Outdoor LED Display Heat-dissipation Guidances (Please read)

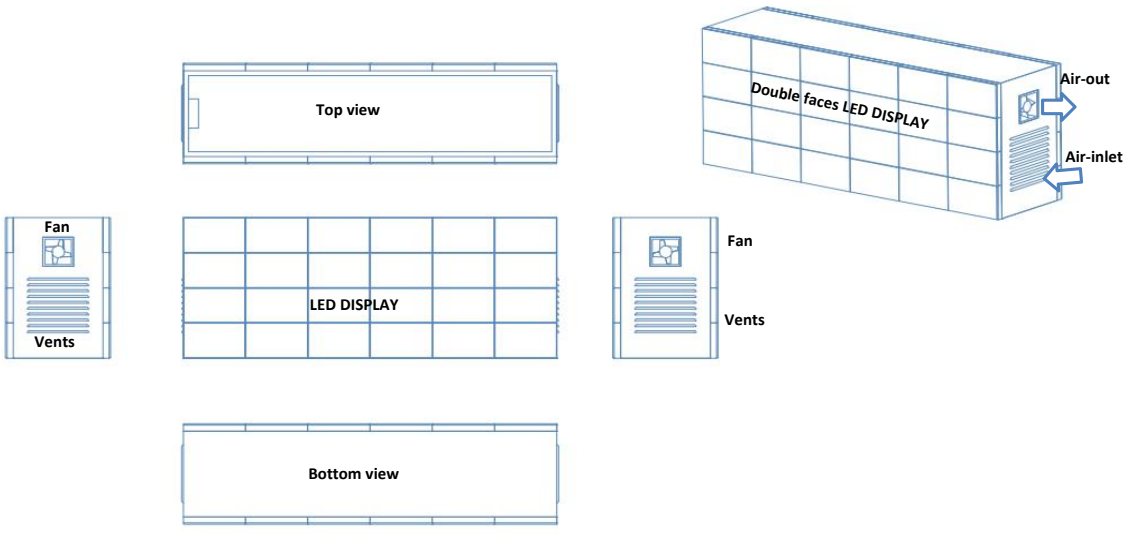
The U,U-PRO, S and XT series of LED display products of our company have LED panels with fully sealed aluminum housings, LED panel relies on the aluminum housing for passive heat dissipation, the heat is concentrated on the aluminium housing and dissipated into the ambient air behind the LED display.If the installation of the LED display has no cover and completely open in the backside, then the LED display body does not need any heat dissipation equipment, the LED panel aluminium body can meet the natural heat dissipation requirements.If the installation of the LED display is closed in the backside, or the LED display is double-sided, or wrap around the edges, besides wall-mounted LED display, It is necessary to use ventilation meansure and equipment to dissipate the heat behind the display to ensure the normal operation of the display.If the heat of the LED display is not dissipated in time,It gets hotter and hotter in the limited interior space of the display, which directly affect the life of electronic components, burn out the circuit, burn out power supply or drive IC. Please do the heat dissipation and ventilation treatment for the display,which is required.**Please kindly note that if the LED display installation is not ventilated and cooled in accordance with this requirement, the damage of LED display panel is not within the company's after-sales maintenance and warranty liability.**

LED panel Qty. (In one face of LED Display)	**≤ 6 pcs LED panels**	**7 pcs to 20 pcs LED panels**	**21 pcs to 50 pcs LED panels**	**50 pcs to 100pcs LED panels**	**100 pcs to 500 pcs LED panels**	**≥ 500 pcs LED panels**
Single face LED display with backside closed	leave vents at top and bottom, left and right sides of LED Display to ensure natural air convection. Perforated sheet metal is used for the edges of LED display body (hole diameter is not less than 5mm)	leave vents at top and bottom, left and right sides of LED Display to ensure natural air convection.Perforated sheet metal is used for the edges of LED display body (hole diameter is not less than 5mm)	Install Two pcs of ≥50W waterproof fans for ventilation	Install Two pcs of ≥100W waterproof fans for ventilation	Install Four pcs of ≥ 100W waterproof fans for ventilation	Install Four pcs of ≥ 200W waterproof fans for ventilation
Double faces LED display with closed cabinet	leave vents at top and bottom, left and right sides of LED Display to ensure natural air convection. Perforated sheet metal is used for the edges of LED display body (hole diameter is not less than 5mm)	The distance between the two faces of display is more than 0.5 meters,the above ventilation method is used. If the distance is less than 0.5 meters, please install two waterproof fans of more than 50W.	Install Two pcs of ≥50W waterproof fans for ventilation	Install Two pcs of ≥100W waterproof fans for ventilation	Install Four pcs of ≥ 100W waterproof fans for ventilation	Install Four pcs of ≥ 200W waterproof fans for ventilation
Wall-mount installation LED display	leave vents at top and bottom, left and right sides of LED Display to ensure natural air convection. Perforated sheet metal is used for the edges of LED display body (hole diameter is not less than 5mm)	leave vents at top and bottom, left and right sides of LED Display to ensure natural air convection.Perforated sheet metal is used for the edges of LED display body (hole diameter is not less than 5mm). If the distance between the display and the wall is less than 0.15 metres,two waterproof fans of more than 25W should be installed on the upper part of the display.	Install Two pcs of ≥50W waterproof fans for ventilation	Install Two pcs of ≥100W waterproof fans for ventilation	Install Four pcs of ≥ 100W waterproof fans for ventilation	Install Four pcs of ≥ 200W waterproof fans for ventilation

