

Q Install Warranty

Q Install loudspeakers are warranted free of defects in materials and workmanship for a period of 2 years from the date of purchase. During the warranty period Q Install will, at its option, repair or replace any product found to be faulty after inspection by the company or its appointed distributor or agent.

Misuse and fair wear and tear and not covered by warranty.

Goods for repair should in the first instance be returned to the supplying dealer. If this is not possible the item/s should be sent carriage paid preferably in the original packaging to Q Install or their appointed distributor for your area and accompanied by proof of purchase. Damage sustained by goods in transit to the repair centre is not covered warranty. Return carriage will be paid by Q Install or their distributor as appropriate.

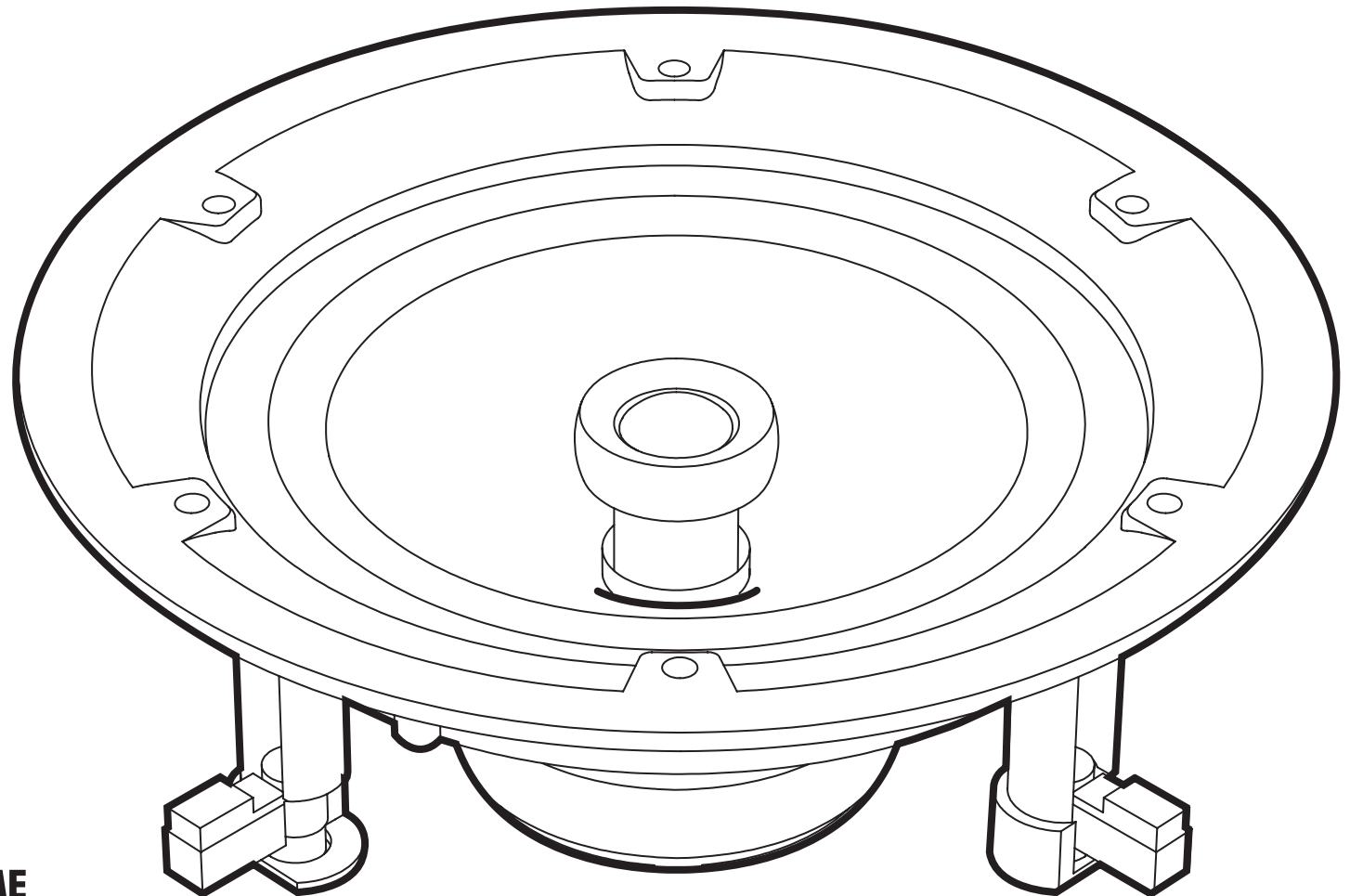
The warranty does not in any way affect your legal rights.



COVERT LOUDSPEAKERS

Quick start installation instructions for Q Install models:

Qi 65C, Qi 65S, Qi 65CP, Qi 65SP, Qi 65C St, Qi 65S St,
Qi 65CP St, Qi 65SP St, Qi 65CW, Qi 65CW St



Appointed Distributor in the UK:

armourHOME

Armour Home Electronics Ltd
Units 7 & 8, Stortford Hall Industrial Park
Bishops Stortford, Herts, UK
CM23 5GZ

Thank you for purchasing Q Install ceiling speakers.
Please take a few minutes to familiarise yourself with the installation procedure.
The speakers are designed for installation into plasterboard ceilings or stud wall cavities.

Warning Notices

- Before cutting the mounting hole ensure that there is no conflict with other in-ceiling or in-wall installed items such as pipe work, electrical cabling, gas pipes and supporting joists etc.
- It is important to ensure that the installation complies with relevant building regulations.
- Take care not to apply pressure to the speaker cone and tweeter dome during installation.
- Ensure that the speaker model is suitable for use in the intended application. Only CVW models should be used where there are high levels of moisture.

