

## **AW 2.1P**

2-inch wall-mount speakers

## **AW 3.2P**

3-inch 2-way wall-mount speakers

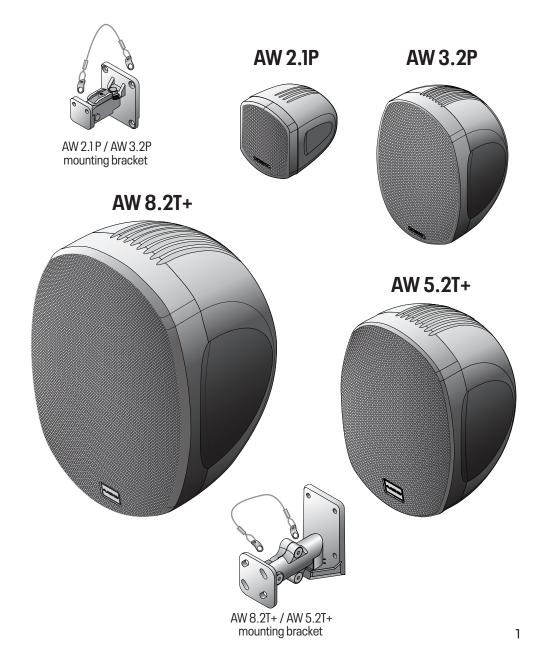
## **AW 5.2T+**

5-inch 2-way wall-mount speakers

## **AW 8.2T+**

8-inch 2-way wall-mount speakers

# Operating and Installation Manual



## Safety and Operation Precautions.

- 1. Heed all warnings; follow all instructions.
- 2. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way.

#### **Installation and Mounting**

- To prevent inductive effects from causing hum, noise, loudspeaker lines should not be laid together with other electric cables, microphone or line level signal cables connected to amplifier inputs.
- 4. To ensure proper sound reproduction, correct loudspeaker phase is necessary. Check "+" and "-" polarity at both the amplifiers and the AW Series speakers.
- 5. Make sure loudspeaker lines are not shorted before turning the amplifier on.
- The entire audio system must comply with the current local standards and regulations regarding electrical systems.
- Ashly recommends this product only be permanently installed by licensed, professional installers (or specialized firms) who can ensure a correct installation and certified by a local inspector.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- **9.** Use only with mounts or brackets specified by Ashly Audio.

- 10. Check the suitability of the support surface to which the product is anchored (wall, ceiling, structure, etc.) and the attachment components (wall plugs, screws, brackets etc.) to confirm that they are in compliance with requirements set forth by local building, safety and electrical codes.
- Make sure all connections have been made correctly and the loudspeaker input voltage is suitable for the amplifier output.
- Protect loudspeaker lines from damage.
   Make sure they are positioned in a way that they cannot be stepped on or crushed by objects.
- Make sure that no objects or liquids can get into this product, as this may cause a short circuit.
- If used with the SP 12.1P subwoofer, make sure that it is placed on a flat, rigid and antiskid surface.

#### Tilt - Swivel Mount

- **15.** Please use the appropriate Tilt-Swivel mount packed with each AW speaker.
- **16.** For AW 3.2P, 5.2T+ and 8.2T+, make sure that the safety cable is securely attached.

#### Operation

17. AW wall-mount speakers can deliver high sound pressure that can surpass 90dB. Exposure to high sound levels can cause permanent hearing loss. Monitor and control the volume at all times.

- 18. If amplifiers or other connected equipped displays "clipping", "peak" or other overload conditions, adjust to assure these are operating below that threshold to prevent a distorted signal, which may cause damage to the speakers.
- 19. To avoid clipping, always use a clip limiter if available. Always observe specified high pass filtering recommendations, failure to do so may result in damage to drivers.
- 20. Contact your authorized service center or qualified personnel should any of the following occur:
- The loudspeaker does not function normally).
- The cable has been damaged.
- Objects or liquids have gotten into the unit.
- The loudspeaker has been damaged due to heavy impacts.
- 21. Clean only with a dry cloth. Do not use solvents, alcohol, benzene or other volatile substances for cleaning the external parts of this product.
- Don't unplug signal cables when the amp connected to your AW Series speakers is still on.
- 23. Don't remove the metal grid of speaker, which can cause damage to the speaker cones.
- **24.** Make sure to limit the number of connected speakers to match the amplifier's minimum safe operating impedance.

