

PULSE

150W PA/Monitor Speaker

Model: ASM5D



Instruction Manual

www.pulse-audio.co.uk

Safety Information



The lightning bolt within a triangle is intended to alert the user to the presence of dangerous voltage levels within the product's enclosure.

This voltage may be of sufficient magnitude to constitute an electric shock risk.



To reduce the risk of electric shock, do not remove cover of this device. There are no user serviceable parts inside. Refer servicing only to qualified service personnel.



The exclamation point within a triangle is intended to alert the user to important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Safety Precautions

- Read these instructions carefully and retain for future reference.
- To allow isolation from the mains supply, the mains plugs must remain accessible when the equipment is in use.
- The equipment must be connected to a three pin earthed mains socket outlet using the mains cord provided.
- Do not expose the equipment to dripping or splashing water and do not place any objects filled with liquids, such as vases on the equipment.
- Do not use the equipment near water or in high humidity areas.
- Do not place any naked flame sources, such as lighted candles, on top of the equipment.
- Install in accordance with the manufacturer's instructions.
- Ensure that the power cord cannot be damaged, once the equipment is installed.
- Only use accessories specified by the manufacturer.
- There are no user serviceable parts within this equipment. Refer all servicing to qualified personnel.
- For installation, mount the equipment securely on a solid flat surface or suitable stand.
- To clean, only use a clean soft cloth. Do not use any detergents or solvents.

Pulse Active 150W PA/Monitor Speaker

The PULSE ASM5D portable active PA and monitor system with a class-D powered 5-inch speaker system provides 150W of power, and features a low noise 3-channel mixer section with 2 mic/line inputs on XLR (balanced) / Jack (unbalanced) combo connectors and an auxiliary line input on stereo phono or 3.5mm jack connectors. Also included in the mixer section is a 3-band EQ, switchable 48v phantom power and on-board echo effect (switchable between Mic1+2 & Mic2).

A mic stand mounting adapter system is included; whereby the monitor can be fixed to a mic stand for “ear level” monitoring applications.

A rear mounted XLR / TRS Jack main input enables connection of a stage monitor signal, while an XLR ‘thru’ output is Mic / Line level selectable to enable supply of mic or line level signals from the ASM5D to a Front of House mixer, or to feed a further active speaker.

The ASM5D is a high quality and versatile portable “on the spot” sound reinforcement solution for all kinds of live events, conferences, meetings and education. It also configures as a very useful personal monitor system for practice sessions and all kinds of solo/band performances, including keyboard players, guitarists, drummers and a useful piece of additional equipment for live DJs.