INSTALLING THE SPEAKERS

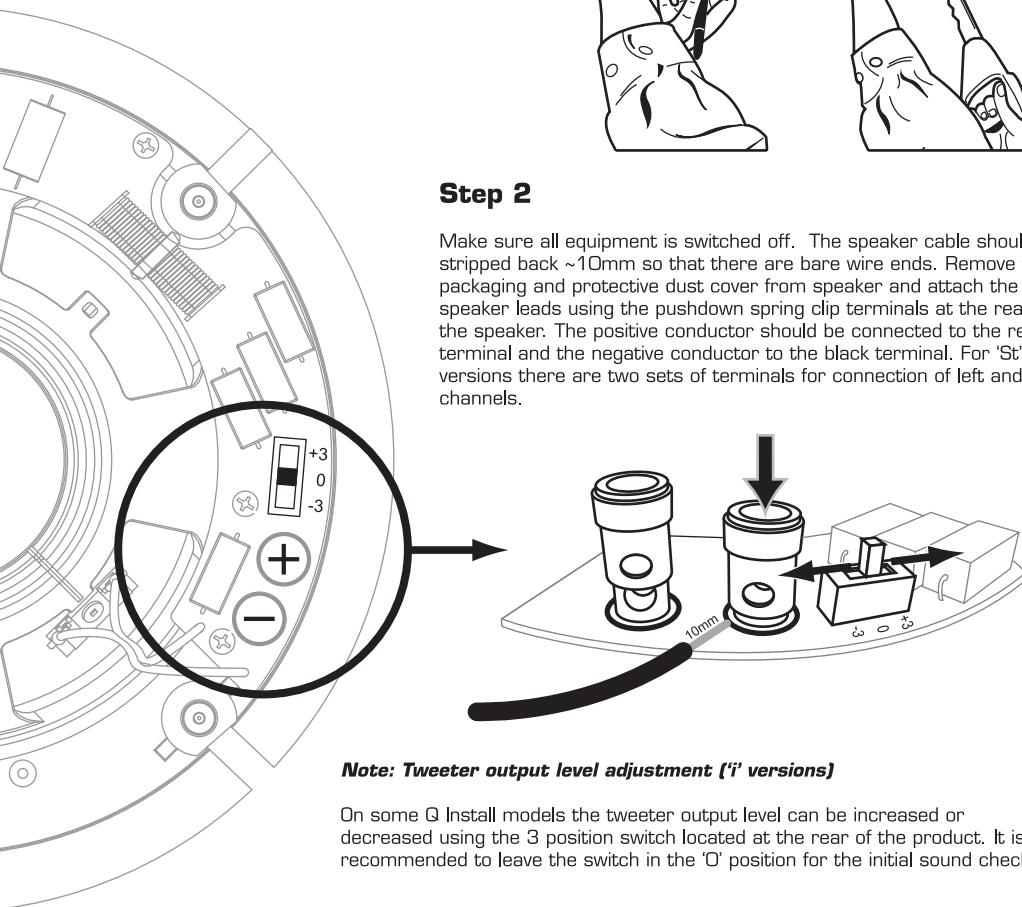
Step 1

Select a suitable mounting location for the speaker taking note of the Warning Notice above. Using the mounting template supplied mark the speaker position and cut the mounting hole.



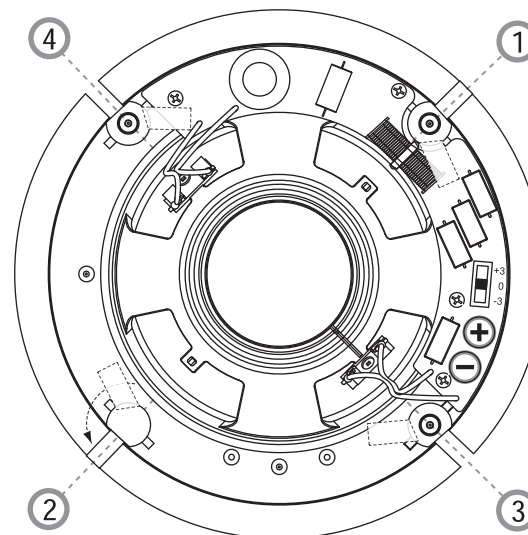
Step 2

Make sure all equipment is switched off. The speaker cable should be stripped back ~10mm so that there are bare wire ends. Remove the packaging and protective dust cover from speaker and attach the speaker leads using the pushdown spring clip terminals at the rear of the speaker. The positive conductor should be connected to the red terminal and the negative conductor to the black terminal. For 'St' versions there are two sets of terminals for connection of left and right channels.



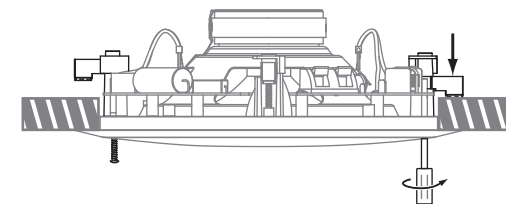
Note: Tweeter output level adjustment ('i' versions)

On some Q Install models the tweeter output level can be increased or decreased using the 3 position switch located at the rear of the product. It is recommended to leave the switch in the '0' position for the initial sound check.



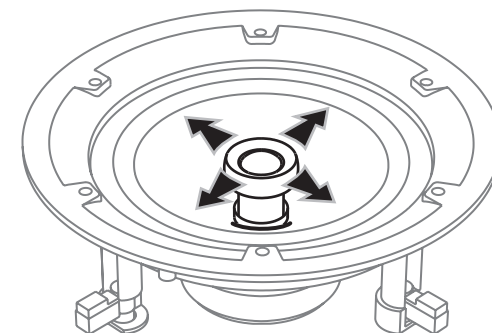
Step 3

Check that each of the 4 swing out clamps are rotated inwards. Position the speaker through the mounting hole and position flush with the ceiling. Whilst holding the speaker in place tighten each of the mounting screws using a No. 2 Pozidriv® screw driver in the order shown in left figure. When an increase in resistance is felt the clamp is in position.



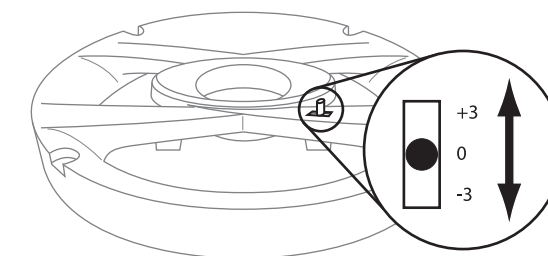
Step 4

Once the speakers are installed they should be tested before the grilles are fitted. All speaker models (other than 'St' Stereo models) feature a swivel tweeter that may be adjusted allowing the high frequencies to be directed towards or away from the normal listening position as required. The tweeter's outer frame (not dome) should be pushed gently to achieve the desired tweeter position.



Note: Tweeter output level adjustment ('CW' versions)

The tweeter output level can be increased or decreased using the 3 position switch located at the front of the speaker. It is recommended to leave the switch in the '0' position for the initial sound check and then adjust if necessary.



Step 5

For speakers featuring a magnetic grille, locate the grille over the speaker bezel where it will be pulled into place. Note that square grilles may be positioned at any angle required. For CW models push fit the grille into place by applying gentle pressure around the edges until the grille edge is flush with the outer bezel.