## **AW Series wall-mount speaker Operating Manual**

#### **AW Series**

- 4-sizes from 2" to 8"
- High-strength yet light ABS/ polypropylene enclosure
- Enhanced sound with Protêa and AquaControl™ presets via selected Ashly power amplifiers and DSP processors
- Tilt-swivel mount provided
- Available in Black or White (except AW 3.2P and AW2.1P - Available in black only)

Thank you for choosing Ashly AW Series wall-mount speakers (and hopefully our matching subwoofer). We know that there are many choices on the market today; so we have worked hard to create wall-mount speakers that set themselves apart from the rest.

Outside, AW's are perfect for balconies and patios. Inside, this is the speaker that will deliver great sound and tasteful design to restaurant dining rooms and waiting areas, bars, lounges, church foyers and crying rooms...anywhere you need high intelligibility and smooth sound quality in a small package.



#### **Contents**

Back Panel Connections	4
Typical AW 2.1 or AW 3.2P Connections	
AW 5.2T+ or AW 8.2T+ Connections	
Ashly AquaControl™ and Protêa™ software	
presets for AW Speakers	7
AW Series Mounting Brackets	3
AW 2.1P & AW 3.2P bracket	3
AW 5.2T+ & AW 8.2T+ bracket	9
AW Series Specifications	10

### **Back Panel Connections**

AW 2.1P and AW 3.2P have basic 2-pole Euroblock connections.

AW 2.1P are  $6 \Omega$  impedance; AW 3.2P are  $8 \Omega$ .

AW 5.2T+ and AW 8.2T+ have two parallel sets of Euroblock inputs.

Transformer-equipped, AW 5.2T+ and AW 8.2T+ have variable impedance adjustments designed for anything from 8-ohm operation to 70 and 100 Volt distributed systems.

Connect ginormous amounts of these, based on the impedance /output capabilities of the Ashly amplifier used.







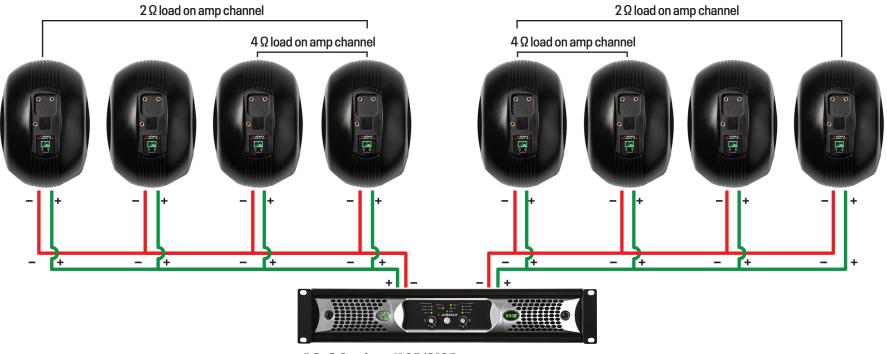


# Typical AW 2.1 or AW 3.2P Connections

AW 2.1 Ps are 6  $\Omega$  impedance. If using a 2-ohm-rated amplifier, two AW-2.1 Ps may be connected per channel.

AW 3.2Ps are  $8 \Omega$  impedance.

If using four AW 3.2Ps in parallel per amp channel, confirm that the amplifier is capable of 2  $\Omega$  output.



**4Ω, 8Ω**: pêma 4125/8125

**2Ω, 4Ω, 8Ω**: nXp 752/754 or nXp 1502/1504,

mXa-1502

#### AW 5.2T+ or AW 8.2T+ Connections

Standard transformer-coupled, Constant Voltage connection. Please note that when using these models set to 8 ohms, the same conditions should be applied as with the AW-3.2P, except that more power may be used per speaker.



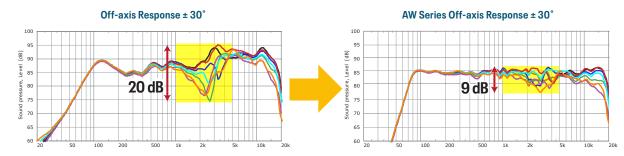
**70 V, 100 V**: nxp 752/754 and up, nep 4250/8250.70, pema 4125/4250/8125/8250.70, and mXa-1502

## Ashly AquaControl™ and Protēa™ software presets for AW Speakers

Frequency response and crossover points of AW Series speakers can be enhanced when used in conjunction with:

- mXa-1502 mixer amplifier
- Pêma amplifiers
- ne amplifiers (pe version only)
- nXp amplifiers
- ne DSP system and matrix processors
- ne 24.24m DSP matrix processor
- SP series DSP loudspeaker processors

The various capabilities and software used are shown at right:



Typical 2-way loudspeaker

Ashly 2-way speaker with DOC\* crossover and DSP

Ashly Product	Ashly Software	Directivity- weighted, optimized linear frequency response	Universal crossover implementation for use between subwoofers and full-range loudspeakers	FIR-corrected, linear phase response above about 300 Hz	Basic loudspeaker processing
mXa-1502	AquaDSP™	<b>/</b>	<b>/</b>	<b>/</b>	N/A
Pêma amplifiers	Protêa™	<b>/</b>	<b>/</b>	<b>/</b>	N/A
ne amplifier (pe version)	Protêa™	<b>/</b>	<b>/</b>	<b>/</b>	N/A
nXp amplifiers	Protêa™	<b>/</b>	<b>/</b>	<b>/</b>	N/A
ne system and matrix processors	Protêa™	<b>/</b>	<b>/</b>	<b>/</b>	N/A
ne 24.24m DSP matrix processor	Protêa™	<b>/</b>	*	_	N/A
SP series speaker processors	Protêa™	_	*	_	*

<sup>\*</sup> Basic loudspeaker processing is defined as basic EQ (4-Band PEQ) approximating the appropriate curve, plus Delay. No advanced EQ or FIR filters.

<sup>\*</sup> HPF/LPF only

## AW Series Mounting Brackets.

Separately configured tilt-swivel (dual-angle) brackets are included for the AW 2.1P / AW 3.2P the AW 5.2T+ / 8.2T+.

#### AW-2.1P (two speakers per carton)

- (2) Dual-angle wall-mounting brackets
- (4) M4 x 12 screws for wall mount brackets
- (1) Allen wrench

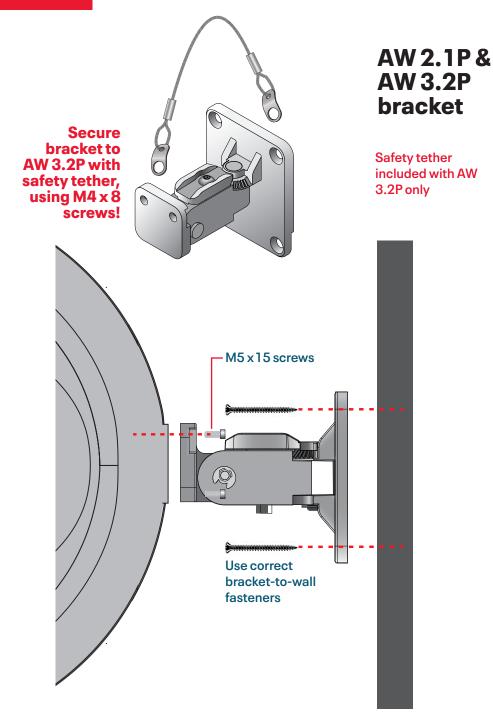
#### AW 3.2P (two speakers per carton)

- (2) Dual-angle wall-mounting brackets
- (2) Steel safety tethers with integrated screw lugs
- (2) M4 x 8 screws for tether cable
- (4) M4 x 12 screws for wall mounting brackets
- (1) Allen wrench

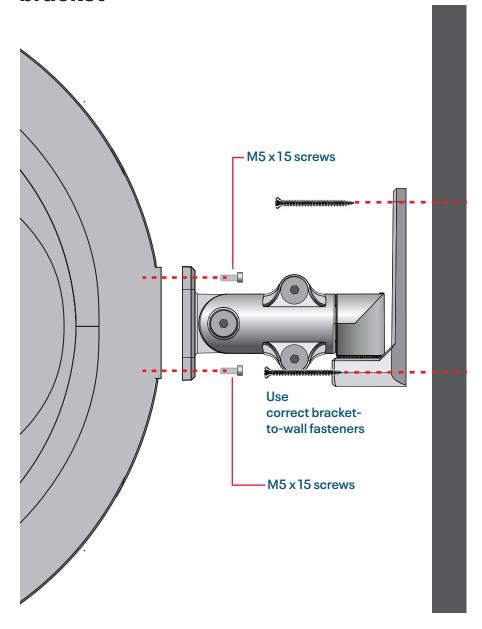
#### **AW 5.2T+** & **AW 8.2T+** (1 speaker per box)

- (1) Dual-angle wall-mounting bracket
- (1) Steel safety tether with integrated screw lugs
- (1)  $M5 \times 10$  screw for tether
- (4) M5 x 15 screws for wall mounting bracket
- (2) Allen wrenches

Note: when mounting in an outdoor environment, the speaker should not be directly exposed to rain or other precipitation. It is highly recommended they be placed under an eaves or other protective covering.



