◉ ALDERWOOD

Hand Crafted Sound

POSEIDON

MANUAL CONTENTS - POSEIDON
On Wall + Flush Mount

Thank you for supporting Australian jobs, Alderwood products are proudly made in southwest Victoria by highly trained and skilled artisans. To ensure that this product provides you with many years of musical enjoyment please read and understand this manual before using our installing this product.

Scott Wilkinson

Director of Alderwood

MANUAL CONTENTS

WARNING - Caution - VERY LOUD!
This product is capable of producing very high sound pressure levels. Care must be taken to install and operate correctly.

POSEIDON SPECS

Dimensions	7cm x 7cm x 7cm
Weight	250gm
Input Connection	Phoenix Contact 3.81mm
Frequency Range	150 - 20KHz
Nominal Impendance	4 Ohms
Sensitivity 1W/1M	87DB
Peak Output Full Range	99DB
Peak Output With Highpass	103 DB (white noise 200 highpass on 24DB oct slope)
Beamwidth	170 degrees Conical
Driver	1inch copper voice coil, alloy diaphram
Power	20W
IP Rating	IP66 dust and rain proof
Operating Temperature	-18 - 42degrees C

RUN IN PERIOD

Before leaving the factory this speaker has been tested and measured using state of the art electrical and acoustic analysis software as well as critical listening from highly trained ears. This only accounts to a runtime of 4 hours, you can expect the speaker to run in over the first 200 hours getting more detailed in the high frequencies and midrange as the rubber surround and the voice coil spider fibers soften, this is a process that cannot be hastened by playing the speaker at extreme levels. We recommend that you enjoy this time by playing your favorite albums going through different genres of music and revisit previously played songs after a while and see what new details you can notice that you haven't heard before.

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INGRESS PROTECTION (IP RATING)

The Poseidon is rated IP66 which covers dust exposure and direct exposure to weather including usage in marine environments. Your Poseidon has stainless steel fasteners used throughout and a marine alloy grill and diaphragm to withstand the tests of time. It is still recommend to provide as much natural protection when choosing a mounting location for the longest service life.

WIRING

The Poseidon uses a Pheonix contact 3.81mm terminal plug, for discreet and simple wiring, this connector has exceptional electrical connection qualities and also allows for simple unplugging for quick deinstallation.

We recommend speaker cable thickness of 20-16g speaker cable be used, on long cable runs up to 60 meters we recommend 16g cable be used to avoid voltage drop. In humid or salt air environments tinned copper will resist corrosion and provide better signal integrity for many years longer than standard copper.

A speaker cable that has a black strip or identifying marker on one side will help when identifying which is negative and positive, we recommend that the side with a black strip is used as negative as a rule of thumb. It is of vital importance that all speakers used are wired the same to ensure proper sonic performance

Care must be taken when striping speaker cables, only strip 5mm off the ends and ensure no strands of wire are exposed or able to short out the connection which could result in damage to the amplifier or the speakers.

Use the supplied flat blade screw driver to first loosen the 2 wire retaining screws, before inserting the wires and tightening the 2 screws till tight.

INSTALLATION

Before carrying out any work double check behind mounting location for services or electrical wiring.

In the packaging you should find for 2 Poseidon cubes:

INSTALLATION (FLUSH MOUNT) MARINE

1) using a 95mm holesaw cut a hole in the desired fibreglass or non structural alloy mounting location.

2) place flushmount Poseidon in hole and carefully mark the 4 screw mounting locations.

3) Pre drill holes with a 2mm drill bit

4) Plug in Phoenix connector and check all screws are tightened to avoid rattles

5) Insert flushmount and install using provided screws

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INSTALLATION ON WALL, SWIVEL MOUNT.

In the packaging you should find for 2 Poseidon (on wall version)

2 alloy wall mounts

2 stainless screws 70mmx8g

1 small 2mm flat blade screwdriver

1 2mm allen key wrench

1 spare stainless M4x5mm cone point grub screw

You will need a drill for installation and a Phillips head screw drive

The wide off axis response of the Poseidon allows for many

successful mounting possibilities. Speaker placement will depend on how the final system is to be used

If predominantly used for entertaining installing the Poseidon cubes higher in the air and angling them downwards slightly will provide even sound coverage of large outdoor spaces. The subwoofer will need to be placed within a radius of 7 meters, some trial and error can aid in finding the best place for your subwoofer.

1) take the alloy wall mount out of its packaging and locate the 2mm allen key in wall mounting kit.

2) Use the 2mm allen key to loosen a few turns of the M4 grub screw located halfway on the side of the brass bracket, this should only be finger tight from factory. Take care not to loose the grub screw, a spare is provided in kit if one is lost.