Grille backing cloth

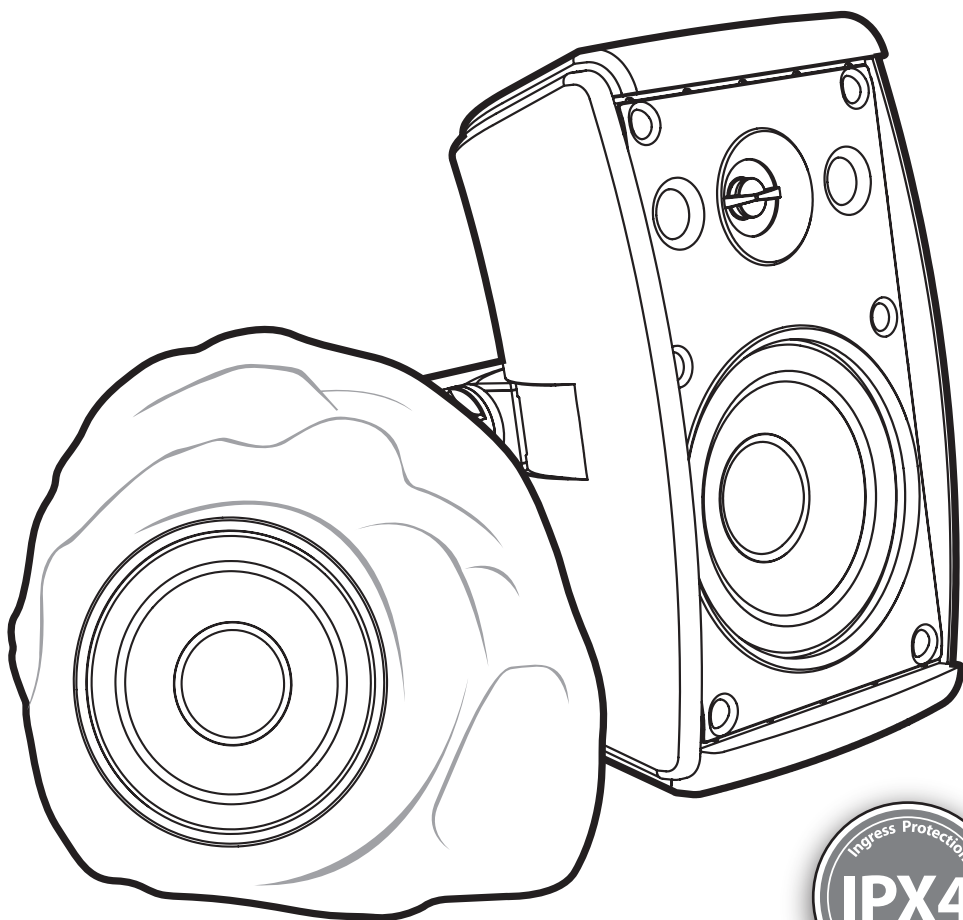
Some models feature a white backing cloth behind the grille to help minimize visual contrast with the ceiling. For the very best sound performance it is recommended that this cloth is removed before use. To remove simply peel away the backing cloth from the grille.



COVERT LOUDSPEAKERS

Quick start installation instructions for Q Install models:

Qi 45EW & Qi 65LW



Thank you for purchasing Q Install loudspeakers.
Please take a few minutes to familiarise yourself with the installation procedure.

Warning Notices

- It is important to ensure that the installation complies with relevant building regulations. If in doubt always consult a qualified installer.
- Before drilling mounting holes or laying speaker cables ensure that there is no conflict with other in-wall/in-ceiling or underground installed items such as water or gas pipes, or electrical cabling etc.
- Ensure that the speaker model is suitable for use in the intended application. Note that these products are not suitable for use in a marine environment where they will be exposed to salt spray.
- These products should only be cleaned using a damp cloth without the use of chemical cleaning agents. Do not use a garden hose or high pressure water jet as it may damage the speakers.
- The Qi 45EV should NOT be positioned where water or rain will be driven directly into the grille (Figure 1). The speaker should always be mounted such that water will naturally drain away from the grille. For IPX4 protection in wet environments, the rubber ports plugs must be fitted.
- The Qi 65LW should NOT be positioned on ground where there is insufficient drainage and risk of being submerged in standing water.

SPEAKER CABLE GENERAL GUIDELINES

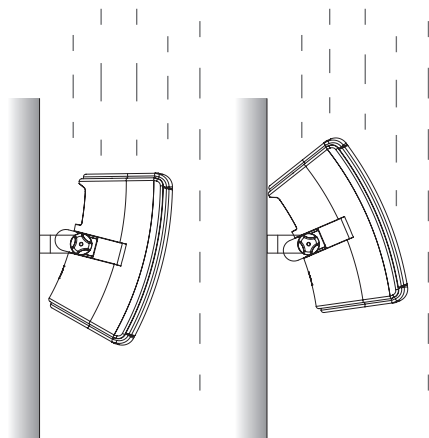
(ALWAYS ENSURE LOCAL REGULATIONS ARE MET)

Use speaker cable that has the correct rating, it is important to ensure that the wire gauge is adequate to cope with the longest run of cable required. When running speaker cables outside ensure they are moisture proof and resistant to UV exposure. If burying speaker cables in a trench use additional protection such as PVC piping or a cable rated for direct burial into the ground.

Distance	A.W.G.	mm ²
up to 45m	12	4.0
up to 30m	14	2.5
up to 20m	16	1.6

Minimum recommended wire gauges (single run to one speaker)

Qi 45EW Vertical Mounting



Qi 45EW Horizontal Mounting

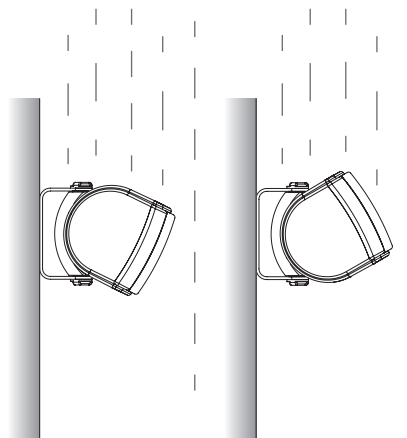


Figure 1. Qi 45EW installation orientation when exposed to rain.

Sound coverage area:

For large areas multiple pairs speakers may be required to give good stereo results. As a rough guide the recommended maximum area covered by two speakers should be no more than 30 - 40 m².

INSTALLING THE Qi 65LW ROCK SPEAKER

Step 1

Select a suitable location for the speaker taking note of the Warning Notices. The Qi 65LW can be installed directly on the ground, wood decking or a stone patio for example. Where it is mounted on earth it is recommended that a paving slab or similar is laid first to provide a firm horizontal base. This can then be covered with earth to camouflage. For best audio performance it is recommended that at least two speakers are installed. The perforated speaker grille/s should face the normal listening position and not be obstructed with shrubs or other objects (Figure 2) as this will reduce the sound level and audio performance.

