Xtreme™ Fully Sealed Outdoor Displays



peerless-AV®

Performs
Beyond Expectations

Go beyond expectations for outdoor displays with Xtreme™ fully-sealed, seamless professional flat panel displays from Peerless-AV®. Without vents, filters, or exhaust fans nothing gets in and nothing gets out. Fully-sealed technology provides the highest levels of environmental protection possible and a streamlined design ideal for use in commercial applications both outdoors and indoors. All of which open up exciting new possibilities for screen applications regardless of the screen placement or environment.







Fully-sealed goes beyond Waterproof.

Only Xtreme™ professional outdoor displays feature fully-sealed, seamless technology earning the coveted IP 68 rating, the highest rating in the industry. Able to withstand pressurized washing from any angle, it is the only outdoor display that can be submerged in up to 4 feet of water for 1 hour and continue to operate reliably. Making it the first truly waterproof flat panel display.

Fully-sealed goes beyond Dustproof.

At NEMA 6, Xtreme™ professional outdoor flat panel displays provide the ultimate in protection against dust, microscopic particles and dirt. A perfectly smooth design prevents particles from collecting in seams, working into the display and damaging internal components. Xtreme™ flat panels are designed to ensure perfect operation even in the most demanding industrial environments.

Fully-sealed goes beyond Weatherproof.

The patented Ventless Dynamic Thermal Transfer™ system combines internal air circulation with a unique thermal transfer heat sink to effectively maintain the displays internal operating temperature. This technology provides displays with the industry's broadest operating range of -40°C to +60°C (-40°F to140°F), making the Xtreme™ display truly weatherproof from extreme heat to intense cold.

Fully-sealed goes beyond expectations.

Able to withstand casual impact and resist smoke, debris, micro-particles, acid base, chemical clouds, and dust, an Xtreme™ professional display is tough enough to operate in virtually any outdoor and industrial setting. The unique fully-sealed technology protects a high quality display, housed in a triple-protected aluminum body with rounded corners and optically bonded for readability. Get the highest levels of protection in a sleek display.





A Higher Standard

IP 68	NEMA 6	Operating Range



What's in an IP number?
The IP (Ingress Protection) rating indicates the external conditions LCD displays can withstand and describes the scope of protection when exposed to temperatures, fuel, oil (& their fumes), chemical clouds, acid based moisture and dust.

- The first number lists the ability to protect against dust. A 6 rating means the unit is completely protected against dust.
- The second number lists the level of protection against moisture. An 8 rating states that the display can be immersed in water and still operate.

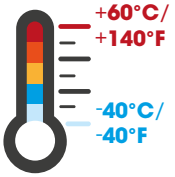
Xtreme™ fully-sealed displays have earned an IP 68 rating.



What does NEMA mean?
The National Electrical Manufacturers Association (NEMA) established a range of standards for enclosed electrical equipment. Each rating corresponds to a protection level against designated conditions.

- A NEMA 6 rating is defined as protection against dirt; against hose-directed water and the entry of water during occasional temporary submersion at a limited depth; and won't be damaged by the external formation of ice on the enclosure.

Xtreme™ fully-sealed displays have earned the NEMA 6 rating.



What is operating range?
Operating range is the acceptable temperature range that a screen will work without exposing the LCD to damage.

The Xtreme™ outdoor display provides the widest operating range of any outdoor display. The unique Ventless Dynamic Thermal Transfer™ system keeps the display operating perfectly in any environmental conditiond without the need for exhaust vents or additional expensive HVAC systems.

Xtreme™ fully-sealed display operates from -40°C to +60°C

IP54 rating	IP56 rating	IP65 rating	IP68 rating
Particle protection 5: Dust protected. Ingress of dust is not entirely prevented	Particle protection 5: Dust protected. Ingress of dust is not entirely prevented	Particle protection 6: Dust tight. No ingress of dust or other particles	Particle protection 6: Dust tight. No ingress of dust or other particles
Liquid protection 4: Splashing of water protected. Water splashing against the enclosure from any direction should have no harmful effect	Liquid protection 6: Powerful water jet protected. Water jets from 12.5mm nozzle projected against the enclosure from any direction should have no harmful effect	Liquid protection 5: Water jet protected. Water jets from 6.3mm nozzle projected against the enclosure from any direction should have no harmful effect	Liquid protection 8: Immersion beyond 1m depth. The equipment is suitable for continuous immersion in water under specified conditions

