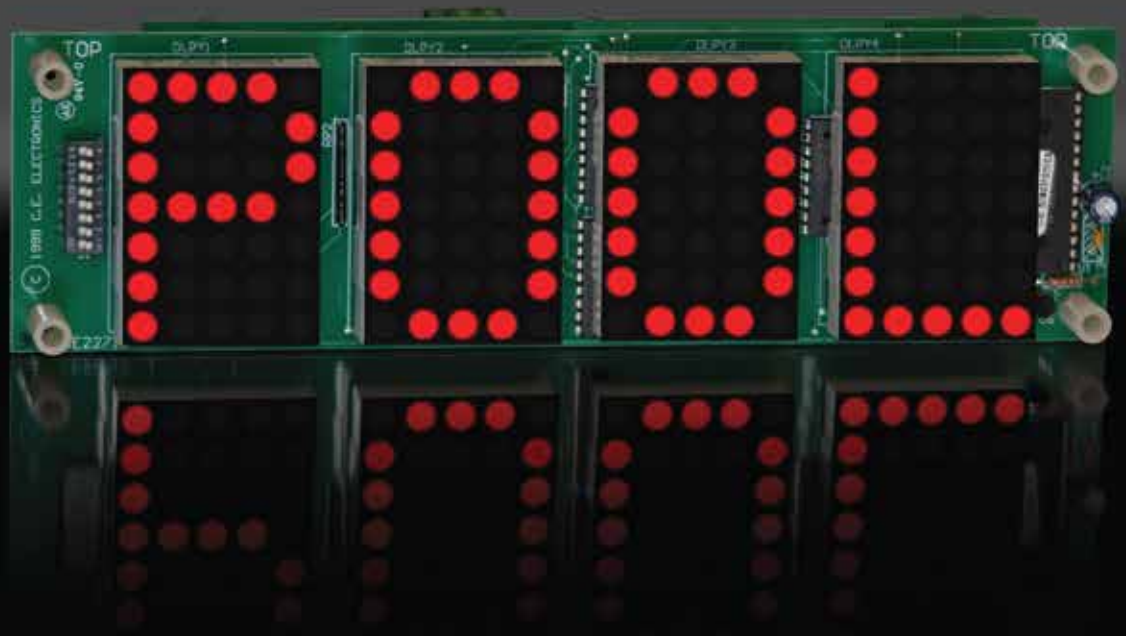
DH420-XXXXX

DOT MATRIX LED DIGITAL INDICATOR



DOT MATRIX

2" CHARACTERS

Dot Matrix LED digital indicator for floor position display, as well as car direction, if desired. Any alphanumeric or custom character can be displayed in either double digit with single "UP/DOWN" arrows or four digit floor designations.

TYPICAL APPLICATIONS:

- Car-OP Panel
- Transom-car or Hall

FEATURES:

- Low cost design
- Self contained unit
- Latched input
- Self testing
- Scrolling
- Passing chime output
- Error detection and correction feature
- UL listed

C.E. Electronics, Inc. 2107 Industrial Drive Bryan, OH 43506 ph: 419.636.6705 www.ceelectronics.com

C.E. Electronics, Ltd. Marlow, Bucks, UK ph: +44 (0) 1628 487633 www.ceelectronics.co.uk

