



DATASHEET

- 24Vdc Panel Mount Custom Sized Remote Display
- Available from 8 to 144 points
- IP42 Front Panel Protection:
- All Round Compliance:
 - IE61508 SIL1 Compliant
 - RoHS Compliant



OmniX Remote Display (6 High x 8 Wide)

Features

- Backlit LED Display
- 24Vdc Powered (20-28Vdc)
- User printed legends on inkjet/laser

- Certified to IEC61508 SIL1 Safety Standard
- RoHS Compliance to 2011/65/EU (RoHS2)
- IP42 Compliant Front Panel

Overview

The OmniX Remote Displays provide from 8 to 144 points of annunciator display in a stand-alone panel-mount package.

Use with remote alarm logic such as the Omni16C RLU series for your safety critical alarms or connect to your PLC or SCADA computer for an operator friendly display of essential alarm information.

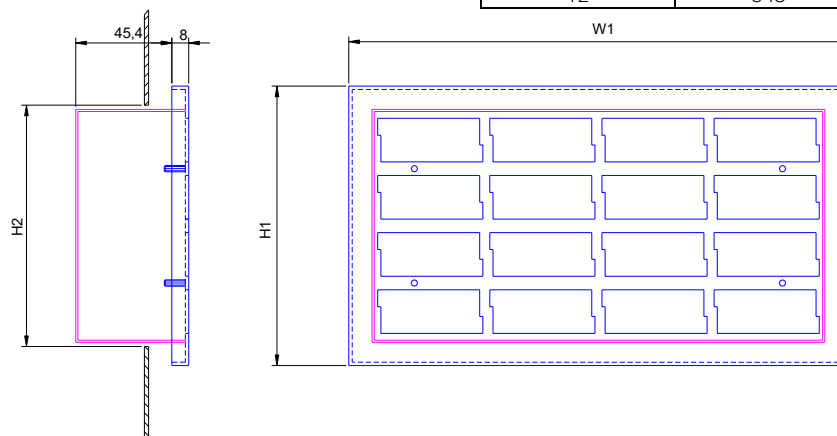
Available in Backlit LEDs, these displays provide panel indication where remote alarm handling or display logic is required. Common positive or common negative switching options are available. Add the optional Control Pushbutton station for easy alarm annunciator operation. These displays provide an ideal low cost alternative to individual panel lamps and matrix displays

Mechanical Details

No. of Columns	Width	
	Overall (W1)	Panel Cutout
4	236	216
6	342	322
8	448	428
10	554	534
12	660	640

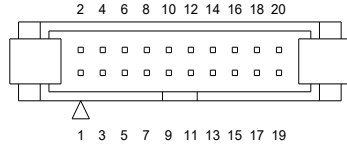
No. of Rows	HEIGHT	
	Overall (H1)	Panel Cutout (H2)
2	78	58
3	105	85
4	132	112
5	159	139
6	186	166
7	213	193
8	240	220
9	267	247
10	294	274
11	321	301
12	348	328

(Panel cutout tolerance +/- 1mm)





Electrical Connections – 2.54mm Ribbon Cable (Display Models C1670A)



Ribbon Header Pin Layout

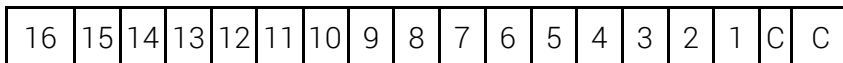
One connector per 16 windows (or part thereof).

Example: For a 5 high by 8 wide display (40 windows) there will be three ribbon connectors for windows 1-16, 17-32, and 33-40 respectively

Note: Windows are illuminated by switching the Window Inputs to 0V (Common Positive). Common negative not available in ribbon version.

Pin No.	Description
1	No connection
2	No connection
3	24 Volts
4	24 Volts
5	Window 16
6	Window 15
7	Window 14
8	Window 13
9	Window 12
10	Window 11
11	Window 10
12	Window 9
13	Window 8
14	Window 7
15	Window 6
16	Window 5
17	Window 4
18	Window 3
19	Window 2

Electrical Connections – Individual Wire Terminals (Display Model C1672A)



Terminal Strip Layout (View from Rear of display)

One terminal strip per 16 windows (or part thereof).

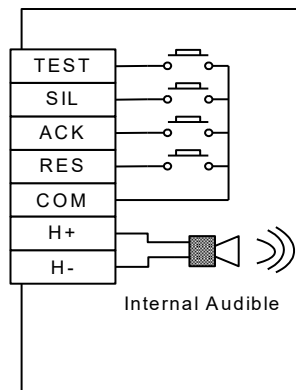
Example: For a 5 high by 8 wide display (40 windows) there will be three terminal strips for windows 1-16, 17-32, and 33-40 respectively.