Fully-Sealed Technology is Only The Beginning

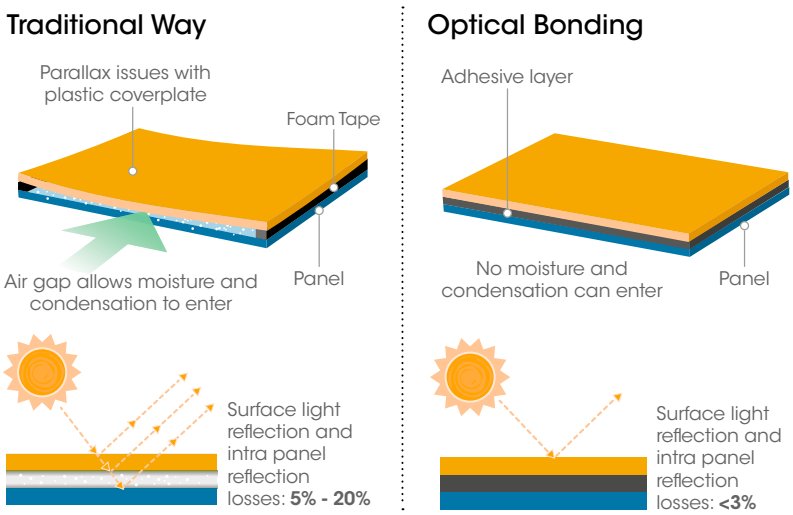


Ventless Dynamic Thermal Transfer™ System

Xtreme™'s patented Ventless Dynamic Thermal Transfer™ system keeps internal components safely warmed in extreme cold and properly cooled in extreme heat, all without vents, filters or exhaust fans. Making possible the widest operating range in professional outdoor displays, offering new and exciting opportunities for display placement.
This unique system also reduces running costs as the Optical Bonded displays deliver high brightness output with a much lower power consumption, eliminating the requirement for additional HVAC equipment

Optical Bonding for higher contrast in direct sunlight

Optical bonding is a technique that eliminates the air gap between the display panel and the safety glass, enabling the Xtreme display to significantly increase the image contrast for exceptional outdoor performance. It improves the readability of the display in direct sunlight by dramatically reducing reflections which occur at each air / glass interface. By using an adhesive gel with the same refractive index as the glass it effectively forms a non-reflective layer above the display. It also prevents the entry of moisture and the subsequent formation of condensation between panel and glass.

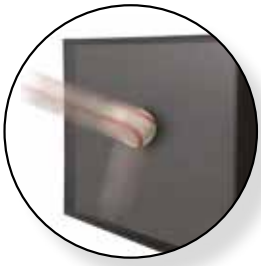




Ambient Light Sensor
Automatically adjusts the high-contrast panel to best match the lighting conditions making the content easy to see in bright and varying sunlight.



Sealed Cable Entry
The water-proof seal ensures that the signal connections are unaffected by weather conditions and provides maximum protection to internal components



Impact Resistant Safety Glass
Protects the screen from impact and the elements. Should the screen be broken, it won't shatter, protecting nearby viewers and property.



Device Connectivity
All standard AV inputs, including 3 HDMI sockets, provide a connection to any content driver, to deliver everything from computer media files to the HD of Blu-Ray.

Outdoor Digital Kiosks For Lower Total Cost of Ownership





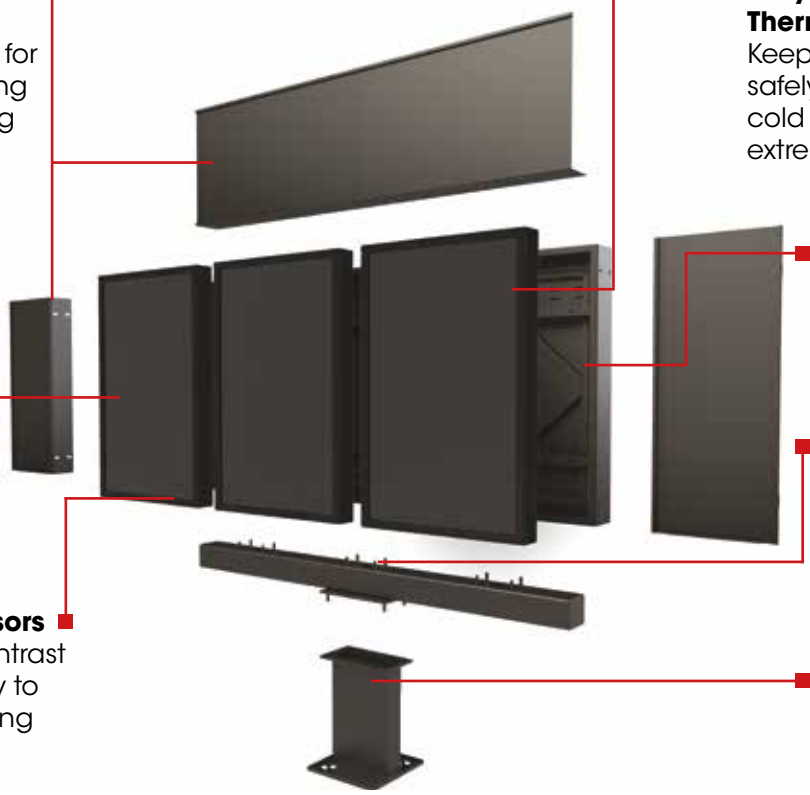
Peerless-AV® Xtreme™ Outdoor Digital Menu Board Kiosks engage your customers in ways static signage can't – offering sharp, high-definition displays with dynamic, eye-catching text, animation and video. Lower your total cost of ownership (TCO) with these units using up to 70% less energy than typical digital menu boards requiring additional compressor air conditioned systems.

