Wharfedale Pro

Your full user manual can also be downloaded from www.wharfedalepro.com

WLA-210A Series
QUICK START GUIDE

Congratulations on the purchase of your WLA-210A Active system. We take great pride in engineering and building every Wharfedale Pro product and wish to thank you for entrusting us with your audio.
From the time Gilbert Briggs built his first loudspeaker in 1932, to the present day, we have maintained the same standard of quality in components, workmanship and performance.
Please take the time to read this guide completely in order to get the most from your new PA.

Specifications

Model Name	WLA-210A	WLA-210SUBA
System Type	Active 2 x 10" 2-way Bi-Amplified	Active 2 x 15" Subwoofer
Frequency Response (+/-3 dB)	55 Hz - 20 KHz	39 Hz - 125 HZ
Frequency Range (-10 dB)	50 Hz - 20 KHz	35 Hz - 163 KHz
Loudspeaker Sensitivity @ 1 W / 1 m)	101 dB	108 dB
Maximum SPL(peak)(@1 m)	133 dB	145 dB
Waveguide Type	EvoFold®	
Nominal Coverage (H x V)	100° x 10°	-
Signal Processing	DSP based, 8 FIR presets resident in Input Module	DSP based,8 presets resident in Input Module
Preset list	A) 1 SPKR 100 Hz HPF B) 2 to 4 SPKR 100 Hz HPF C) 4 to 8 SPKR 100 Hz HPF D) >8 SPKR 100 Hz HPF E) 2 to 4 SPKR F) 4 to 8 SPKR G) >8 SPKR H) CUSTOM	A) FLOWN B) FLOWN with 218 C) STACK D) STACK with 218 E) CARDIOID AUDIENCE F) CARDIOID STAGE G) CUSTOM H) CUSTOM
Amplifiers		
Amplifier Design	Class D	Class D
Power Rating:	1600 W Peak (1400 W LF + 200 W HF), 800 W Continuous (700 W LF + 100 W HF)	4000 W Peak / 2000 W Continuous
Power On Protection	Power switch on/off mute	Power switch on/off mute
Thermal Protection	Amplifier Shut Down. Auto Reset	Amplifier Shut Down. Auto Reset
Low Line Voltage Shut Down	80% Nominal Line Voltage	80% Nominal Line Voltage
Driver Protection	Independent L/ H Limiters and DC	Independent L/ H Limiters and DC
DC and Short Protection	Yes	Yes
Limiter Indicator	Red LED	Red LED
Signal Indicator	Green LED	Green LED
Power/Active Indicator	White LED	White LED
Find Function Indicator	Blue LED	Blue LED
Input Sensitivity	+4 dBu	+4 dBu
Maximum Input Level	+18 dBu	+18 dBu
Input Impedance	Balanced: 10 KΩ	Balanced: 10 KΩ
AC Power details - Power Supply	High Efficiency Switching Mode Power Supply	High Efficiency Switching Mode Power Supply
Connectors		
Input Connector	Balanced Female XLR Connector	Balanced Female XLR Connector
Link Connector	Balanced Male XLR Connector	Balanced Male XLR Connector
UPDATE	USB Type B	USB Type B
NETWORK (RS485)	RJ45	RJ45
AC Power Options	AC 100-120 V~ and 220-240 V~, 50/60 Hz Automatic	AC 100-120 V~ and 220-240 V~, 50/60 Hz Automatic
AC Input Connector	powerCON	powerCON
AC Loop Through Connector	powerCON	powerCON
Hardware - Rigging	Integral side plate adjustable rigging 0°-10°	Integral side plate
Enclosure Material and finish	15 mm / 18 mm Plywood	15 mm / 18 mm Plywood
Colour Options	TOUGH-TONE paint	TOUGH-TONE paint
Grille Material & Finish	1.5 Steel	1.5 Steel
Unpacked dimensions - Height	314 mm / 12.4" 190 mm / 7.5"	485 mm / 19.1"
Width (Front)	760 mm / 29.92"	760 mm / 29.9"
Width (Back)	760 mm / 29.92"	760 mm / 29.9"
Depth	503 mm / 19.8"	775 mm / 30.67"
Packed Dimensions - Height	404 mm / 15.9"	575 mm / 22.6"
Width (Front)	855 mm / 33.7"	850 mm / 33.5"
Width (Back)	855 mm / 33.7"	850 mm / 33.5"
Depth	594 mm / 23.4"	865 mm / 34.6"
Net Weight (Kg / lbs)	40.0 Kg / 88 lbs	68.0Kg / 149.6 lbs
Gross Weight (Kg / lbs)	42.7 Kg / 93.9 lbs	72.5 Kg / 159.5 lbs