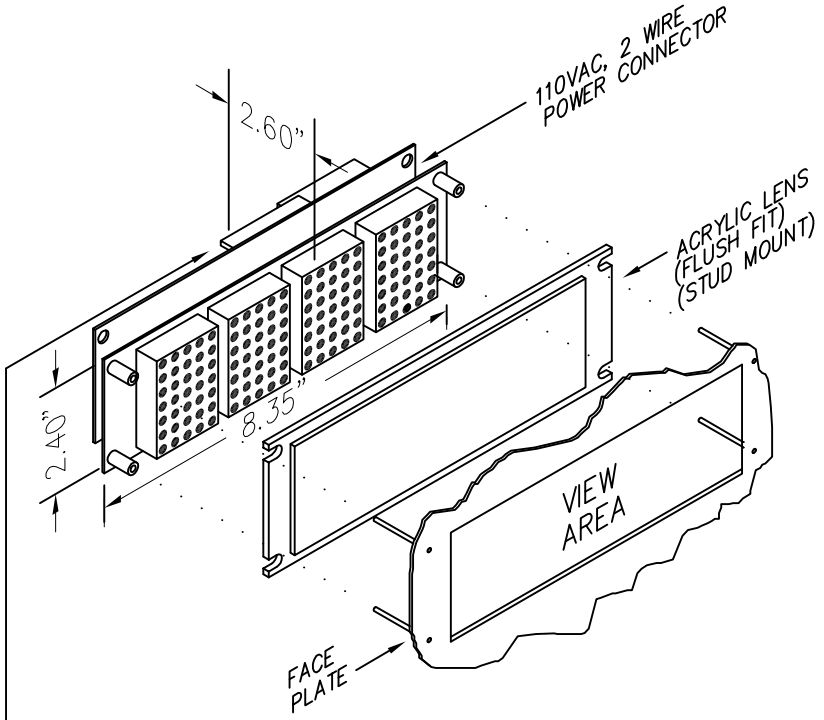
International Lift Equipment (ILE) Highams Park, London, UK ph: 0208 527 9669 www.ileweb.com

C.E. Electronics, Inc.
2107 Industrial Drive
Bryan, OH 43506
PH (419) 636-6705 FX (419) 636-2516
www.ceelectronics.com

DH420-XXXXX

Ver. 6 Rel. 10/7/2013

COMPETITOR
DOT MATRIX



RENEWAL PARTS

Lens: 104-5611 RED
Lens: 104-6033 GRAY
Lens: 104-9033 BLUE

DOT MATRIX LED DIGITAL INDICATOR

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- Car-OP Panel
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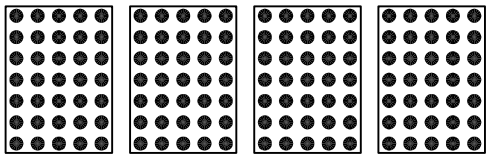
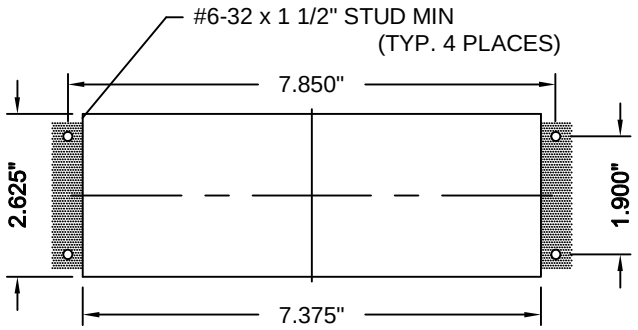
INPUT CONNECTION

8' CABLE SUPPLIED WITH PLUG-IN CONNECTOR SUPPLIED



2" CHARACTERS

PANEL PREPARATION



CUTOUT TOLERANCE: +.020
- 0.0

TO ORDER:-SPECIFY DH420 - X X X X X

COLOR:
"0" = MIXED
"R" = RED
"A" = AMBER
"G" = GREEN
"W" = WHITE
"B" = BLUE

NUMBER OF INPUTS:
"0" = 16 INPUT OR LESS
"1" = 31 INPUT
"M" = MICRO COMM*

LENS:
"R" = RED
"G" = GRAY
"B" = BLUE
"X" = NO LENS

SIGNAL FORMAT:
"1" = SINGLE LINE/FLOOR
"2" = BINARY
"3" = UNITS & TENS
"4" = GRAY CODE
"5" = INVERTED BINARY
"6" = SPECIAL
"X" = IF MICRO COMM

SIGNAL VOLTAGE:
"A" = POSITIVE 6-20VDC, 6-24VAC
"B" = POSITIVE 24-48VDC, 24-48VAC
"C" = 120VAC
"D" = POSITIVE 125VDC
"E" = NEGATIVE 6-20VDC
"F" = NEGATIVE 24-48VDC
"G" = NEGATIVE 125VDC
"X" = IF MICRO COMM

NOTE:

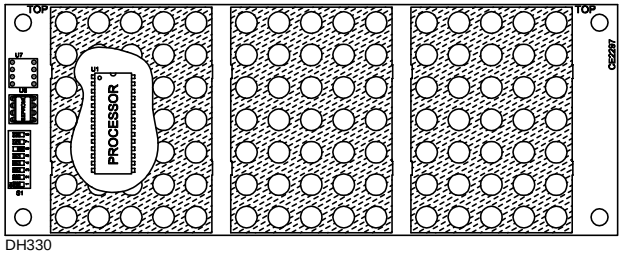
1. If a special voltage is required, please consult factory.
2. *110VAC not required for power supply on Micro Comm units

JOB# _____

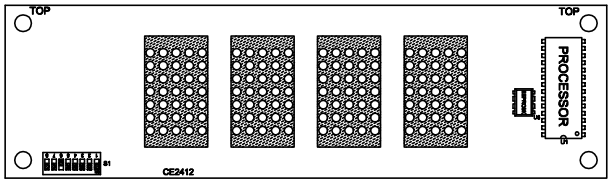
SCROLL RATE:
0 = NO SCROLL
1 = FAST SCROLL
F = SLOW SCROLL

REDUNDANCY:
0 = SELF-TEST MODE
1 = LOW REDUNDANCY
F = HIGH REDUNDANCY

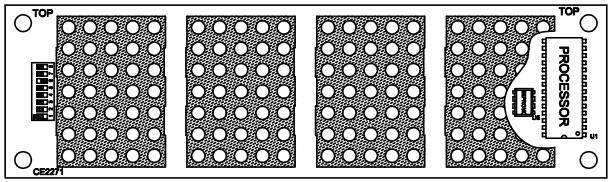
OPTIONAL CHIME PORT



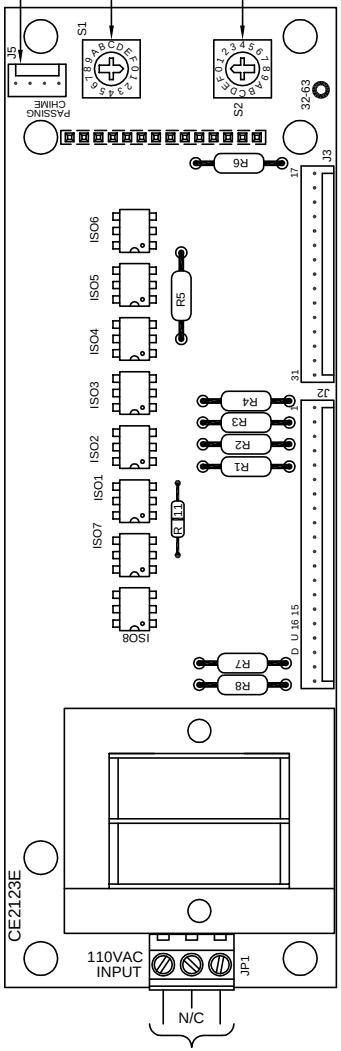
DH330



DH410



DH420



115 VAC INPUT

SIGNAL VOLTAGE (FROM CONTROLLER)

ARROW VOLTAGE

COMMON

ARROW COMMON

	ONE LINE PER FLOOR	BINARY	J2
FLOOR 1 SIGNAL		A1 (1)	BLACK
FLOOR 2 SIGNAL		A2 (2)	WHITE
FLOOR 3 SIGNAL			RED
FLOOR 4 SIGNAL		A3 (4)	GREEN
FLOOR 5 SIGNAL			ORANGE
FLOOR 6 SIGNAL			BLUE
FLOOR 7 SIGNAL			WHT/BLK
FLOOR 8 SIGNAL		A4 (8)	RED/BLK
FLOOR 9 SIGNAL			GRN/BLK
FLOOR 10 SIGNAL			ORG/BLK
FLOOR 11 SIGNAL			BLU/BLK
FLOOR 12 SIGNAL			BLK/WHT
FLOOR 13 SIGNAL			RED/WHT
FLOOR 14 SIGNAL		A6 (32)	GRN/WHT
FLOOR 15 SIGNAL			BLU/WHT
FLOOR 16 SIGNAL		A5 (16)	BLK/RED
UP ARROW			WHT/RED
DOWN ARROW			ORG/RED