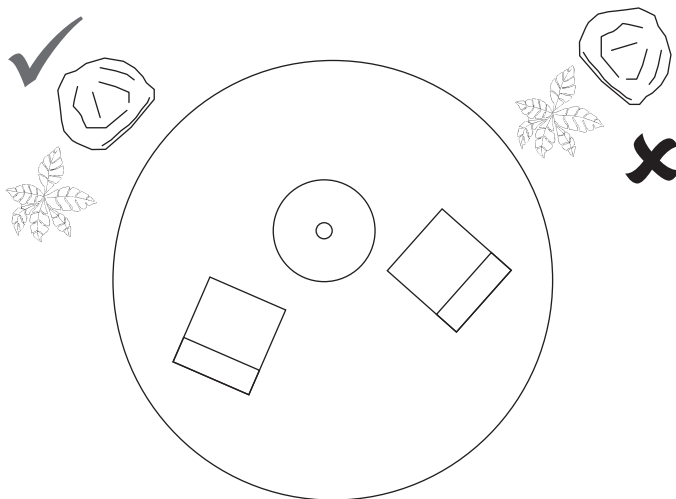


Figure 2. Position speakers clear of acoustic obstructions

Step 2

Make sure all audio equipment is switched off. Remove (unscrew) the square speaker connector cover on the base of the speaker to expose the speaker terminals. Any outer jacket should be trimmed back ~ 50 mm. Feed the speaker wires through the cover and then strip back the individual speaker conductors ~10mm so that there are bare wire ends. Attach the speaker leads using the pushdown spring clip terminals at the bottom of the speaker. The positive conductor should be connected to the red terminal and the negative conductor to the black terminal (Figure 3).

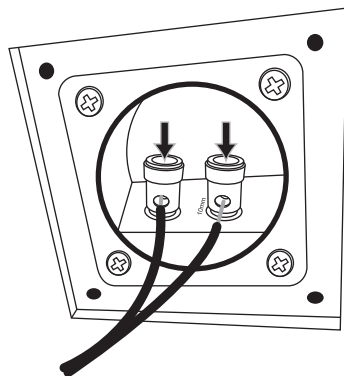


Figure 3. Qi 65LW Speaker cable connections

Step 3

Re-secure the speaker terminal cover plate. Position the speaker on its base ensuring that the cable exits through the notch at the rear of the speaker. Test the speaker/s with a music source to ensure there are no unwanted buzzes or vibrations from the supporting surface or nearby objects.

INSTALLING THE Qi 45EW INDOOR AND OUTDOOR LOUDSPEAKER

Step 1

Ensure that the package contains; Speaker, 1 x C-bracket, 2 x C-bracket lock nuts, 2 x rubber port plugs, 2 x speaker terminal weather protection boots and 1 x packet of grille adhesive. The speaker contains a 'C' mounting bracket and integrated angle adjuster that enables the speaker to be easily installed and adjusted in either a vertical or horizontal position.

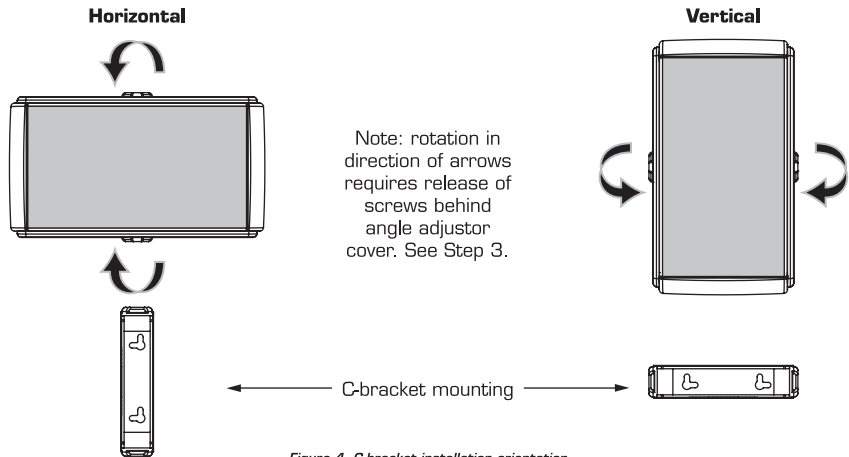


Figure 4. C-bracket installation orientation

Step 2

Decide on the preferred orientation of the speaker ensuring that all relevant Warning Notices are observed. For vertical speaker mounting the C-bracket should be mounted horizontally and for horizontal speaker mounting the C-bracket should be mounted vertically (Figure 4).

Using the bracket (separated from the speaker) as a template mark the position of the two fixing points on the surface to which the speaker is to be secured. It is important to ensure that there is sufficient room to both mount and adjust the angle of the speaker from any adjacent surfaces, so check this before drilling. Fixings should be selected (these are not included) that are appropriate for the mounting surface. Key slots are provided in the C-bracket that will accommodate an M4 sized pan screw head. Drill the holes and fit rawl plugs if required. Drive in the screws leaving ~ 5 mm of screw thread exposed on each. The bracket should be positioned over the exposed screw heads to check that the screws are accurately positioned and of the correct size to locate into the key slots. (Figure 5). The bracket should then be removed for attachment to the speaker in a safe location.

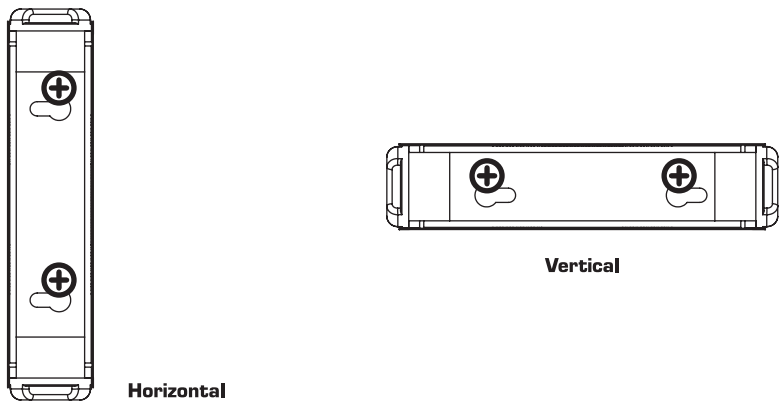


Figure 5. Ensure correct position of screws into key slots

Step 3

If mounting the speaker horizontally or requiring side to side rotation of a vertically mounted speaker (Figure 4), remove the plastic angle adjustor cover at the rear of the speaker by pulling it firmly (Figure 6), this will allow access to 2 locking screws (Figure 7). These should both be unscrewed a couple of turns each so that the angle adjustor can be rotated left or right (up or down) as required.