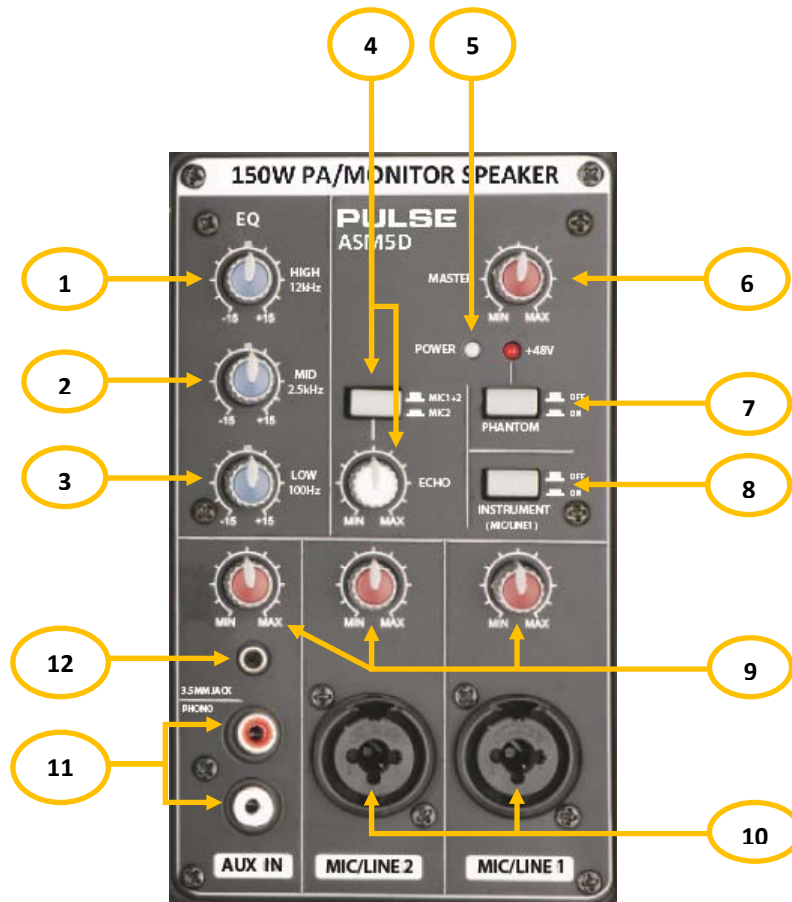
Features

- Ultra compact 150W PA/Monitor speaker system
- 5” Premium full range driver with neodymium magnet
- Class D amplifier technology
- Ultra low noise, 3 channel mixer
- 3 Band EQ
- +48V Phantom power (switchable)
- Ch.1 Instrument ready (switchable)
- Echo function (switchable from Mic 1&2 to Mic 2 only)
- Dedicated stereo input channel for keyboards, CD, MP3, etc.
- Main in & Link Thru connectors for using multiple units together.

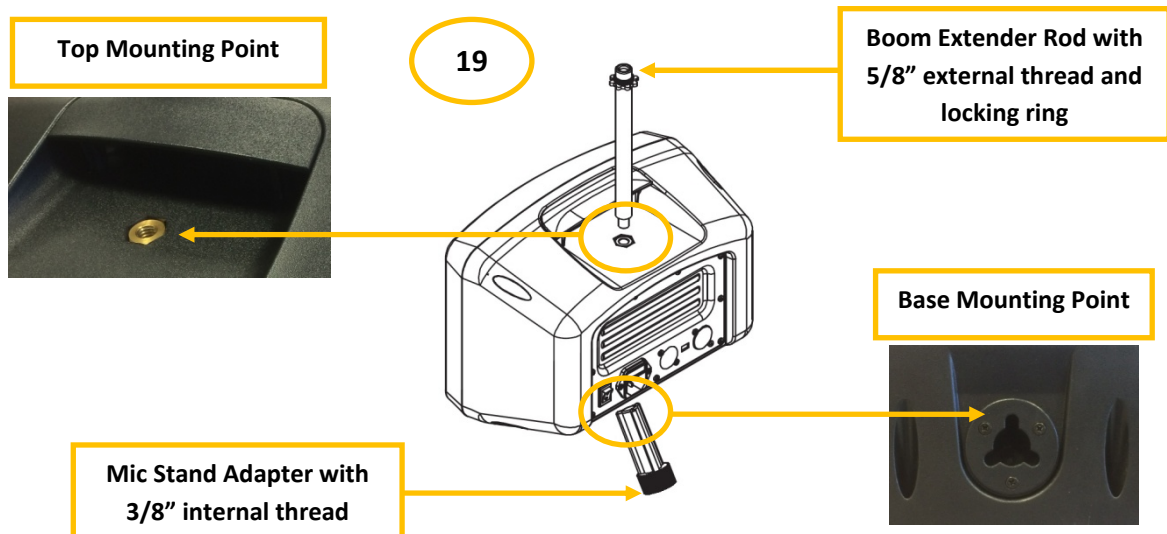
What's In The Box

- ASM5D - 150W Active PA/Monitor Speaker
- Instruction manual
- Mic stand adapter
- Boom extender rod
- UK power cable

Connections & Controls



Number	Item	Description
1	EQ - HIGH	High Frequency EQ adjuster ±15dB
2	EQ - MID	Mid Frequency EQ adjuster ±15dB
3	EQ - LOW	Low Frequency EQ adjuster ±15dB
4	Echo	Echo FX control & mic channel selector switch (1+2 or 2)
5	Blue LED	Power indicator LED
6	Master	Master volume level adjuster
7	Phantom	+48V Phantom power on/off switch & red LED indicator
8	Instrument	Instrument level selector switch for channel 1
9	Channel Adj.	Audio input level adjusters for each channel (1, 2 & Aux)
10	Mic/Line Inputs	Bal. XLR/ UnBal. 6.35mm (¼") Jack combo sockets
11	Phono Inputs	Audio input connector for sources such as CD/DVD players
12	3.5mm Jack Input	Audio input connector for sources such as MP3/Mobiles/Tablet PCs
13	Handle	Integral carry handle
14	Power Switch	Power on/off switch
15	AC Power Socket	IEC Power input connector with integrated fuse holder
16	Thru	XLR Audio out / Link connector (Pre EQ & Master level control)
17	Thru Level Switch	Switches the audio out signal between Line & Mic levels
18	Main In	Main audio (Line level) input when linking multiple units together
19	Mounting Points	Top: 3/8" Internal thread for boom extender adaptor Base: Connector socket for mic stand adapter



Quick Start Guide

1. Before Setting Up:

Rear Panel

1. Make sure the POWER switch [14] on the rear panel is turned OFF.
2. MIC/LINE switch [17] on rear panel is set to LINE (button out).