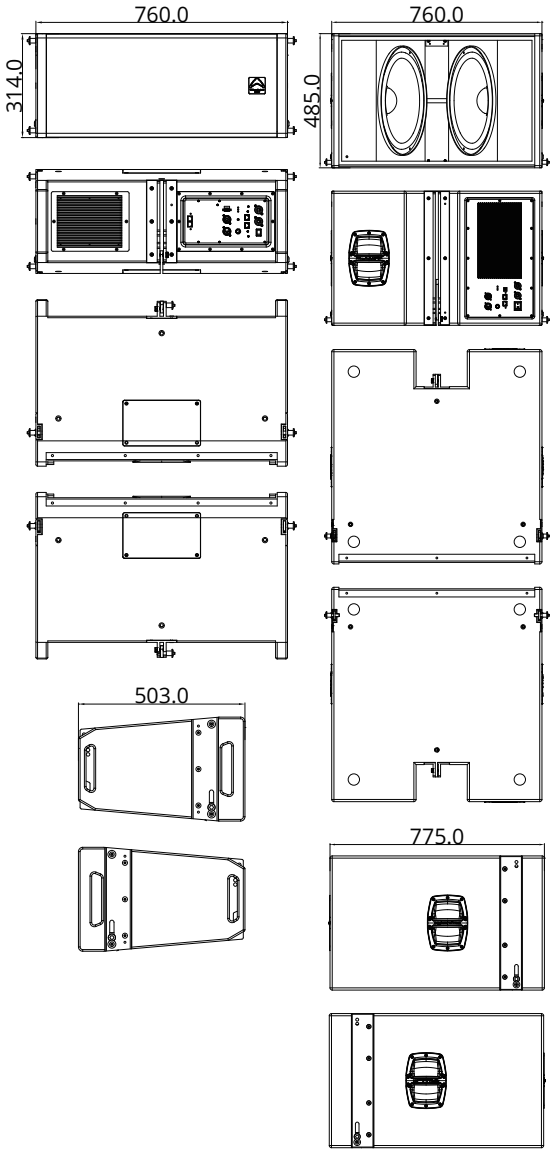
Note : Specifications may be subject to change without notice.

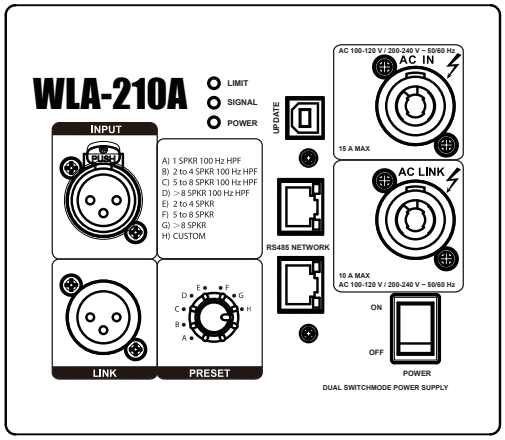
Product Features

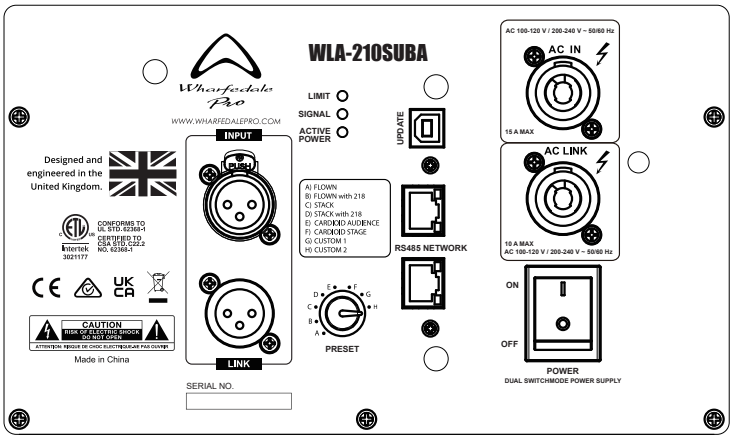
- Active with DSP and FIR filters
- Tough-Tone paint finish
- EVO-Fold waveguides in full range elements
- Custom phase plugs
- Integral side plate rigging
- Optional WLA-210X Common Fly Frame
- EASE .gll files available for download

Overview

WLA-210A **WLA-210SUBA**







INPUT: Balanced XLR input

LINK: Balanced line output

PRESET: DSP Preset control selector

UPDATE: USB Input for software update. Service staff only.