Notes: For common positive, +24Vdc must be applied to terminal C. Windows are illuminated by switching the Window Input terminals to 0V. For common negative, 0V must be applied to terminal C. Windows are illuminated by switching 24V to the Window Input terminals

Pin No.	Description	
	Common +ve	Common -ve
C	24 Volts	0V
C	24 Volts	0V
1	Window 1	Window 1
2	Window 2	Window 2
3	Window 3	Window 3
4	Window 4	Window 4
5	Window 5	Window 5
6	Window 6	Window 6
7	Window 7	Window 7
8	Window 8	Window 8
9	Window 9	Window 9
10	Window 10	Window 10
11	Window 11	Window 11
12	Window 12	Window 12
13	Window 13	Window 13
14	Window 14	Window 14



Electrical Connections – “SART” Pushbutton and Audible (Models C167xA-R-C-1)



Specifications

Power Requirements

Voltage	24Vdc +/- 15%
Models	C1670A/C1672A
Type	Backlit LED
Current per window	50mA

Electrical Connection

C1670A	20-way insulation displacement ribbon cable connector for each set of 16 alarm windows (or part thereof). Compatible with the following products: <ul style="list-style-type: none"> Omni16C Remote Logic Units Maxiflex 16DO and 32DO modules Only available in Common Positive.
C1672A	“Cage-Clamp” terminals (2.5mm ² max - < 1.5mm ² recommended) Available in Common Positive (std.) or Common Negative Note: To be specified when ordering

Alarm Window Display

Window Size	24mm x 53mm
Legend Area	21mm x 48mm
Lamps per window	2 redundant LED's/Lamps per window for fail safe operation
Legend Type	Printed by the user on to clear film using a laser/inkjet printer using software template provided.

“SART” Control Pushbutton + Audible (optional)

No. of Pushbuttons	4 (Silence, Acknowledge, Reset, Test)
Pushbutton Location	Occupies bottom right window location.

	This window cannot be used for alarm display when the “SART” pushbutton station is installed
Contact Rating	30Vdc 100mA max.
Audible Device	Piezo Electric device internal to display
Audible Device Operating Voltage	2-28V dc
Audible Output	90dB at 1m (at 24Vdc operating voltage)

Temperature Range

Operating Temperature	0°C – 60 °C (+32°F – 140°F)
Humidity	Up to 90% RH, non condensing is recommended
Storage Temperature	-10°C – 70 °C (+14°F – 158°F)
Humidity	Less than 40% RH is recommended

Compliance to Standards

Ingress Protection (I.P.)	IP42 (front only)
Functional Safety	IE61508 SIL1 Compliant
Human Safety	EN 60950:1995
Emissions	EN55011 & EN550081-2:1994 Grp I Class A
Immunity – ESD	IEC 61000-4-2:1995, level 3
Immunity – RF Fields	IEC 61000-4-3:1995, level 3
Immunity – Fast Transients	IEC 61000-4-4:1995 2 kV – DC power port 1 kV – input/output lines
Supply Variations	IEC 61000-4-7:1991, 24 V dc +15% -10%
Vibration	IEC60068-2-6: 1995 10-150Hz. 1g
RoHS Compliance	2011/65/EU (RoHS2)





Ordering Information

ORDER CODE	DESCRIPTION
C1670A	Backlit LED Display with Ribbon Cable Termination Does NOT include LED Modules. Order separately from the list below Colours can be mixed in a display. Only available in Common Positive. Optional integral pushbuttons and Audible may be ordered.
C1672A	Backlit LED Display with individual wire Termination Does NOT include LED Modules. Order separately from the list below Colours can be mixed in a display. Available in Common Positive (std.) or Common Negative. To be specified when ordering. Optional integral pushbuttons and Audible may be ordered.

Notes

R = Number of Rows
C = Number of Columns
P = Optional Pushbutton Station + Audible [0 = None; 1 = Included]

Example

C1672-4-8-1 is an LED display with 32 windows arranged as 4 rows by 8 columns, with pushbutton station+ audible fitted to bottom right corner window.
LED modules must be specified and ordered separately.
If multiple colours are selected, then specify positions if you wish to take advantage of the free factory assembly facility.

Note: The Models C1671A and C1673A Incandescent Lamp Remote Displays have been discontinued.
The C1670A and C1672A are a drop-in replacement with an improved display*

Accessories To be ordered separately. (Will be fitted prior to shipment.)

