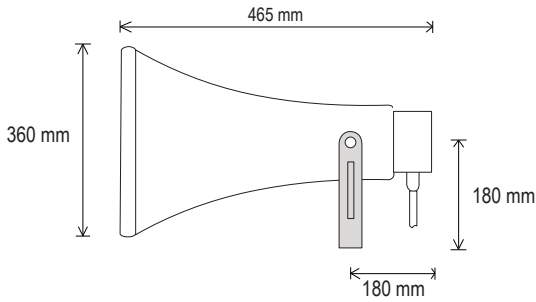


### Introduction

HS810 is an outdoor high power clear horn speaker, which is built to differ from other conventional aluminum flare horns. It has better frequency response, while able to deliver the distance required with better sound quality, both for voice and non bass music.

It is rated at IP65, 50W 100V or 100W 8 Ohm with power tapping at 50 / 25 / 12.5 W 100V line. HS810 is suitable for large factories, beaches, mosques and other installations that require loudness and extra clarity.

### Physical Dimensions



### Technical Specifications

Power rating	50W 100V line / 100W 8 Ohm
Speaker / driver	4" woofer + 1" HF
Operating voltage	70 / 100V
Power taps	12.5 / 25 / 50W 100V line
	100W @ 8 Ohm
Frequency response	200 - 8 kHz
SPL @ 1W / m	103 dB
Max SPL @ 1m, 1 kHz	120 dB
Coverage angle - 1 kHz	73 deg
	- 4 kHz      84 deg
	- 8 kHz      45 deg
Operating temperature	-5 to 60 deg
Humidity	< 90 %
IP rating	IP 65
Flare / bracket	Aluminum, MS epoxy coated
Overall size ( W/O bracket )	360 x 465 mm
Weight	3.75 kg
Colour	Beige






### Guide to Installation

#### 1 Unpacking and check contents

Unpack the horn speaker from the carton and the following items shall be available :

1. Horn speaker with bracket attached
2. Instruction manual

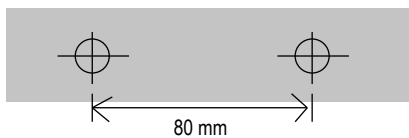
Mounting fasteners are not provided. Below are recommended parts for mounting the speaker

-  M5 x 50mm expandable bolts x 2 pcs
-  M5 Spring washer x 2
-  M5 Washer x 2
-  #10 x 1 1/2" self tapping screws x 2 pcs
-  Wall plugs x 2 pcs

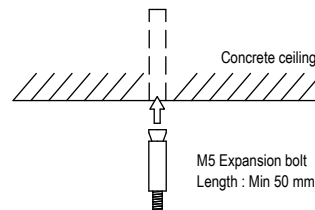
Recommended for ceiling / slab mounting

#### 2 Wall / Ceiling bolt mountings

The horn speaker can be mounting on the ceiling or wall. Using bolt and nuts is highly recommended especially for ceiling installation. For wall mounting, using M5 self tapping screws with wall plugs is possible.

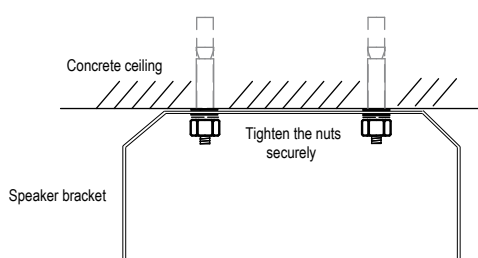
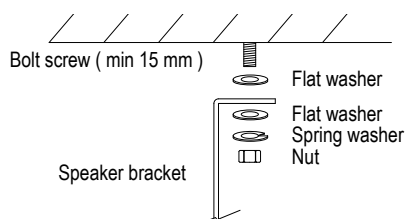


Mark and drill holes to the wall / ceiling with drill bit size suitable to insert M5 expandable bolts

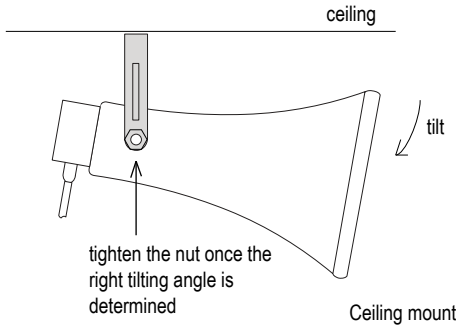


#### 3 Speaker mounting

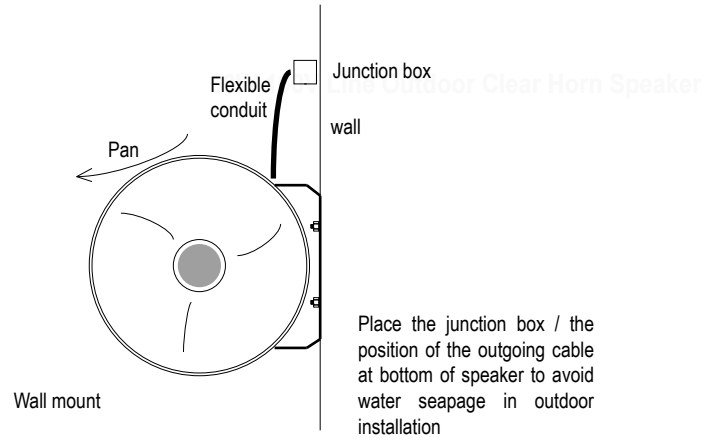
Mount the horn speaker assembly's bracket to the bolt together with the washer, spring washer and the nuts.



**4 Secure horn flare to mounting bracket**

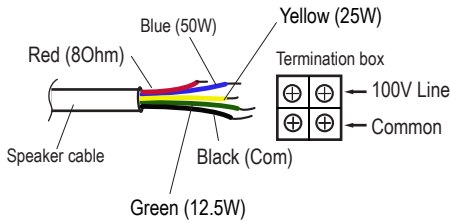


For outdoor installation, it is always recommended to tilt the speaker downwards to avoid water collection during rain.



**5 Terminating the cable**

Select the power rating required when terminating the cable.



	Green	Yellow	Blue	Red
100V	12.5W	25W	50W	-
8 Ohm	-	-	-	100W

**WARNING :**

Do not connect Red and Black ( Common ) when using power amplifier with 70 / 100V line outputs.

The power tap to be used is subjected to the required coverage area, the distance between the speaker and intended audience and the SPL expected at the targeted distance.

The chart illustrated here can be used to determine which power tap is suitable for the installed area.

**SPL Distribution Chart for a direction : tilt angle : 0 degree.**

SPL (dB) vs Distance (m) - @ 1 kHz

Horizontal Distance	1m	5m	10m	15m	20m	30m	40m	50m
1W (ref)	103	89	83	79	77	73	71	69
25W	117	103	97	93	91	87	85	83
50W	120	106	100	96	94	90	88	86

**Tips for installation**