Front Panel

3. The MASTER [6] & INPUT [9] levels are turned down to MIN.
4. The HIGH[1] / MID[2] / LOW[3] EQ levels are set to 0 (central position).
5. PHANTOM POWER [7] is switched off (button out) unless using condenser microphones.
6. INSTRUMENT [8] optimizer is switched off (button out) unless using an instrument with an unbalanced jack input.
7. ECHO [4] effect level is turned to MIN.

WARNING: Make sure the MASTER [6] & INPUT [9] levels are turned to MIN (anti-clockwise) before & after every use.



2. Placement:

1. Place the ASM5D speaker(s) in the desired location(s) for use.
2. The ASM5D speaker can be positioned on a flat and stable surface or on a stand
3. If stand mounting is required use a suitable microphone stand and the supplied mounting adaptors (additional thread adaptors may be required).

WARNING: DO NOT place the ASM5D near water/liquids that could be splashed or spilt onto the unit, or in areas of high humidity.

3. Connections:

Inputs

1. Connect the output signal of your main audio source, such as a mixing desk monitor output feed to either the:-
MAIN IN [18] (mono, XLR or balanced 6.35mm jack, fixed level)
MIC/LINE IN 1 or 2 [10] (mono, unbalanced 6.35mm Jack, adjustable level)
AUX IN (stereo, 3.5mm jack [12] or L+R phono [11], adjustable level)
2. Connect your microphones to MIC/LINE inputs 1 or 2 [10] using an XLR connector.
3. If using condenser microphones which require phantom power, switch the PHANTOM POWER [7] button to on (the red LED will now be illuminated to signify this).
4. Connect your instrument (such as electric guitar) to MIC/LINE 1 using a 6.35mm jack connector and switch the INSTRUMENT [8] switch to ON (button in). This will optimize the MIC/LINE 1 input for high-impedance signals from instruments with electric pickups to be used (if a greater volume is required from your instrument a DI box can be used).

Thru

5. XLR connector [16] for linking out to a mixer, additional ASM5D's or larger active PA speaker.
6. LINE/MIC level switch [17] to change the output level of the THRU connector from line to mic signal level.
7. Combines the signal from the MAIN IN [18] connector and the front panel inputs prior to the EQ & MASTER level controls.

Power

8. Make sure the POWER switch [14] is turned off.
9. Connect the supplied mains lead to the ASM5D.
10. Only set the POWER switch to ON once all your input & link connections are made and are already switched on.
11. When the POWER switch is turned on, the blue LED [5] situated on the front control panel will be illuminated.

4. Levels:

1. Turn the MASTER level [6] to approx 50% to start with (if using multiple ASM5D's then each MASTER level will need adjusting separately).
2. Start playing your audio source, or speaking/singing into a connected microphone.
3. Slowly increase the level control [9] of each connected audio input until the desired volume is reached.
4. If the sound starts to distort, lower the input level [9] on affected channel or lower the output level on the audio source (if it has an output level control).
5. If feedback is detected (a pitched tone/squeal), reduce the input level [9] of the connected microphone(s) and/or move it further away from the speaker if possible.
6. If greater speaker volume is required, increase the MASTER level [6] control (but adjust any level controls if distortion or feedback is detected).

5. EQ:

1. A 3-band EQ is available to adjust (boost/cut) the High [1], Mid [2] & Low [3] frequency levels.
2. Each frequency band can be adjusted by ± 15 dB.
3. The EQ only adjusts the level of the speaker output and DOES NOT adjust levels of the THRU signal.