LED and Lamp Modules

Backlit LED

C1650	OmniX/30 Red Backlit LED Lamp Board -
C1651	OmniX/30 Yellow Backlit LED Lamp Board
C1652	OmniX/30 Green Backlit LED Lamp Board
C1653	OmniX/30 Blue Backlit LED Lamp Board
C1654	OmniX/30 Orange Backlit LED Lamp Board
C1655	OmniX/30 White Backlit LED Lamp Board

Incandescent Lamps (as Spares only; Lamp version of Remote Display no longer available)

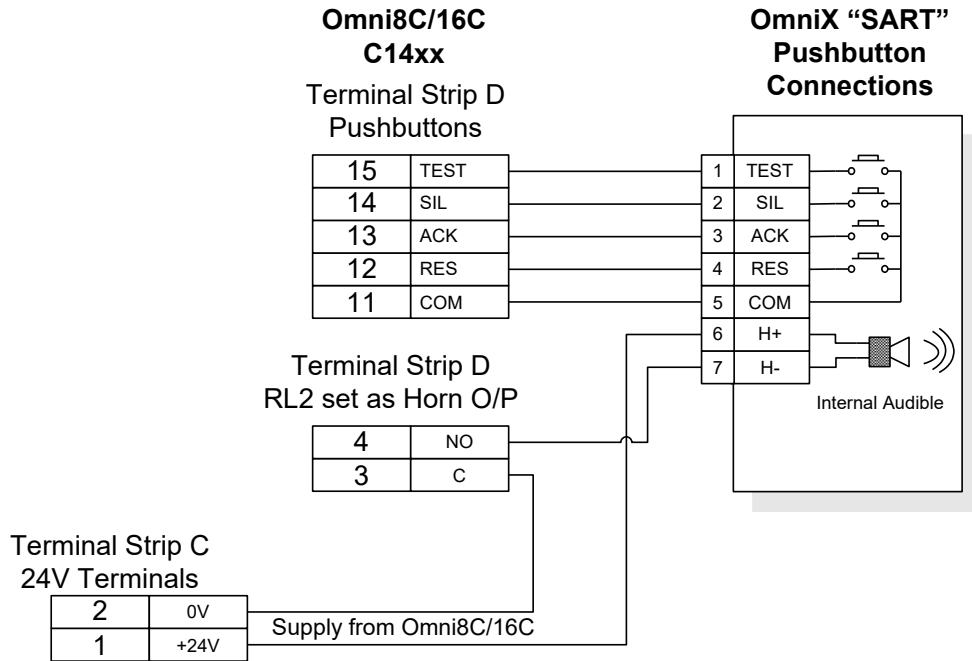
C1160	Lamp and Holder 8 Window Pack
C1161	Incandescent Lamp replacement 10 pack
C1162	Incandescent Lamp replacements 100 pack
C1163	Assorted Colour Filter Kit
C1164A	Plastic Windows and Diffuser Kit (8 pack)



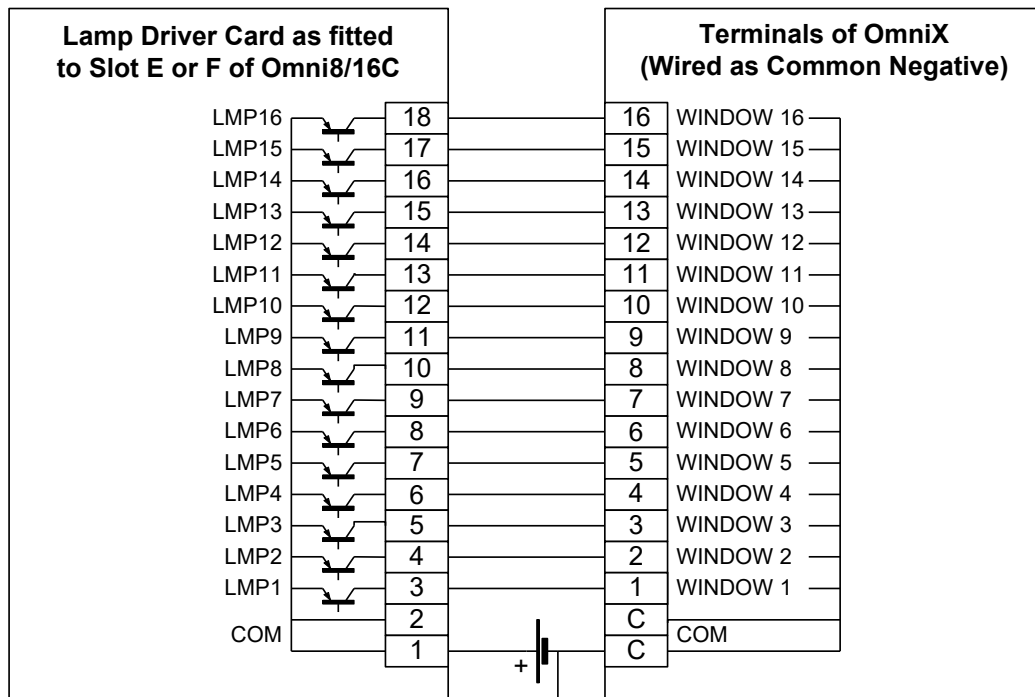


Application Notes

Connecting the OmniX "SART" Pushbutton and Audible to Omni8C/16C Alarm Annunciators



Connecting the Omni8C/16C Lamp Driver Board to OmniX



Connect to annunciator 0V if different supply is used for the lamps