BLU/RED
RED/GRN

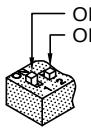
ONLY USED FOR ONE LINE PER FLOOR ABOVE 16 FLOORS

	J3
FLOOR 17 SIGNAL	BLACK
FLOOR 18 SIGNAL	WHITE
FLOOR 19 SIGNAL	RED
FLOOR 20 SIGNAL	GREEN
FLOOR 21 SIGNAL	ORANGE
FLOOR 22 SIGNAL	BLUE
FLOOR 23 SIGNAL	WHT/BLK
FLOOR 24 SIGNAL	RED/BLK
FLOOR 25 SIGNAL	GRN/BLK
FLOOR 26 SIGNAL	ORG/BLK
FLOOR 27 SIGNAL	BLU/BLK
FLOOR 28 SIGNAL	BLK/WHT
FLOOR 29 SIGNAL	RED/WHT
FLOOR 30 SIGNAL	GRN/WHT
FLOOR 31 SIGNAL	BLU/WHT

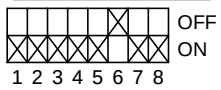
SEE NOTE ( ) BELOW

DIP SWITCH DETAIL

CHARACTER SET SELECTOR
ARROW COUNTERSCROLL
NOT USED
ARROW SCROLL (Y/N)
ERROR CORRECTION SENSITIVITY



DEFAULT SETTINGS



NOTE A: THE SIGNAL AND ARROW COMMONS ARE TIED TOGETHER ON THE DRIVER BOARD. IF ARROW SOURCE IS DIFFERENT THAN SIGNAL SOURCE, CONTACT TECH SUPPORT AT 419-636-6705 FOR FURTHER INFORMATION.

NOTE B: THE SIGNAL AND ARROW COMMONS HAVE BEEN SEPARATED BY THE FACTORY.

ROTARY SWITCH S1 _____

DRIVER BOARD CE2123 _____

ROTARY SWITCH S2 _____

DISPLAY BOARD CE_____

CODE VERSION _____

Competitor Series

Discrete Input Dot Matrix Displays

DATE DRAWN:	DRAWN BY:	REQUESTED BY:	C.E. ELECTRONICS, INC. 2107 Industrial Drive Bryan, Ohio 43506 (419) 636-6705
06/01/07	DAC	DV	
BOARD NUMBER:	LAST DATE REVISED:	APPROVED BY:	
2123	-		
PRODUCT		DWG. NO.	REV:
DISCRETE DOT MATRIX DISPLAYS		DH330_410_420 DIS	-

BINARY FLOOR CHART

BINARY BITS

	A7	A6	A5	A4	A3	A2	A1
	64	32	16	8	4	2	1

1000000 _____			
0111111 _____	0101111 _____	0011111 _____	0001111 _____
0111110 _____	0101110 _____	0011110 _____	0001110 _____
0111101 _____	0101101 _____	0011101 _____	0001101 _____
0111100 _____	0101100 _____	0011100 _____	0001100 _____
0111011 _____	0101011 _____	0011011 _____	0001011 _____
0111010 _____	0101010 _____	0011010 _____	0001010 _____
0111001 _____	0101001 _____	0011001 _____	0001001 _____
0111000 _____	0101000 _____	0011000 _____	0001000 _____
0110111 _____	0100111 _____	0010111 _____	0000111 _____
0110110 _____	0100110 _____	0010110 _____	0000110 _____
0110101 _____	0100101 _____	0010101 _____	0000101 _____
0110100 _____	0100100 _____	0010100 _____	0000100 _____
0110011 _____	0100011 _____	0010011 _____	0000011 _____
0110010 _____	0100010 _____	0010010 _____	0000010 _____
0110001 _____	0100001 _____	0010001 _____	0000001 _____
0110000 _____	0100000 _____	0010000 _____	0000000 _____