3) You should now be able to slide the wall fixture out of the back of the bracket, this is the part you will screw firmly to the wall. Supplied in the kit is a wall screw 70mm x 8g this is designed to be long enough to go through most mounting situations including fibre glass. pre drilling the mounting hole with a 2mm drill bit may make installation easier in fibreglass and outdoor hardwoods, hand tightening with a Phillips head screw driver is recommended to confirm tension.

4) Reassemble bracket with parts removed in step 2. Before tightening the allen key try to point the threaded end to a position that will allow for the Poseidon to be threaded on with ease

5) remove your Poseidon from packaging. On the back in the center you will find a phillps head bolt. This is to be removed with a screw driver to expose the mounting thread. Under no circumstances can the speaker be used without either the phillps head bolt or the wall mount in place, this speaker cabinet runs at

high pressure and running the speaker depressurized can damage your speaker and degrade its sound.

6) Carefully line up the back of the Poseidon to the wall bracket thread and gently turn the Poseidon clockwise from front to thread in place. Care must be taken not to cross thread the Poseidon when starting to turn. Thread on until firm, if ball mount starts to spin you can tighten it futher with the allen key and the proceed to thread the Poseidon till firm

(if thread gets tight and wont allow the Poseidon to be fully threaded in place the thread might be crossthreaded, in this case carefully turn the Poseidon anti clockwise to remove it and have a second attempt at lining up the threads.)

7) Using allen key loosen the grub screw to allow for rotating and aiming at desired location, it is also now time to plug in the speaker, depending on the location of the wiring it may require you to have the speaker upside down to better hide the cables. This is completely fine and will not affect the performance. When aimed at desired area tighten the grub screw firmly to lock the Poseidon in place.

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AMPLIFIER SETUP

Before using the Poseidon it is essential your amplifier is setup correctly to get the best sound from it and also avoid any potential damage.

The Poseidon is designed to work with a subwoofer at all times, it covers the 150-20,000hz range and as such will not benefit from bass adjustments or bass boost loudness settings, these settings will send high current signal to the speaker and cause damage. The following are a guideline of settings to use when setting up the Poseidon, some of these settings may not be applicable in your usage case.

- Speaker crossover set to 200hz for all channels with Poseidon connected

- Bass controls set to zero

- Loudness controls off

- Speaker size set to small in amplifier setup menu

- Subwoofer set to yes.

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SUBWOOFER SETUP

For best results use an Alderwood subwoofer with your Poseidon speakers. They are precisely matched to the high speed response times needed and are specificlly designed to work with the Poseidon

How you setup your subwoofer will depend on your own personal tastes as well as the usage case

If using a Alderwood Cyclops subwoofer connected to a subwoofer amplifier we recommend setting the low pass filter between 80-140hz, subwoofer placement will determine the best performance and how much volume is needed

In home audio/outdoor applications with an active subwoofer

Turning off the subwoofer crossover on your amplifier setup menus will provide the best results, if you cannot turn it off, set the crossover point as high as possible eg 200hz. This avoids doubling up on crossover filters* as most subwoofers have settings for adjusting crossover points on the back of them.

* Having 2 sets of crossovers trying to perform the same task will cause signal delays and phase issues at the crossover point and will affect the way the Poseidon and subwoofer blend together

a crossover setting of 80-100hz will often have enough bleed through midrange to blend seamlessly with the cubes and create a cohesive sound front.

If only 1 subwoofer is being used we recommend it is placed on the same wall as the cubes are mounted

TROUBLE SHOOTING

Sound is crackly or distorted at low volume	- Check phoenix connector for loose strands of wire between the two contacts. - Ensure the terminals are done up tightly. - Check the wiring going into amplifier for shorts
Speaker sounds distorted at high volume	- Check that you have applied the "small speaker" settings on your amplifier - Some amplifiers only have a crossover setting, set this to 200Hz for maximum performance Double check your wiring is correct (look for any loose wires)
No sound	- Check all connections - Check that your amplifier is set to the right input. - Check power
Not enough bass / Tinny sounding vocals	- Check that your amplifier is set to "small speakers" in the setup menu or set crossover at 200Hz. - Check that subwoofer is turned on, properly connected to your amplifier. - Some amplifiers have an "extra bass" setting. This sets the subwoofer in a sub-satellite configuration.

WARRANTY

This product is covered by a 3 year warranty against defects and workmanship including commercial usage,

Alderwood reserves the right to repair or replace defective products in the event of a warranty claim

Not covered under warranty

- Damage to drivers from excessive volume or incorrect amplifier settings being used. A repair fee may be charged for improper use.

- Natural paint fading from direct UV exposure over time

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