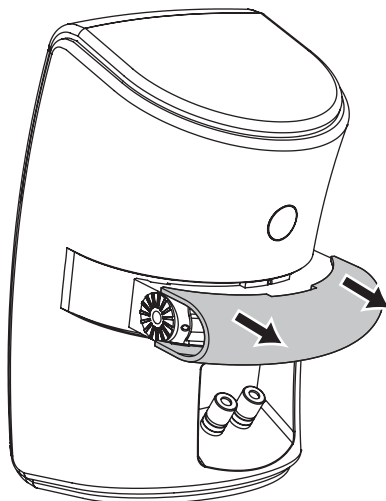


Figure 6. Qi 45EW removing angle adjustor cover

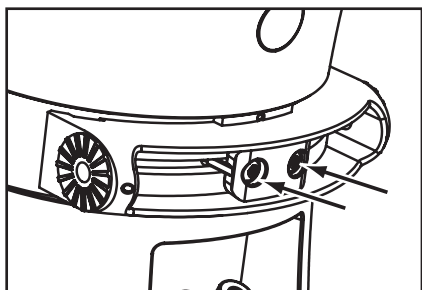


Figure 7. Qi 45EW Angle Adjustor screws
DO NOT REMOVE only loosen 2 turns

Note:

With a right angled screw driver it is possible to make adjustments with the speaker mounted on the wall as the cover can be removed and replaced with the C-bracket attached. Once the required angle is obtained the screws can be tightened and the cover clicked firmly back into place.

Step 4

Mount the C-bracket onto the speaker's angle adjustor using the 2 securing lock nuts (Figure 8). Ensure that the C-bracket is the correct way up so that when the speaker is mounted the screws will slot and secure correctly as shown in Figure 5. Tighten both locking nuts once the required C-bracket angle has been set.

Note: The locking nuts can be loosened and further adjustment undertaken when the speaker is on the wall if necessary.

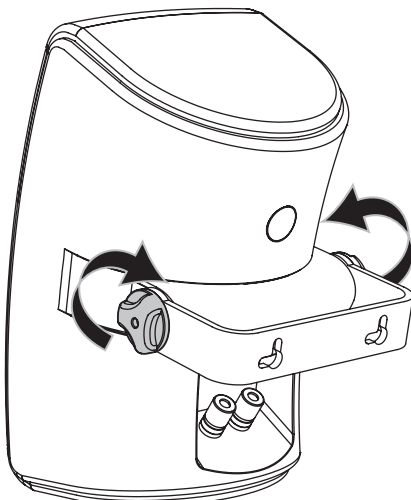


Figure 8. Qi 45EW attach the C-bracket to the speaker

Step 5

If fitted remove the rubber speaker terminal weather protection boots and keep these for use at Step 7. Weather protection boots are also packed separately within the carton.

Step 6

Mount the speaker on to the wall by passing the pre-installed (Step 2) securing screws through the C-bracket and slotting it down behind the screw heads. Using a right angled screwdriver tighten the screws so that the bracket is clamped securely to the wall.

Step 7

Strip back the individual speaker conductors ~10mm so that there are bare wire ends. Attach the speaker leads using the screw terminals at the rear of the speaker. The positive conductor should be connected to the red terminal and the negative conductor to the black terminal (Figure 9). Ensure that the weather protection boots are replaced over the terminals and that there are NO shorting strands of copper between the positive and negative terminals.

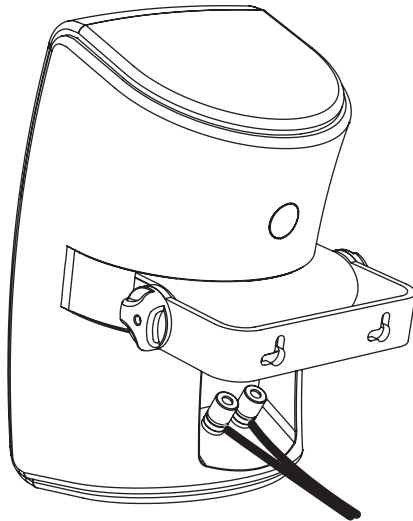


Figure 9. Qi 45EW speaker cable connections

Step 8

Position the speaker at the desired angle and tighten both the 2 rear angle adjusted locking screws (if necessary) and the C-bracket locking nuts.

Step 9

If the speakers are to be used where there is a possibility that water may be blown into the grille, the 'port' holes either side of the tweeter can be plugged using the supplied rubber port plugs. These should be pressed firmly into place (Figure 10).

Note: It is recommended that the plugs are only fitted when it is necessary to comply with IPX4, since the installation will reduce the amount of bass produced by the speaker.
To meet IPX4 the port plugs must be fitted.

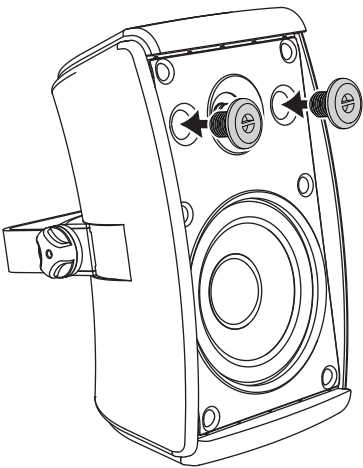


Figure 10. Insertion of rubber port plugs into port holes

Step 10

Included in the speaker pack is some flexible grille adhesive, this provides additional securing for the grille should it be considered necessary. To use gently pull the grille on both sides and pull away from the speaker (Figure 11). Press 4 pieces of the adhesive into the recess slot as indicated (Figure 12). Replace the grille by first ensuring that all grille edges are inside the bezel moulding and then pushing carefully back into place.

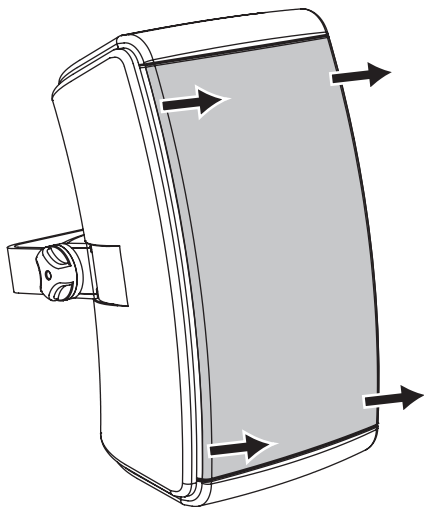


Figure 11. Qi 45EW grille removal

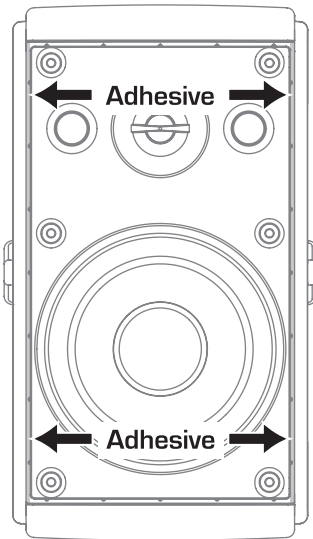


Figure 12. Positioning of adhesive strips before replacing grille

Step 11

Test the speaker to ensure that it is working correctly with no unwanted buzzes or rattles.