INSTALLATION GUIDE

1. MAKE SURE THE INPUT RESISTORS ARE FULLY SEATED IN THEIR SOCKETS.

2. CONNECT 115VAC TO THE OUTER TERMINALS OF CONNECTOR J1. THE CENTER TERMINAL HAS NO CONNECTION.

3. SET ROTARY SWITCH S2 TO "0" TO START SELF-TEST. THE DISPLAY WILL CYCLE THROUGH THE FLOOR DATA. THIS SHOWS WHAT FLOOR MARKINGS WILL DISPLAY AND ALLOWS ADJUSTMENT OF THE SCROLL RATE AND OPTIONAL PASSING CHIME VOLUME. SET S2 TO AT LEAST "1" (FACTORY DEFAULT IS "2") TO END SELF-TEST.

4. MAKE SURE THE SIGNAL CABLE(S) IS PLUGGED INTO THE DRIVER BOARD CORRECTLY.

5. CONNECT THE SIGNAL CABLE(S) TO THE CONTROLLER. THE VOLTAGE AND DC POLARITY ARE MARKED ON THE REVERSE SIDE. THE UNIT WORKS LIKE A LIGHT BULB; IT NEEDS VOLTAGE FROM COMMON TO THE SELECTED INPUT.

6. IF THE INPUT IS DC AND YOU SUSPECT THE POLARITY IS WRONG, PUT THE SELECTED FLOOR WIRE TO COMMON AND COMMON TO THE SELECTED FLOOR INPUT. IF THE UNIT DISPLAYS THE FLOOR, CONTACT TECH SUPPORT.

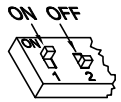
7. IF THE INPUT FORMAT IS SINGLE LINE PER FLOOR, ONLY ONE WIRE SHOULD HAVE VOLTAGE PRESENT (WITH REFERENCE TO COMMON) AT ANY TIME.

8. IF THE UNIT DOES NOT SEEM TO WORK PROPERLY, RECHECK THE ABOVE STEPS. IF THE PROBLEM CONTINUES, RECORD THE SERIAL NUMBER FROM THE WHITE LABEL ON THE UNIT AND EXACTLY WHAT THE UNIT DISPLAYS AT EACH FLOOR, THEN CONTACT TECH SUPPORT AT 419-636-6705.

DATE DRAWN:	DRAWN BY:	REQUESTED BY:	C.E. ELECTRONICS, INC. 2107 Industrial Drive Bryan, Ohio 43506 (419) 636-6705
06/04/07	DAC	DV	
BOARD NUMBER:	LAST DATE REVISED:	APPROVED BY:	
N/A	-		
PRODUCT: COMPETITOR SERIES BINARY FLOOR CHART		DWG. NO.: COMP_BINCHART_RS	REV: -