**AW 5.2T+ & AW 8.2T+** bracket





	AW 2.1P	AW 3.2P	AW 5.2T+	AW 8.2T+
Speaker Type	Passive, Full-range	Passive, 2-Way	Passive, 2-Way	Passive, 2-Way
Frequency Response	165 Hz~19 KHz (-10 dB)*	100 Hz~19 KHz (-10 dB)*	79 Hz~19 KHz (-10 dB)*	65 Hz~19 KHz (-10 dB)*
Power Handling (RMS)	15 W	30 W @ 8 Ohms	50 W @ 8 Ohms 70 V (30 W/15 W/ 7.5 W/3.75 W) 100 V (60 W/30 W/15 W/7.55 W)	70 W @ 8 Ohms 70 V (60 W/30 W /15 W/7.5 W) 100 V (60 W/30 W /15 W)
Maximum Continuous SPL, (measured at MIV (continuous / peak) <sup>1,2,3</sup>	92 dB / 102 dB	96 dB / 108 dB	100 dB / 113 dB	103 dB / 118 dB
Maximum Continuous SPL, calculated from power handling (continuous / peak) <sup>2</sup>	96 dB / 108 dB	100 dB / 112 dB	104 dB / 116 dB	108 dB / 120 dB
Maximum Input Voltage (MIV) 1,3	19 dBV, 8.9 V (equivalent to 13 W at rated impedance)	23 dBV, 15.6 V (equivalent to 38W at rated impedance)	27 dBV, 22.4 V (equivalent to 63 W at rated impedance)	31 dBV, 28.9 V (equivalent to 88 W at rated impedance)
Impedance	6Ω	8Ω	8Ω	8Ω
Sensitivity (dB@1W/1M)	86 dB*	85 dB*	87 dB*	89 dB*
Crossover Type	N/A	Passive	Passive	Passive
Crossover Slope	N/A	HF – 12 dB/oct LF – 12 dB/oct	HF – 18 dB/oct LF – 12 dB/oct	HF - 12 dB/oct LF - 12 dB/oct
Crossover Point	N/A	2,600Hz	2,200Hz	3,200Hz
Beam Width	195° H x 205° V	155° H x 135° V	165° H x 160° V	115° H x 105° V
Directivity Index	6.2 dB	6.4 dB	5.6 dB	8.5 dB
Cabinet Material	ABS	ABS	Polypropylene	Polypropylene
Grille Material	ABS + Cloth	Steel (painted)	Steel (painted)	Steel (painted)
Environmental	IP52	IP52	IP54	IP54
Input Connection	Removable 2-pole Euroblock	Removable 2-pole Euroblock	Removable 4-Pole Euroblock	Removable 4-pole Euroblock
HF	N/A	1.1" PEI tweeter	0.75" silk dome tweeter	1" silk dome tweeter
LF	2.75" full-range	3.5", 1" voice coil 6.5 Oz magnet	5.25″, 1″ voice coil 8 Oz magnet	8″, 1.25″ voice coil 15 Oz magnet
Dimensions (WxHxD)	3.22" × 3.82" × 4.13"	5.51" x 7.64" x 5.39"	7.32" x 10.23" x 7.04"	10.11" x 14.16" x 10.12"
Net weight	0.99 lbs	2.53 lbs	5.29 lbs	9.48 lbs
Supplied Accessories	Wall-mount bracket	Wall-mount Bracket Safety cable	Wall-mount Bracket Safety cable	Wall-mount Bracket Safety cable

- 1) With recommended processing
- 2) Referenced to 1 m
- The maximum input voltage (MIV) is determined by no more than a 3 dB change in the frequency response of the loudspeaker system
- 4) Averaged from 400 Hz to 10 kHz

All specifications subject to change.



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Questions? Install problems? We think that Ashly Technical Support is the best in the pro audio business. Just call us (8 AM-5PM Eastern time zone) or e-mail us.

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