



Why LED Boards Fail After a Weather Event

LED boards that are installed in an outdoor environment are susceptible to the elements of Mother Nature on a daily basis. Rain, heat, cold, humidity can all adversely affect an LED installation in different ways.

RAIN

The majority of LED screens installed outdoors are IP65 rated on the front and IP45 rated on the back. IP ratings are Ingress Protection codes used to define the ability for a mechanical or electrical enclosure to protect the internal components against intrusion, dust, accidental contact, and water.

It is easy to notice the difference in ratings will result in different levels of protection for the front and rear of the LED screen. Following a rainy day, if modules or power supplies have experienced any type of failure, this is a good indication that rainwater is entering the panel.

Check if there is water in a module or water pooling in the bottom of the cabinet. If water is present, check the panels above the intrusion as water could be getting in and traveling down a cable pass through. If the issue returns on the next rainy day, there may be issues within the seals of modules that also needs to be checked.

HEAT

Days with warm temperatures can cause damage to power supplies, which are more susceptible to heat. If a power supply fails, verify the exhaust fans are working on the power supply. The bearings in the fans on the power supply may go out and be the cause of overheating.

Most power supplies installed in LED boards have an internal thermal breaker that will trip when the unit overheats. Turning the source power off will allow the power supply to reset this internal breaker and possibly return to service.

If failures continue, it may be time to replace the unit.

COLD

Cold can affect the internal cabling and connections to LED modules. If modules fail in cold weather, check the internal cabling first before replacing the module. In some cases, disconnecting and reseating the cable connection will allow the module to continue working.

HUMIDITY

In humid conditions, condensation can form in the overnight hours on the modules causing electrical components on the module to short. When the panel dries out modules may return to normal operation. Condensation is more likely to occur when the power to the screen is turned off at night and turned on in the morning. To prevent this failure, allow the screen to remain powered on overnight in order to maintain moving airflow inside the panel.

For Additional Help

If after following these steps there are outages on the LED board please contact Southpaw Service for assistance at:

(469)299-4111

or service@southpawlive.com.

We have technicians ready to assist as our country returns to hosting great sporting events!

For more information on any of the services Southpaw offers, please contact service@southpawlive.com

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