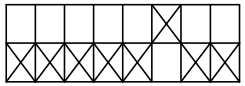
DH410 / DH420-XM

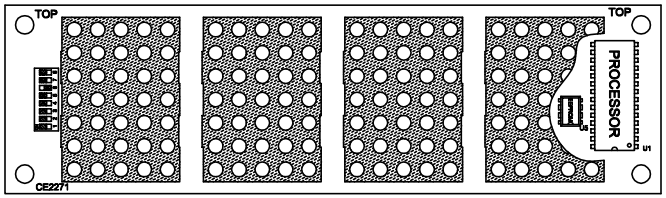
JOB# _____

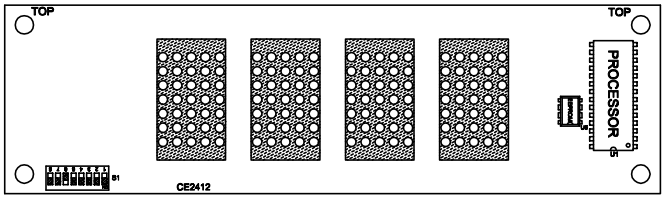


DIP SWITCH LEGEND

S1 DEFAULT SETTINGS







DISPLAY BOARD# _____

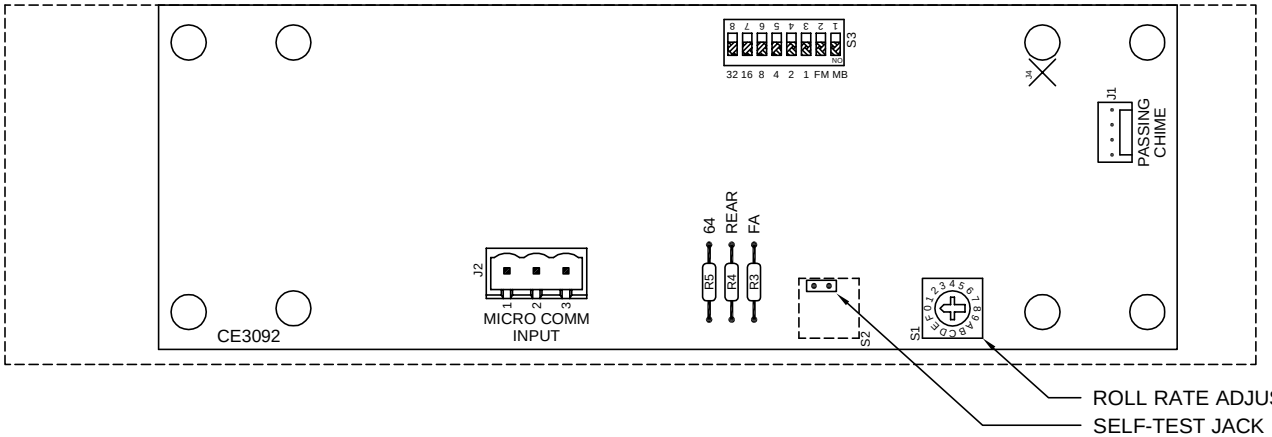
CODE VERSION _____

FLOORS: _____

ROTARY SWITCH S1 _____

DRIVER BOARD# CE3092 _____

CODE VERSION _____



To SELF-TEST display unit, short the two pins on the S2 header and release. NOTE: If S2 is a rotary switch, set it to "F" and back to 0 to self-test.

DIP switch 1 (MB) has no function with this unit.

The Micro Comm driver must be programmed to send messages with the level required to activate the features listed below.

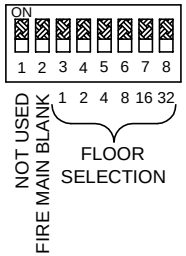
- To blank the display during a fire main (level three) message, turn on DIP switch 2 (FM).
- To blank the display during a fire alternate (level two) message, remove resistor R3 (FA) from the board.
- Do not program a floor value for Floor 63 if the Fire Blanking feature is required.

DIP switches 3-8 off is an all call using travel signals. DIP switches 3-8 on and resistor R5 (64) removed is an all call using arrival signals.

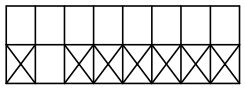
The floor address switches setup the display arrows as arrival (hall) arrows. Refer to the "S3 DIP SWITCH DETAIL" and turn on the floor address switches whose value adds up to the desired floor. For example, to display the arrows only when the unit is at floor 19, turn on switches 3, 4, and 7 (values 1, 2, and 16: 1+2+16=19). The Micro Comm driver must be set up to send arrival information.

To operate this unit as a rear lantern, remove resistor R4 (REAR) from the board. NOTE: The Micro Comm driver must be sending the MC2000 data stream to use this feature. Call Tech Support at 419-636-6705 for more information.

S3 DIP SWITCH DETAIL



S3 DEFAULT SETTINGS



NOTE: MUST BE USED WITH A CLASS 2 POWER SUPPLY.

DATE DRAWN:	DRAWN BY:	REQUESTED BY:	C.E. ELECTRONICS, INC. 2107 Industrial Drive Bryan, Ohio 43506 (419) 636-6705
06/26/07	DAC	DV	
BOARD NUMBER: 3092, 2271, 2412	LAST DATE REVISED: -	APPROVED BY:	
PRODUCT: DH410 / DH420-XM 4-DIGIT DOT MATRIX			DWG. NO. DH410-420-XM_01 REV: -