

What are IP Ratings?

IP Rating (aka IP Code) is shorthand for Ingress Protection, which is defined by the British Standards Institution (BSI) and International Electrotechnical Commission (IEC). Each number of an IP rating provides a concrete way to classify how resistant equipment is to damage – the two digits referring to the level of protection against solid objects and water respectively.

IP ratings not only make it easier to understand what level of protection a product has, it deters manufacturers from using terms like ‘weather resistant’, or ‘waterproof’ and forces them to build to a consistent specification giving you more confidence when buying. **Use the chart on page 2 to work out IP Ratings for your equipment.**

IP Rating Examples

IP20 Moving Head

Protection against solid objects larger than 12mm with no protection against water or liquids. Keep clear of all water sources.

IPX4 Garden Speaker

No information available on resistance to solid matter. Protects against splashing water from any direction with no harmful effects

IP55 Surface Speaker

Partial protection against all solid matter and low-pressure water jets (6.3mm) from any direction. Ingress may occur with no damage to parts or performance.



IP20

CHAUVET Professional Rogue R1X Spot LED Moving Head



IPX4

TOA GS302 ABS Garden Speaker



IP55

Void Cyclone 55 Passive Surface Mount Speaker

IP Ratings Chart

First Digit: Protection from solid objects and particulate matter

IP Rating	Level of Protection
X	No information available from manufacturer on protection against solid matter
0	Not rated against damage from solid objects or particles
1	Protects against solid objects larger than 50mm
2	Protects against solid objects larger than 12mm
3	Protects against solid objects larger than 2.5mm
4	Protects against solid objects larger than 1mm
5	Partial protection against solid objects and particles such that no harm will come to components or performance
6	Full protection against solid objects and particles including a vacuum seal, tested against continuous air flow

Second Digit: Protection from liquids and moisture

IP Rating	Level of Protection
X	No information available from manufacturer on protection against water ingress
0	Not rated against damage from liquids or moisture
1	Protects against vertical falling drops of water when in upright position
2	Protects against vertical falling drops of water when tilted up to 15° from normal upright position
3	Protects against direct water sprayed when tilted up to 60° from normal upright position
4	Protects against splashing water from any direction resulting in no harmful effects
5	Protects against low pressure water jets (6.3mm) from any direction resulting in no harmful effects
6	Protects against low pressure water jets (12.5mm) from any direction resulting in no harmful effects
7	Protects against full immersion in water a maximum depth of 1 metre for up to 30 minutes
8	Protects against prolonged under water immersion as specified by the manufacturer. Additional environmental protections may be included such as against temperature, pressure and chemical harm
9K	Protects against high-pressure and high temperature water jets and cleaning procedures