



# Omni-X Remote Displays

Model C1670A Series Omni-X Custom Sized Remote Displays.

## DATASHEET

### FEATURES

- Sizes from 8 to 144 Windows
- Bright Back-Lit Display.
- Choice of Incandescent or Solid-State LED Display
- Redundant Lamps in every window for fail safety.
- Plug-in or Screw Termination for low Cost integration
- Practical Window Format for Readable Legends
- Window legends easily printed on inkjet/laser
- Optional integral pushbuttons and audible.

The Omni-X 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.



Omni-X Remote Display (6High x 4Wide)

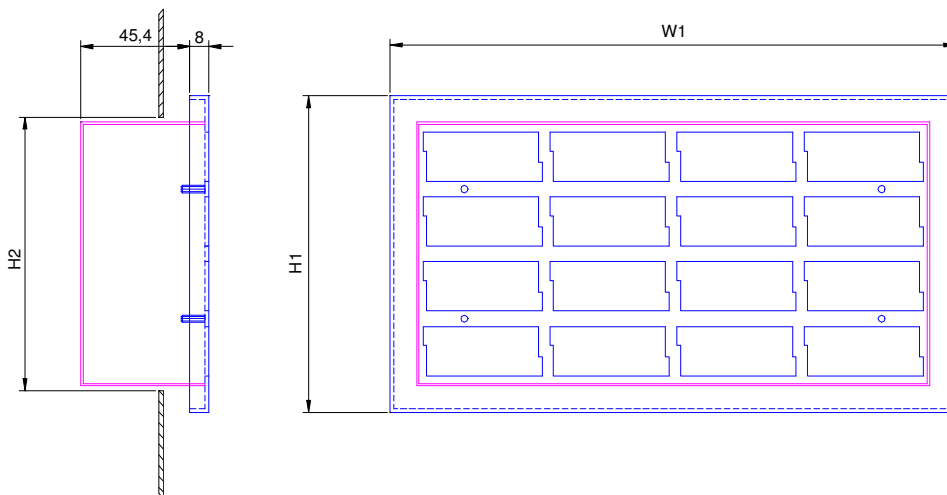
Available in dual incandescent lamps or ultra-reliable solid state LED back-lighting, these displays provide panel indication where remote alarm handling or display logic is required. Add the optional Control Pushbutton station for easy alarm annunciator operation. These displays provide an ideal low cost alternative to individual panel lamps and matrix displays.

### MECHANICAL DETAILS

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

(Panel cutout tolerance +/- 1mm)

HEIGHT		
No. of Rows	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





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## SPECIFICATIONS

### Power Requirements

Voltage	24Vdc +/- 15%	
Model	C1670A/C1672A	C1671A/C1673A
Type	Solid State LED	Incandescent Lamp
Current per window	50mA	120mA

### Electrical Connection

C1670A/C1671A	20 way insulation displacement ribbon cable connector per each 16 alarm windows (or part thereof). Compatible with the following products: <ul style="list-style-type: none"> <li>Omni16C Remote Logic Units</li> <li>Maxiflex 16DO and 32DO modules</li> </ul>
C1672A/C1673A	"Cage-Clamp" terminals (2.5mm <sup>2</sup> max - < 1.5mm <sup>2</sup> recommended)

### 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	0°C – 50 °C (+32°F – 122°F) Incand Lamps 0°C – 60 °C (+32°F – 140°F) Backlit LEDs
Storage	-10°C – 70 °C (+14°F – 158°F)

### Compliance to Standards

Safety	EN 60950:1995
Emissions	EN 55011 and EN50081-2:1994 Group 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 – All Lines
Supply Variations	IEC 61000-4-7:1991, 24 V dc +15% -10%
Vibration	IEC60068-2-6: 1995 10-150Hz. 1g

### Ordering Information

ORDER CODE	DESCRIPTION
C1670A-R-C-P	Solid State LED Display with Ribbon Cable Termination Does NOT include LED Lamp Modules. Order separately from the list below Colours can be mixed in a display. Optional integral pushbuttons and Audible may be ordered.
C1671A-R-C-P	Incandescent Lamp Display with Ribbon Cable Termination Includes Lamps fitted Supplied with a Colour Filter kit that can be user fitted to individual windows. Optional integral pushbuttons and Audible may be ordered.
C1672A-R-C-P	Solid state LED Display with individual wire Termination Does NOT include LED Lamp Modules. Order separately from the list below Colours can be mixed in a display. Optional integral pushbuttons and Audible may be ordered.
C1673A-R-C-P	Incandescent Lamp Display with individual wire termination. Includes Lamps fitted. Supplied with a Colour Filter kit that can be user fitted to individual windows. 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 Lamp 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.

### Accessories

#### LED Lamp Modules

Backlit Solid State Light Emitting Diode (LED) Modules for Models C1670A and C1672A to be ordered separately.

Will be fitted before delivery if position information provided..

C1650	Red Backlit LED Module
C1651	Yellow Backlit LED Module
C1652	Green Backlit LED Module
C1653	Blue Backlit LED Module
C1654	Orange Backlit LED Module
C1655	White Backlit LED Module
C1161	Incand. Lamp replacement 10 pack
C1162	Incand. Lamp replacements 100 pack

#### Other Accessories

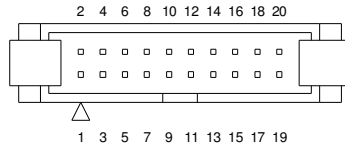
C1161	Spare Lamps – 10 piece pack
C1162	Spare Lamps – 100 piece pack
C1163	Assorted Colour Filter Kit (1 set supplied with each Lamp display)
C1165	Omni30 Window and diffuser kit (Set of eight spare windows + diffusers)



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## ELECTRICAL CONNECTIONS – 2.54mm Ribbon Cable (Display Models C1670A and C1671A)



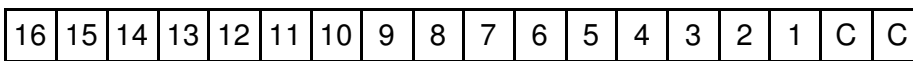
Ribbon Header Pin Layout  
One connector per 16 windows (or part thereof).

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: +24Vdc must be applied to pins 3 and 4 (3 & 4 are joined).  
Windows are illuminated by switching the Window Inputs to 0V.**

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
20	Window 1

## ELECTRICAL CONNECTIONS – Individual Wire Terminals (Display Models C1672A and C1673A)



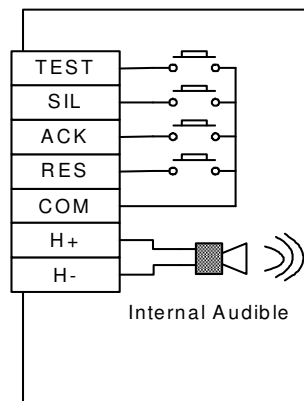
Terminal Strip Layout (View from Rear of display)  
One connector per 16 windows (or part thereof).

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.

**Note: The two terminals marked C must have +24Vdc applied (They are joined).  
Windows are illuminated by switching the Window Inputs to 0V.**

Terminal No.	Description
C	24 Volts
C	24 Volts
1	Window 1
2	Window 2
3	Window 3
4	Window 4
5	Window 5
6	Window 6
7	Window 7
8	Window 8
9	Window 9
10	Window 10
11	Window 11
12	Window 12
13	Window 13
14	Window 14
15	Window 15
16	Window 16

## ELECTRICAL CONNECTIONS – “SART” Pushbutton and Audible (Models C167xA-R-C-1)





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## APPLICATION NOTES

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