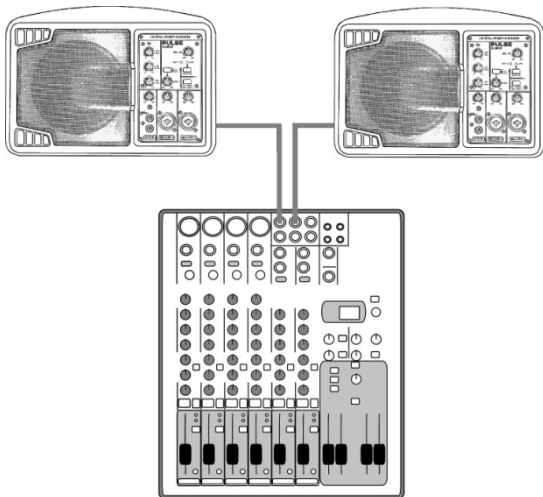
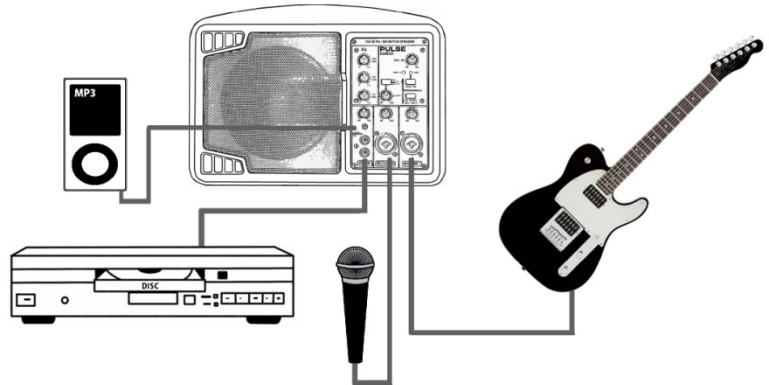
6. ECHO:

1. The ECHO function allows the speaker/singer to add delay to the microphone signal.
2. The ECHO adjustment dial [4] goes from MIN (off) through slight echo/reverb to MAX (repeated echo which fades away)
3. The ECHO function is switchable between MIC1+2 or MIC2 only [4].
4. The ECHO function of the microphone inputs is included in the THRU connector signal.

Configuration Examples

This illustration shows the typical connection points for different types of equipment.

MP3 player – 3.5mm jack
 CD/DVD/Media Player – L+R Phono
 Instrument – MIC/LINE1 (Jack)
 Microphone – MIC/LINE1 or 2 (XLR)



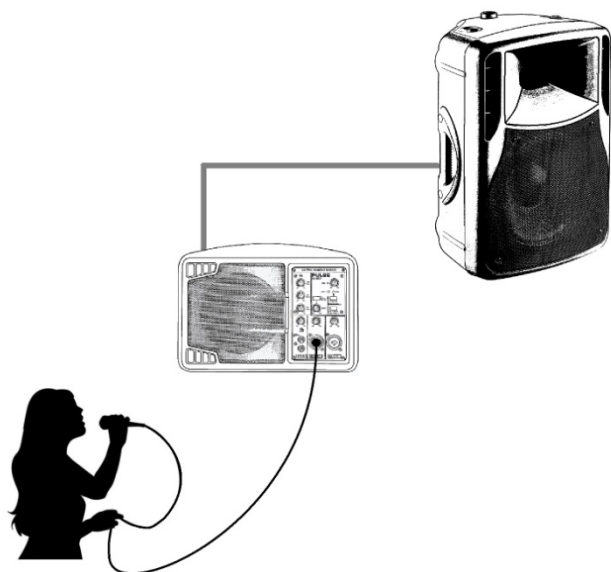
This illustration shows typical connection for using as floor monitors.

This can be done as a stereo L+R for a keyboard player using MAIN IN on each ASM5D for either L or R signal.

Or as a general stage monitor and send a mono signal to MAIN IN on the 1st ASM5D and use the THRU connector to link out to the next ASM5Ds MAIN IN.

This illustration shows typical connection for using as monitor before sending the signal out to an active PA speaker, for using with a large venue/audience.

Connect your microphone, instrument and/or any additional music source (such as CD/MP3 player) to the appropriate channel input. Use the THRU connector to link the ASM5D to the active PA speakers input.