The Xtreme™ Outdoor Digital Menu Board Kiosks are built for ease of installation. The install is a two-man job without the need for cranes or forklifts. The units run on standard 220V-240V mains supply, which means there is no need to trench new power.

Optional Topper and Sidekick
Static signage area for additional advertising space and branding opportunities

IP68 Rating
Prevents water, dust, ice, or air from entering the flat panel display

Ambient Light Sensors
Adjusts the high-contrast panel automatically to match current lighting conditions



Fully-Encapsulated Dynamic Thermal Transfer System
Keeps internal components safely warmed in extreme cold and properly cooled in extreme heat

Aluminium Construction
Sheds heat fast and powder-coated with a fade-resistant formula

Modular Design
Displays can be replaced or repaired without disturbing the adjacent units

Steel Pedestal
Provides strength, stability and able to withstand hurricane force winds

Where Will You Use Xtreme™ Outdoor Displays and Kiosks?

CASE STUDIES

Transportation



In late 2012, the **Washington Metropolitan Area Transit Authority** (WMATA) rolled out a new digital signage project designed to inform riders on its Metrorail system about track work, weekend closures and other travel issues before they pass through the fare gate at any of the system's 88 stations. The project required displays that could withstand rain, snow, dust, dirt, pressure washing and other ravages unavoidable in the transit environment.

Visitor Attractions



In mid-2014, the **Columbus Zoo and Aquarium** embarked on a project to revamp the facility's signage. A well-known attraction welcoming approximately 2.2 million guests annually, the zoo was relying on static wayfinding signage and a handful of flatscreen TVs. To enhance visitor experience, the Zoo sought out a rugged, reliable, and weatherproof solution to keep guests informed on zoo and aquarium updates, events, and severe weather warnings

Drive Through



In late Spring 2014, **Clean Image Car Wash** made the decision to update their facility's signage. Their static services board, located at the entrance of the car wash, required regular upkeep due to weathering and consistent service changes. Clean Image decided it was time to look for a digital solution that would look sleek and modern, while being able to withstand the elements, including any water and cleaning products associated with the car wash.

Read the full stories online at www.peerless-av.com/en-uk/case-studies

Quick Serve Restaurant



Retail



Entertainment



Marina



Construction



Leisure



Product Specifications & Accessories



CL-42PLC68-OB-EUK : Landscape
CLP-42PLC68-OB-EUK : Portrait*

Display Size: 995mm x 588mm x 143mm
VESA Pattern: 600mm x 400mm
Net Weight: 37.2kg (82lb)



CL-47PLC68-OB-EUK : Landscape
CLP-47PLC68-OB-EUK : Portrait*

Display Size: 1107mm x 652mm x 143mm
VESA Pattern: 600mm x 400mm
Net Weight: 44.5kg (98lb)



CL-55PLC68-OB-EUK : Landscape
CLP-55PLC68-OB-EUK : Portrait*

Display Size: 1280mm x 751mm x 152mm
VESA Pattern: 600mm x 400mm
Net Weight: 62.6kg (138lb)

* All displays for use in portrait orientation feature a polarised coating to enhance outdoor readability



Single Digital Menu Board Kiosk
KOP547-XTR-1-EUK

Contains (1) 47" Optically Bonded Peerless-AV® Xtreme™ Polarised Display



Double Digital Menu Board Kiosk
KOP547-XTR-2-EUK

Contains (2) 47" Optically Bonded Peerless-AV® Xtreme™ Polarised Displays



Triple Digital Menu Board Kiosk
KOP547-XTR-3-EUK

Contains (3) 47" Optically Bonded Peerless-AV® Xtreme™ Polarised Displays



EWMU



ECMU

EWMU Environmental Wall Mount
EPMU Environmental Pedestal Mount
ECMU Environmental Ceiling Mount