Q Install Warranty

Q Install loudspeakers are warranted free of defects in materials and workmanship for a period of 5 years from the date of purchase. During the warranty period Q Install will, at its option, repair or replace any product found to be faulty after inspection by the company or its appointed distributor or agent.

Misuse and fair wear and tear are not covered by the warranty.

Goods for repair should, in the first instance, be returned to the supplying dealer. If this is not possible the item/s should be sent carriage paid, preferably in the original packaging, to Q Install or their appointed regional distributor accompanied by proof of purchase. Damage sustained by goods in transit to the repair centre is not covered by the warranty. Return carriage will be paid by Q Install or their distributor as appropriate.

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Appointed Distributor in the UK:

armourHOME

Armour Home Electronics Ltd
Stortford Hall Industrial Park
Bishops Stortford, Herts,
CM23 5GZ
UNITED KINGDOM

www.qinstall.co.uk

Q13412-15_r4

RP341v2

- Release Date **January 2022**
- Article No. **301021**
- EAN No. **4260393850927**
- Customs Tariff No. **85 198 100**
- Product URL **<https://www.trivum.de/RP341v2>**



RP341v2 - EN



Amplifier

- 8x30 watts sinus at 8 ohms
- Class D amplifier (digital)
- Impedance of the connected loudspeakers at least 4 ohms

Sources

- 4 x Streaming
- 1 x Analog input
- 1 x DAB+/FM tuner (all 4 zones share this tuner)

Power supply

- 24V DC ~8A **or** 2x24V DC ~ 4A
- Power consumption at idle (without active zone): 5 watts

Housing

- DIN RAIL mounted device with 9 HP
- Dimensions: 160 mm x 92 mm x 63 mm (WxHxD)
- With packaging: 165 mm x 95 mm x 70 mm (WxHxD)
- Weight (net): 0,25 kg

Connections

- 1x Network (RJ45 socket)
- 1x USB (for service)
- 4x Speaker stereo (4x 4-pin screw terminal)
- 1x Line input stereo (1x 3.5mm jack)
- 1x DAB+/FM antenna (1x 2-pin screw terminal)
- 2x Power supply 24V +/- (1x 2-pin screw terminal)

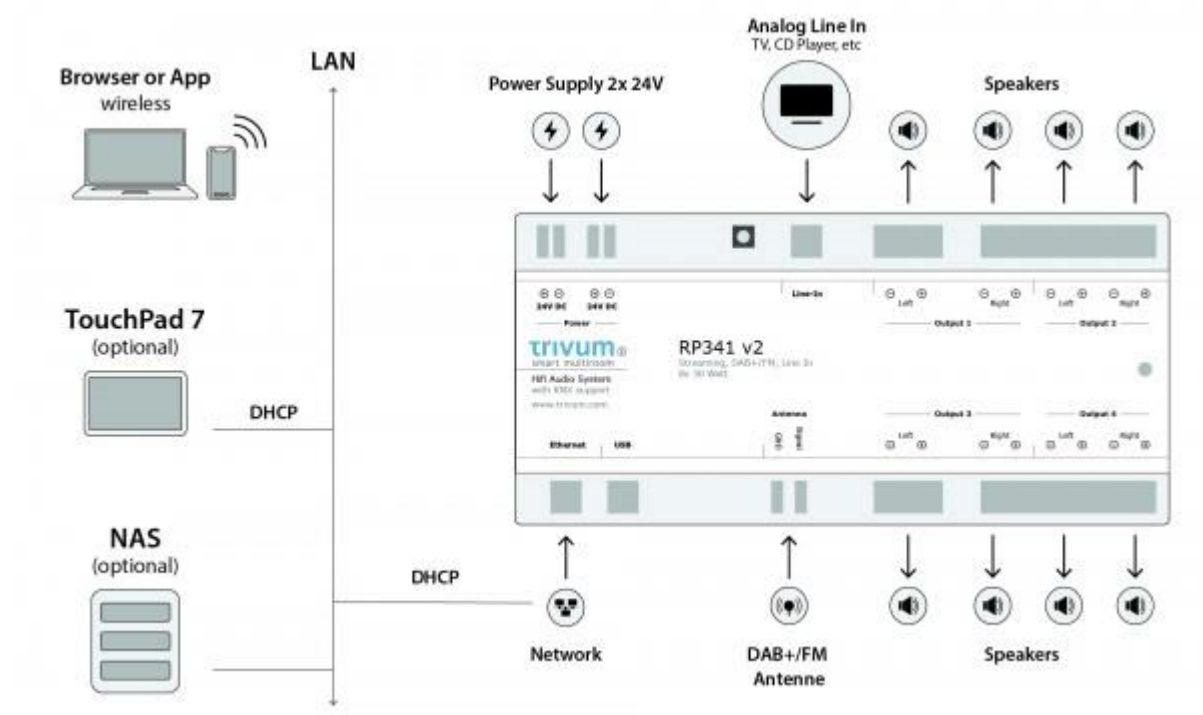
Front

Network

Scope of delivery

- Status LED
- LAN (RJ45 Ethernet)
- 1x RP341v2
- 1x Quick Installation Guide

The specifications mentioned here are subject to change without notice.





801.819 **RL CONNEX**

RX12W 100V Speaker cable Round 2 x 1.5mm² white 100M

Heavy duty 2 core speaker cable suitable for 100V line PA speaker installations. Stranded copper conductors with red and blue inner insulation.