Troubleshooting Guide

Troubleshooting	
No Power	
1.	Check the ASM5D is connected to the mains with an appropriate mains lead.
2.	Check the AC outlet is switched on.
3.	Check the ASM5D is switched on.
4.	Check the FUSE in both the mains lead and the ASM5D's IEC connector fuse holder have not failed. If Yes - Replace with the same size and rating of fuse. If a replacement fails, investigate the reason, referring to a qualified engineer if necessary. If No - Check the blue power LED is illuminated, if illuminated check the level controls and audio sources are set correctly.
No Sound	
1.	Check the MASTER level is properly adjusted.
2.	Check the channel levels (MIC/LINE1, 2 & AUX) are properly adjusted.
3.	Check the audio source is it switched on and working correctly. Make sure the connecting cables are in good order and connected at both ends. Make sure the output volume (gain) of the connected device is turned up sufficiently to drive the inputs of the ASM5D.
Poor/Distorted Sound	
1.	Follow the procedures for setting the levels in the Quick Start Guide (4. Levels)
2.	Make sure all input cables are in good order.
3.	Make sure all input connections are plugged in completely and are not loose.
Noise	
1.	Check all connections to the ASM5D are good
2.	Check that none of the audio signal cables are routed near the following :- Mains leads, Power transformer, Amplifiers or any other EMI inducing devices.
3.	Check that there are no lighting dimmers/controllers on the same mains power circuit. If Yes, use a power filter or a different mains power circuit if available.
Hum	
1.	Turn the MASTER level down. If the noise/hum disappears, it's coming from a connected signal source. If not, try disconnecting the connected signal cables one at a time. If it disappears, it could be a ground loop issue, rather than a problem with the ASM5D.
2.	Use balanced connections where possible.
3.	Where ever possible plug all audio equipment into mains power outlets which share a common ground.
4.	Try using a ground loop isolator on the affected audio signal connections.

Technical Information

Technical Specification	
Amplifier Power Output	
RMS power	125W @ 6Ω
Peak power	150W @ 6Ω
Cooling	Convection
Design	Class D
Speaker	
Size	5 Inch / 127mm
Output Data	
Frequency response	80Hz – 14kHz (-10dB) ; 100Hz – 10kHz (-3dB)
Max SPL	114dB - SPL @ 1M
Dynamic EQ	Processor control
EQ	
HF (12kHz)	15dB ±3dB
MF (2.5kHz)	15dB ±3dB
LF (100Hz)	15dB ±3dB
Audio Inputs (front panel)	
Mic/Line 1 & 2	XLR/6.35mm (1/4") Combo Jacks
- Sensitivity	Mic: -58dBu ±2dBu Line: -35dBu ±2dBu
Aux In	Phono & 3.5mm Jack
- Sensitivity	-10dBu ±2dBu
Frequency response	20Hz – 20kHz ±3dB (Mic input to Amp out)
Phantom power	+48V Switchable
Compression	20dBu
Input impedance	MIC/LINE 1: 20kΩ/1MΩ (switchable)
	MIC/LINE 2: 20kΩ
	AUX: 10kΩ
Input Level Controls	
Max input level	20dB
Input level control	-∞ to +30dB
Link Connections (rear panel)	
Main	XLR/6.35mm (1/4") TRS Combo Jack
- Sensitivity	0dBu ±2dBu
Thru	XLR - Switchable level (mic/line)

General Specification	
Front Panel Connectors	2x XLR/Jack Combo sockets, Phono, 3.5mm Jack
Rear Panel Connectors	XLR/Jack Combo socket (In), XLR (Thru), IEC
Power consumption	180W
Fuse (IEC Socket)	T3.15AH 250V
Power supply	AC 100-240V ~ 50/60Hz
Dimensions (WxHxD)	285 x 200 x 200mm
Weight	2.75kg (without Mic stand adapters)

Compliance



INFORMATION ON WASTE DISPOSAL FOR CONSUMERS OF ELECTRICAL & ELECTRONIC EQUIPMENT

When this product has reached the end of its life it must be treated as Waste Electrical & Electronics Equipment (WEEE). Any WEEE marked products must not be mixed with general household waste, but kept separate for the treatment, recovery and recycling of the materials used. Contact your local authority for details of recycling schemes in your area, or contact PULSE directly via www.pulse-audio.co.uk



Warranty

Pulse products are warranted, by Pulse, against manufacturer defects for a period of one year from the original date of purchase. This warranty is limited to manufacturer defects, in either materials or workmanship. PULSE, or any other worldwide divisions of Premier Farnell PLC, is not responsible for any consequential or inconsequential damage to any other component, structure or the cost of installation or removal of said items. Defective items should be returned to the retailer from whom they were originally purchased.

This warranty will not cover damage due to improper use or items damaged by weather.

This warranty is in addition to your statutory rights.

For questions or specific information regarding warranty replacement or repair, please contact:

PULSE
www.pulse-audio.co.uk