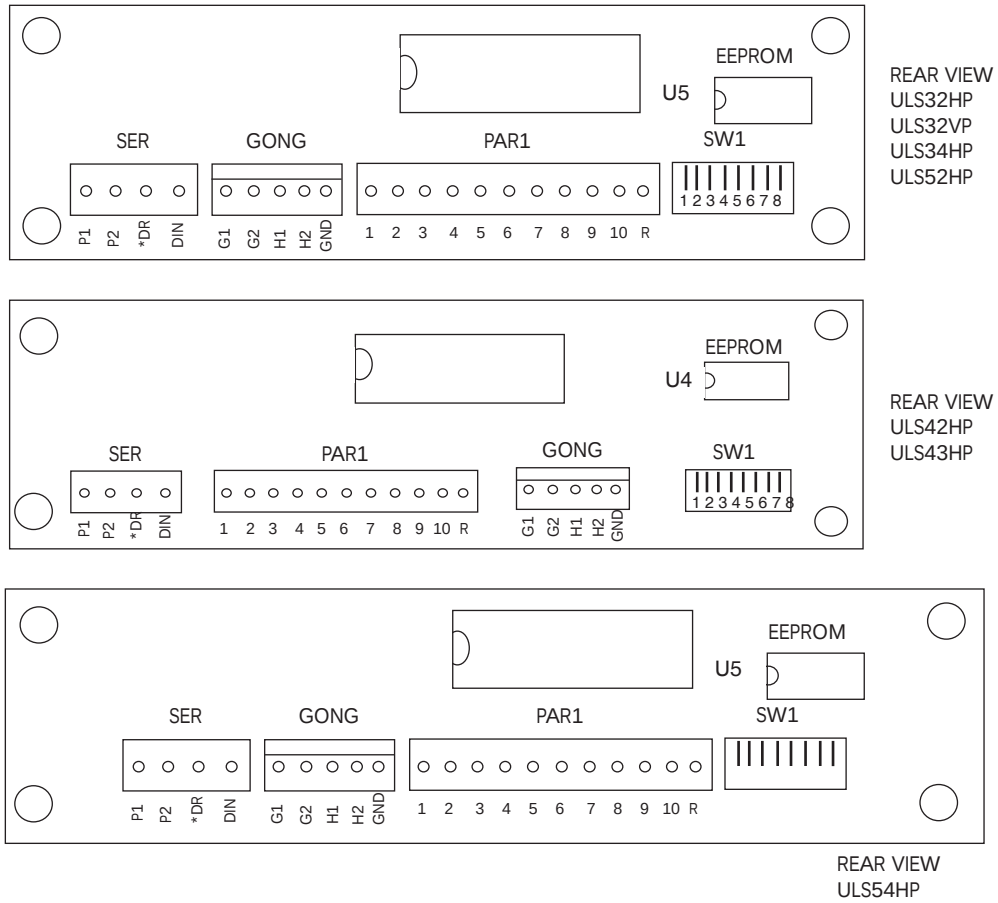
Typical Display Faceplate Assembly



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

NOTE: On some assemblies an additional Control PCB (6) and Insulated Spacer (4) may be fitted.

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 MSB LSB 5 4 3 2 1	GRAY CODE MSB LSB 5 4 3 2 1
Car Unit	00000	00000
1	00001	00001
2	00010	00011
3	00011	00010
4	00100	00110
5	00101	00111
6	00110	00101
7	00111	00100
8	01000	01100
9	01001	01101
10	01010	01111
11	01011	01110
12	01100	01010
13	01101	01011
14	01110	01001
15	01111	01000
16	10000	11000
17	10001	11001
18	10010	11011
19	10011	11010
20	10100	11110
21	10101	11111
22	10110	11101
23	10111	11100
24	11000	10100
25	11001	10101
26	11010	10111
27	11011	10110
28	11100	10010
29	11101	10011
30	11110	10001
31	11111	10000

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	1-3	2
	1-7	3
	1-15	4
	1-31	5
One per floor	1-8	1 each
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.

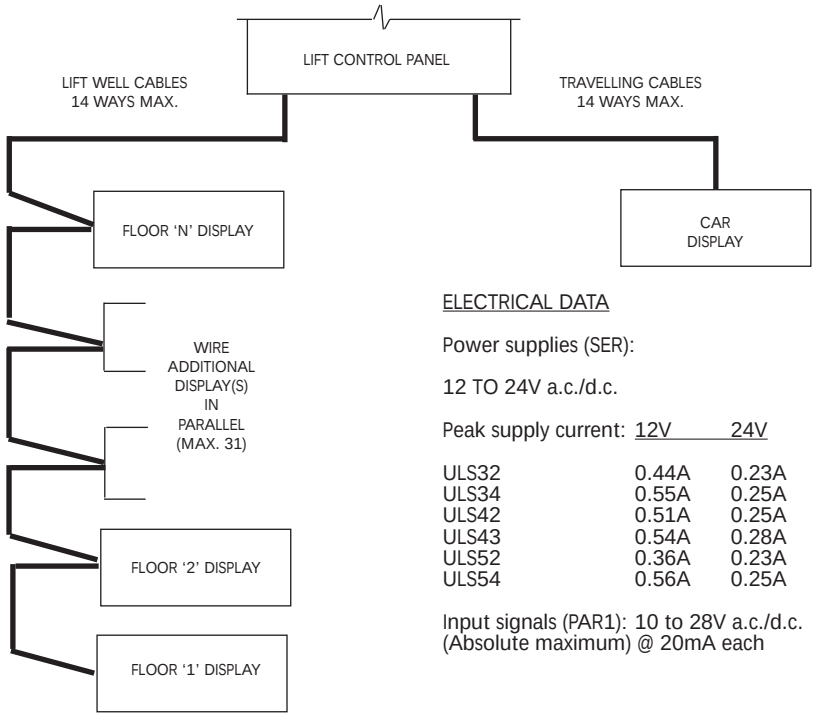
INCORRECT INSERTION WILL INSTANTLY DESTROY THE EEPROM

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
ULS32	0.44A	0.23A
ULS34	0.55A	0.25A
ULS42	0.51A	0.25A
ULS43	0.54A	0.28A
ULS52	0.36A	0.23A
ULS54	0.56A	0.25A

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.] Accepts either polarity
SER	P2	Supply voltage a.c. or d.c.]
SER	DR	Data Return] Not used with parallel displays
SER	DIN	Data Input]
PAR1	1	Floor Input (LSB) | For guidance only.
PAR1	2	Floor Input | Use EEPROM configuration sheet sent
PAR1	3	Floor Input | with display
PAR1	4	Floor Input
PAR1	5	Scroll Arrow or Floor input
PAR1	6	Flash or Scroll Arrow or Floor Input
PAR1	7	Up Arrow or Floor Input
PAR1	8	Down Arrow or 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 up direction
GONG	G2	Gong for down direction
GONG	H1	Lantern for up direction
GONG	H2	Lantern for down direction
GONG	GR	Ground return