Product colour : White
 CSA : 1.5mm²
 Conductor : 45x0.2mm
 Sheath : White
 Outer diameter : 6.8 x 6.5mm
 Weight (kg) : 5,75



Features

- Ultra slim design with 70mm(4SU) width
- Universal input 85~264VAC(277VAC operational)
- No load power consumption<0.3W
- Isolation class II
- Pass LPS (Limited power source) for Blank type
- DC output voltage adjustable
- Protections : Short circuit / Overload / Over voltage
- Cooling by free air convection (working temperature:-30~+70°C)
- DIN rail TS-35/7.5 or 15 mountable
- Over voltage category III
- LED indicator for power on
- 3 years warranty

Applications

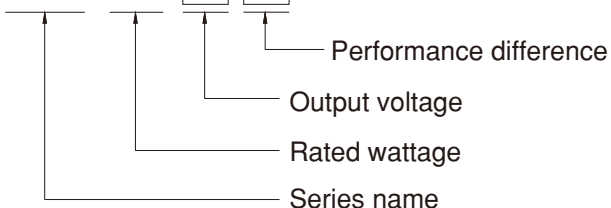
- Household control system
- Building automation
- Industrial control system
- Factory automation
- Electro-mechanical apparatus

Description

HDR-100 is one economical ultra slim 100W DIN rail power supply series, adapt to be installed on TS-35/7.5 or TS-35/15 mounting rails. The body is designed 70mm(4SU) in width, which allows space saving inside the cabinets. The entire series adopts the full range AC input from 85VAC to 264VAC(277VAC operational) and conforms to BS EN/EN61000-3-2, the norm the European Union regulates for harmonic current. HDR-100 is designed with plastic housing that it can effectively prevent user from electric hazards. With working efficiency up to 90%, the entire series can operate at the ambient temperature between -30°C and 70°C under air convection. The complete protection functions and relevant certificates for home automations and industrial control apparatus (IEC62368-1, UL508, UL62368-1, BS EN/EN61558-2-16) make HDR-100 a very competitive power supply solution for household and industrial applications.

Model Encoding

HDR - 100 - 12 N



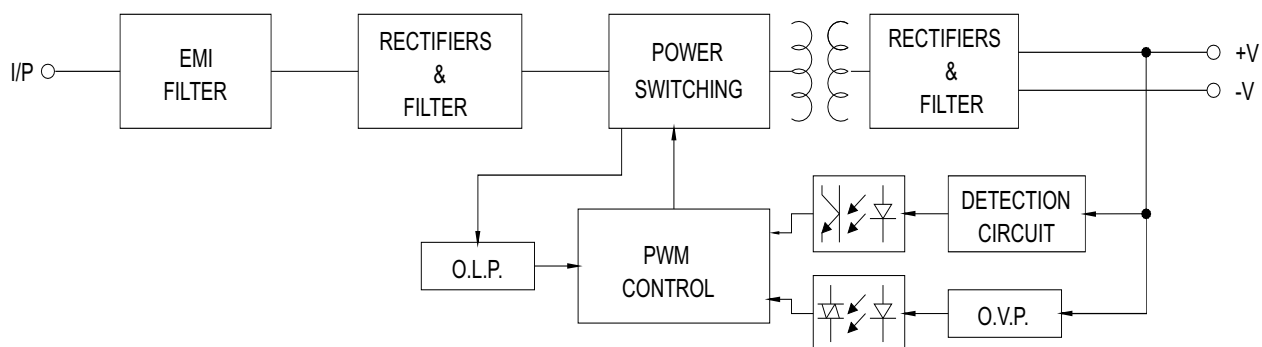
Type	Description	Note
Blank	92W max, Pass LPS with a narrower output adjustable range	In stock
N	100W max, Non-LPS with a wider output adjustable range	In stock



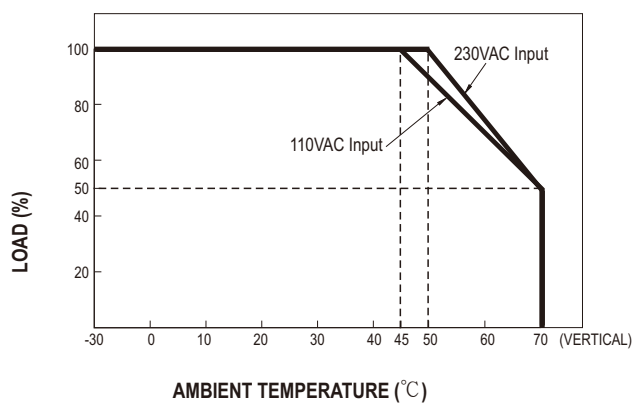
SPECIFICATION

MODEL			HDR-100-12	HDR-100-12N	HDR-100-15	HDR-100-15N	HDR-100-24	HDR-100-24N	HDR-100-48	HDR-100-48N
OUTPUT	DC VOLTAGE		12V		15V		24V		48V	
	RATED CURRENT		7.1A	7.5A	6.13A	6.5A	3.83A	4.2A	1.92A	2.1A
	CURRENT RANGE		0 ~ 7.1A	0 ~ 7.5A	0 ~ 6.13A	0 ~ 6.5A	0 ~ 3.83A	0 ~ 4.2A	0 ~ 1.92A	0 ~ 2.1A
	RATED POWER		85.2W	90W	92W	97.5W	92W	100.8W	92.2W	100.8W
	RIPPLE & NOISE (max.) Note.2		120mVp-p		120mVp-p		150mVp-p		240mVp-p	
	VOLTAGE ADJ. RANGE	Pass LPS	12 ~ 13V		15 ~ 17V		24 ~ 25.5V		48 ~ 48.7V	
		Non LPS	12~ 13.8V		13.5 ~ 18V		21.6 ~ 29V		43.2 ~ 55.2V	
	VOLTAGE TOLERANCE Note.3		±2.0%		±1.0%		±1.0%		±1.0%	
	LINE REGULATION		±1.0%		±1.0%		±1.0%		±1.0%	
	LOAD REGULATION		±1.0%		±1.0%		±1.0%		±1.0%	
	SETUP, RISE TIME		500ms, 60ms/230VAC				500ms, 60ms/115VAC at full load			
HOLD UP TIME (Typ.)		30ms/230VAC				12ms/115VAC at full load				
INPUT	VOLTAGE RANGE		85 ~ 264VAC (277VAC operational)				120 ~ 370VDC (390VDC operational)			
	FREQUENCY RANGE		47 ~ 63Hz							
	EFFICIENCY (Typ.)		88%		89%		90%		90%	
	AC CURRENT (Typ.)		3A/115VAC				1.6A/230VAC			
	INRUSH CURRENT (Typ.)		COLD START 35A/115VAC				70A/230VAC			
PROTECTION	OVERLOAD		HDR-100 : 102 ~ 110% rated output power ; HDR-100-xxN : 105 ~ 150% rated output power							
			Hiccup mode when output voltage <50%, recovers automatically after fault condition is removed Constant current limiting within 50% ~ 100% rated output voltage, recovers automatically after fault condition is removed							
	OVER VOLTAGE		14.2 ~ 16.2V		18.8 ~ 22.5V		30 ~ 36V		56.5 ~ 64.8V	
Protection type : Shut down o/p voltage, re-power on to recover										
ENVIRONMENT	WORKING TEMP.		-30 ~ +70℃ (Refer to "Derating Curve")							
	WORKING HUMIDITY		20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY		-40 ~ +85℃, 10 ~ 95% RH non-condensing							
	TEMP. COEFFICIENT		±0.03%/℃ (0 ~ 50℃) RH non-condensing							
	VIBRATION		10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6							
	OPERATING ALTITUDE		2000 meters							
	OVER VOLTAGE CATEGORY		III : According to EN61558, EN50178, EN60664-1, EN62477-1 ; altitude up to 2000 meters							
SAFETY & EMC (Note 5)	SAFETY STANDARDS		UL62368-1, UL508, TUV BS EN/EN61558-2-16, IEC62368-1, EAC TP TC 004, BSMI CNS14336-1 approved; Design refer to TUV BS EN/EN62368-1							
	WITHSTAND VOLTAGE		I/P-O/P:4KVAC							
	ISOLATION RESISTANCE		I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH							
	EMC EMISSION		Parameter		Standard			Test Level / Note		
			Conducted		BS EN/EN55032(CISPR32), CNS13438			Class B		
			Radiated		BS EN/EN55032(CISPR32), CNS13438			Class B		
			Harmonic Current (Note 5)		BS EN/EN61000-3-2			Class A		
			Voltage Flicker		BS EN/EN61000-3-3			-----		
	EMC IMMUNITY		BS EN/EN55024, BS EN/EN61000-6-2, BS EN/EN61204-3							
			Parameter		Standard			Test Level /Note		
			ESD		BS EN/EN61000-4-2			Level 3, 8KV air; Level 2, 4KV contact, criteria A		
			Radiated Susceptibility		BS EN/EN61000-4-3			Level 3, criteria A		
			EFT/Burest		BS EN/EN61000-4-4			Level 3, criteria A		
			Surge		BS EN/EN61000-4-5			Level 4,2KV/L-N, criteria A		
			Conducted		BS EN/EN61000-4-6			Level 3, criteria A		
			Magnetic Field		BS EN/EN61000-4-8			Level 4, criteria A		
			Voltage Dips and interruptions		BS EN/EN61000-4-11			>95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods		
OTHERS	MTBF		856.5K hrs min. MIL-HDBK-217F (25℃)							
	DIMENSION		70*90*54.5mm (W*H*D)							
	PACKING		0.27Kg; 48pcs/14Kg/1.06CUFT							
NOTE		1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μf & 47μf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Harmonic current test at 90% load for HDR-100-xxN. 5. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to “EMI testing of component power supplies.” (as available on http://www.meanwell.com) 6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft). ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx								