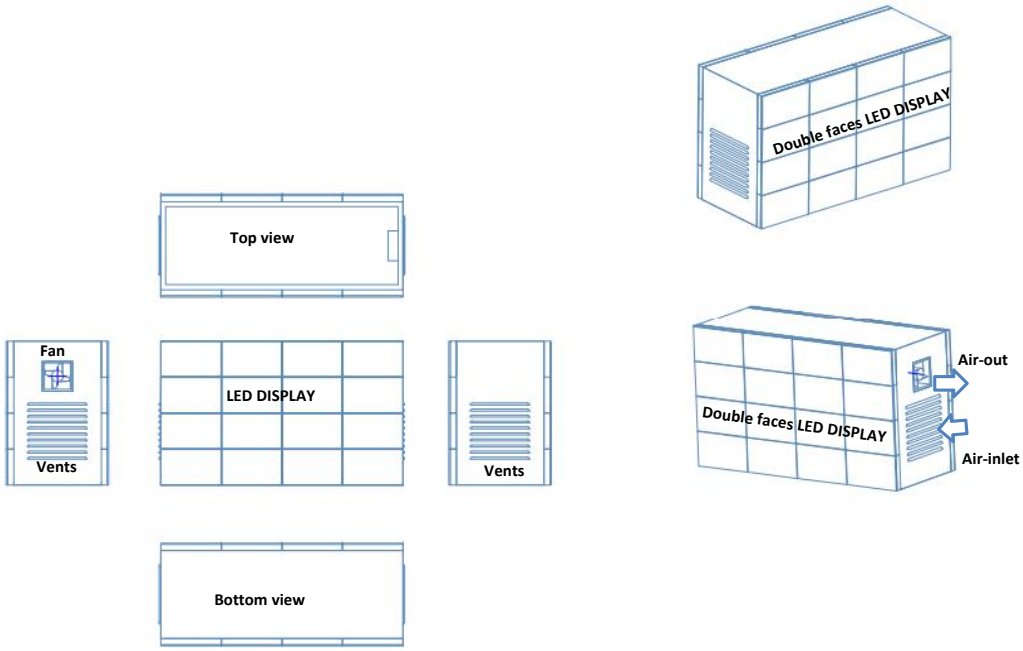
Remarks: Please install the fan in the upper part of the LED display body, the wind blows outward, in the lower part of the display open air inlet holes. Pay attention to the air inlet hole can not be too small in order to ensure the convection of air. Waterproof fans can be replaced by exhaust fans.

Examples of Heat dissipation modes

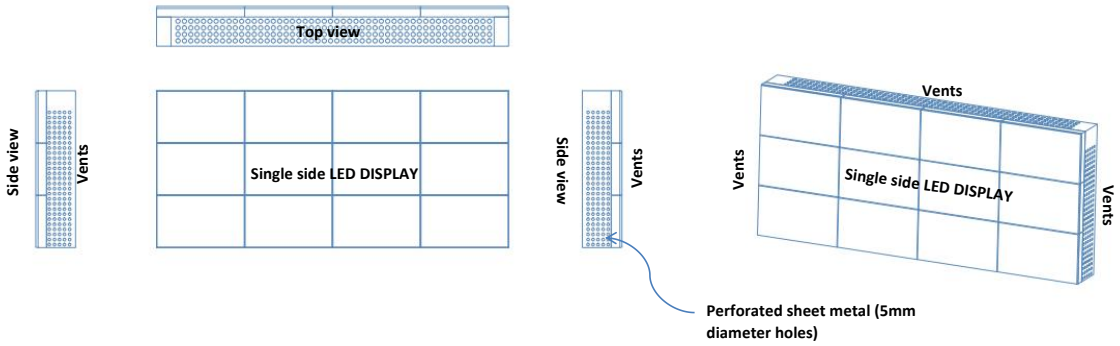
Example：4H*6W(pcs) LED display panels, double faces LED display, According to the above table, two fans of more than 50W should be installed, which can be installed at the top of the display or the upper part of the side. The air inlet should be opened at the bottom of the display or the lower part of the side to facilitate air convection.



Example：4H*4W(pcs)LED display panels, Double faces LED display,According to the above table，two fans of more than 50W should be installed, which can be installed at the top of the display or the upper part of the side. The air inlet holes should be opened at the bottom of the display or the lower part of the side to facilitate air convection.



Example：3H*4W(pcs) LED display panels,wall-mount LED display,According to the above table，need to have vents at four sides of display ,Use natural airflow to dissipate heat.Perforated sheet metal is used for the edges of LED display body (hole diameter is not less than 5mm)



For customers options, can add a thermostat inside of LED display and set startup at 60 degrees Celsius, the air temperature above 60 degrees Celsius can start the fan.

Please contact your sales contact should you have anywhere unclear or any questions, thank you for support !