VESA 600x400mm / Max 91kg / Tilt 0° to 15°	
EPMU Pole Height	1.52m, 1.8m, 2.13m, 2.44m (5ft, 6ft, 7ft, 8ft)
ECMU Ceiling Drop	457, 610, 914, 1289mm (1ft, 2ft, 3ft, 4ft)



Outdoor Media Player Enclosure - Environmentally Controlled
CL-ENCL68-EUK

Sealed enclosure protects media players
Electrothermal system maintains safe operating temperature range
Accommodates media players 363 x 269 x 89mm
Internal power receptacle minimises cables



Outdoor Weatherproof Cover - with padded insert

CLCOV-SM-GR for 40"-42" display
CLCOV-MD-GR for 46"-47" display
CLCOV-LG-GR for 55" display

Screen Specifications

LCD Display	CL-42PLC68-OB-EUK CLP-42PLC68-OB-EUK	CL-47PLC68-OB-EUK CLP-47PLC68-OB-EUK	CL-55PLC68-OB-EUK CLP-55PLC68-OB-EUK
Screen Size	42" Diagonal	47" Diagonal	55" Diagonal
Aspect Ratio	16:9	16:9	16:9
Resolution	1920 x 1080	1920 x 1080	1920 x 1080
Optical Bonded	Yes (Higher Perceived Brightness)	Yes (Higher Perceived Brightness)	Yes (Higher Perceived Brightness)
Display Brightness	700cd/m²	700cd/m²	700cd/m²
Effective Brightness	*Optical bonding delivers the ideal contrast levels required for flawless viewing in direct sunlight - see page 3 for details*		
Backlight Adjustment	Automatic (Ambient Light Sensor)	Automatic (Ambient Light Sensor)	Automatic (Ambient Light Sensor)
Contrast Ratio	1000:1	1000:1	1000:1
Viewing Angle	178° Vertical/Horizontal	178° Vertical/Horizontal	178° Vertical/Horizontal
Response Time	9ms (Grey to Grey)	9ms (Grey to Grey)	9ms (Grey to Grey)
Refresh Rate	120Hz	120Hz	120Hz
Mechanical			
Size (W x H x D)	995mm x 588mm x 143mm	1107mm x 652mm x 143mm	1280mm x 751mm x 152mm
Glass	Anti-reflective & UV Protection	Anti-reflective & UV Protection	Anti-reflective & UV Protection
VESA® Pattern	600mm x 400mm	600mm x 400mm	600mm x 400mm
Net Weight	37.2kg (82lb)	44.5kg (98lb)	62.6kg (138lb)
Carton Size (W x H x D)	1067mm x 660mm x 211mm	1194mm x 737mm x 211mm	1346mm x 813mm x 211mm
Power			
AC Input	90 VAC to 240 VAC, 50 to 60 Hz	90 VAC to 240 VAC, 50 to 60 Hz	90 VAC to 240 VAC, 50 to 60 Hz
Power Consumption	Display – 101 W (Nominal) Low Temperature Heater – 700 W	Display – 135 W (Nominal) Low Temperature Heater – 700 W	Display – 145 W (Nominal) Low Temperature Heater – 700 W

Display Specifications

Input/Output Connections		Display Controller Features	
VGA Input	15 pin D-SUB (x1)	Picture Adjustment	Brightness/Contrast/Saturation/Tint/ Sharpness/Noise reduction
HDMI Input	HDMI (x3) 480i, 480p, 720p, 1080i, 1080p	Picture Mode	Standard, Dynamic, Personal, Soft
S-Video Input	Mini DIN (x1)	Color Temperature Adjustment	Cool, Normal, Warm
CVBS Input	RCA (x1)	Screen Adjustment	Normal/Wide/Zoom
YPbPr Input	RCA (x2), 480i, 480p, 720p, 1080i, 1080p	Clock, Sleep Timer	Yes
VGA Stereo Audio Input	3.5mm (x1)	MTS	Yes
CVBS Stereo Audio Input	RCA (x1)	V-chip	Yes
YPbPr Stereo Audio Input	RCA (x1)	Closed Caption	Yes
Audio Stereo Output	8W + 8W, 8 Ohm (Optional Feature)	Electronic Program Guide	Yes
Electronic Program Guide	Yes	Noise Reduction	Yes
Environmental		3-D Comb Filter & De-Interlace	Yes
Operating Temperature	-40°C to 60°C (-40°F to 140°F)	Mute	Yes
Storage Temperature	-18°C to 51°C (Unit Left Plugged In)	OSD Language	English, French, Spanish, German
IP Rating	IP68 (To a Depth of 5ft)		
Safety/EMC	CE Approved, UL, FCC Class B		

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