NETWORK: Network connection using RS485 protocol. Download the software from www.wharfedalepro.com

AC IN: AC Input using PowerCon connector

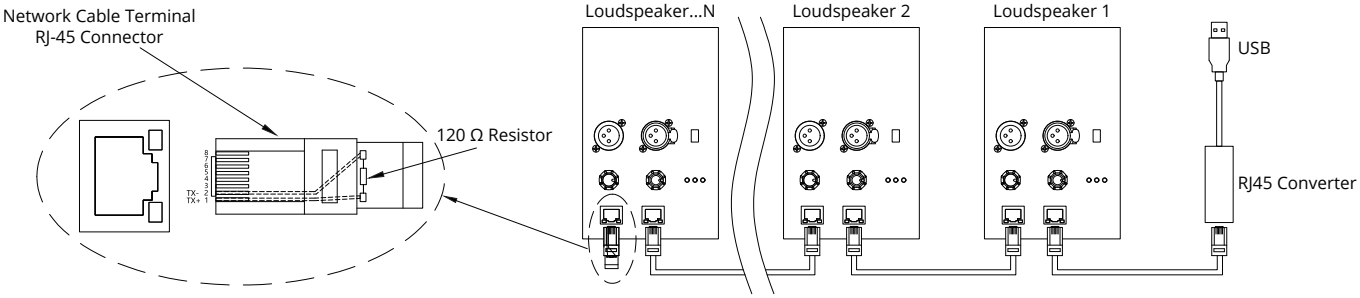
AC LINK: For cascade power to other active loudspeakers in the system. DO NOT EXCEED A TOTAL OF 20 A (continuous current powerCon limit) for each line.

POWER: Power on switch. Only power on after all audio connections have been made.

Control software

The network connection uses RS485 protocol and gives GUI control over the DSP parameters of each element in the array.
https://www.wharfedalepro.com/download/wla-a-control-software/
For easy connection to the computer, the optional USB-RS485-RJ45 convertor can be used. This convertor allows for connection between the PC and the network of active array elements.

Network cable interface description

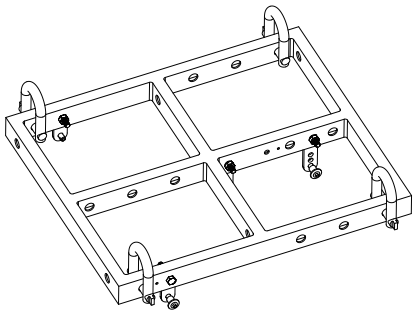


Network total length can be improved by using a 120 Ohm resistor between pins 1 and 2 on an RJ45 connector.
This should be connected to the spare network port on the final speaker in the network.

Optional hardware

WLA-210X Common Fly Frame

The WLA-210X Common Fly frame supports up to 12 x WLA-210A elements and a WLA-210SUBA.



For system design it is recommended to use EASE software. (https://www.afmg.eu)
The EASE library can be downloaded from https://www.wharfedalepro.com/download/wharfedale-pro-ease-library/

WHARFEDALE PRO LIMITED WARRANTY

Wharfedale Pro products are warranted of manufacturing or material defects for a period of three years from the original date of purchase. In the event of malfunction, contact your authorised Wharfedale Pro dealer or distributor for information.
Please be aware that the warranty details may differ from country to country. Contact your dealer or distributor for information (available at www.wharfedalepro.com). These terms do not infringe your statutory rights.

WHARFEDALE PRO
IAG House, 13/14 Glebe Road, Huntingdon, Cambridgeshire, PE29 7DL, UK
www.wharfedalepro.com
Wharfedale Pro reserve the right to alter or improve specifications without notice.
All rights reserved © 2024 Wharfedale Pro. Wharfedale Pro is a member of the IAG Group.

September 2024