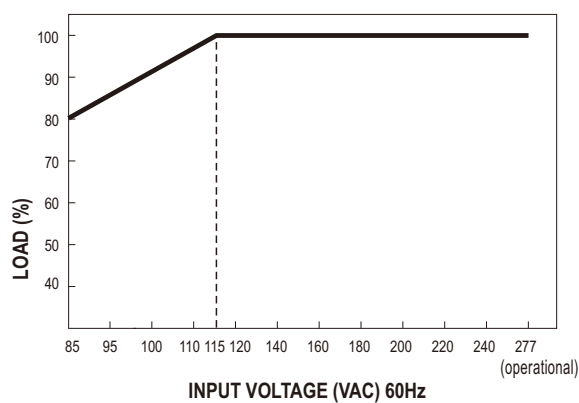
Block Diagram



Derating Curve VS Ambient Temperature

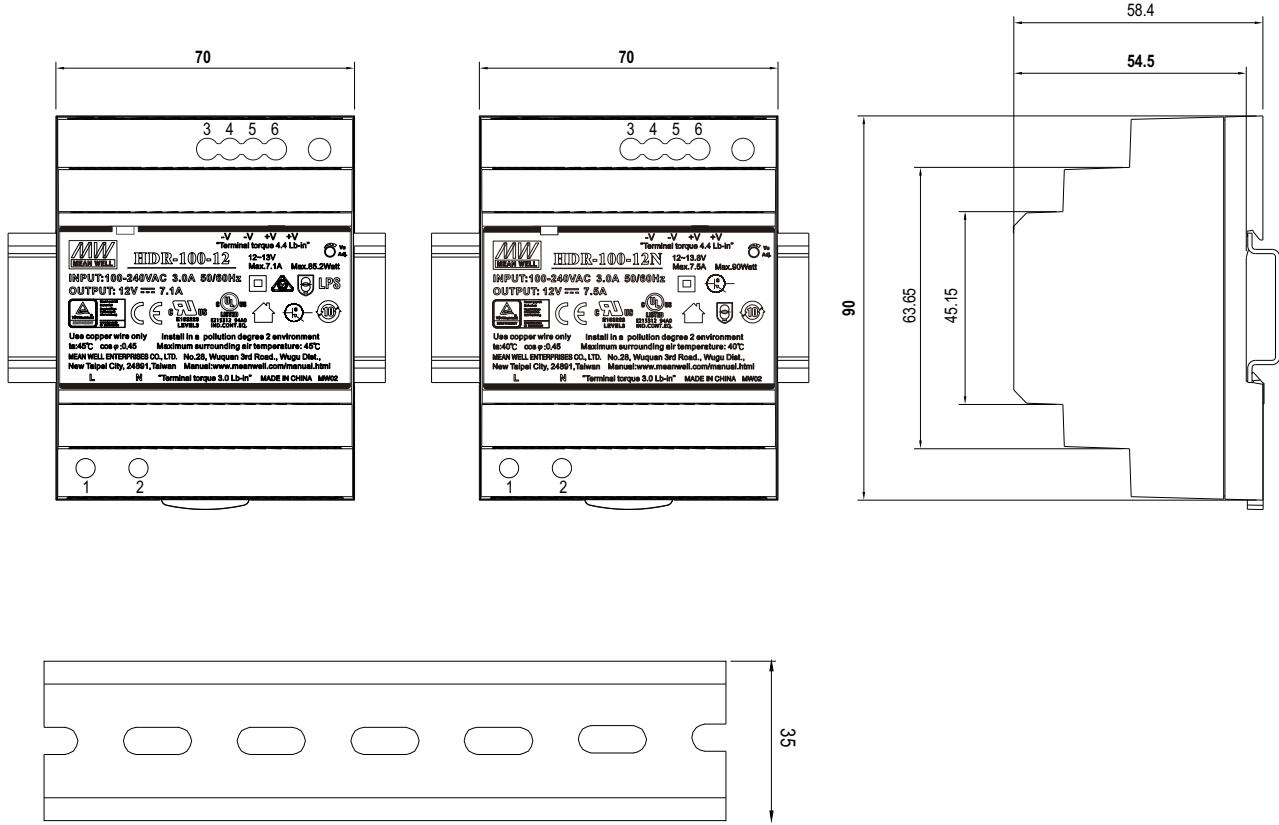


Output Derating VS Input Voltage



Mechanical Specification

(Unit: mm , tolerance $\pm 0.5\text{mm}$)



ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15

Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	3,4	-V
2	AC/N	5,6	+V

Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>