

FreeSpace® ZA 2120-HZ Zone Amplifier



Product Description

The Bose® FreeSpace® ZA 2120-HZ Zone Amplifier is a compact, high-performance amplifier designed for professional audio applications. It features a robust metal chassis and is capable of driving two 120W Class-D amplifiers. The unit is designed for easy integration into existing audio systems and is compatible with a wide range of input sources.

Key Features

- **Reliable 2 x 120 W Class-D amplification** – Two 120W Class-D amplifiers provide clean, distortion-free sound reproduction.
- **Dual remotes** – Two remotes are included for easy control of the amplifier.
- **Expansion-ready connectivity** – The amplifier features a variety of input and output options, including XLR, RCA, and digital connections.

FreeSpace® ZA 2120-HZ Zone Amplifier



Technical Specifications

Power Rating	
Amplifier Power	2 x 120 W @ 70/100V
Audio Performance	
Frequency Response	55 Hz - 20 kHz (+0/-3 dB, @ 1 W reference 1 kHz)
THD+N	≤ 0.3 % (at rated power)
Channel Separation (Crosstalk)	≤ -60 dBV (below rated power, 1 kHz)
Dynamic Range	88 dB
Audio Inputs	
Input Channels	1 unbalanced, 1 balanced
Connectors	Stereo RCA, 5-pin Euroblock
Input Range	-10 dBV to +10 dBV
Input Impedance	20 kΩ
Maximum Input Level	+10 dBV
Nominal Input Level	0 dBV
Audio Outputs	
Outputs	2
Connectors	2-pin touch-proof inverted Euroblock
Nominal Output Level	2 x 120 W @ 70/100V
Indicators and Controls	
Power LED	Solid blue indicates power is on, blinking blue indicates standby mode
Input Signal Clip LED	Green indicates input signal is within -39 dBV to 9 dBV, red indicates signal is over 9 dBV
Output Signal Clip LED	Green indicates output signal is within -46 dBFS to -2 dBFS, red indicates signal is over -2 dBFS, approximately 80 W/channel
Controls, Front Panel	Power On/Off
Controls, Rear Panel	Auto Standby On/Off switch, Input: Dual/Summed switch, Remote 1 Control: Zone 1/Zone 1+2 switch, Output Voltage: 70/100V switch, Mute, Output trims, Remote (x2)
Electrical	
Mains Voltage	100 VAC - 240 VAC (±10%, 50/60 Hz)
AC Power Consumption	23 W (Standby), 350 W (Max)
Mains Connector	Standard IEC (C14)
Maximum Inrush Current	5.0 Amps (230 VAC / 50 Hz), 2.7 Amps (120 VAC / 60 Hz)
Overload Protection	High temperature, output short, excessively low or high AC line voltage
Physical	
Dimensions	1.7" H x 19.0" W x 12.8" D (44 mm H x 483 mm W x 324 mm D)
Shipping Weight	11.5 lb (5.2 kg)
Net Weight	8.5 lb (3.9 kg)
Cooling System	Continuous left-to-right air flow
General	
Inputs (Control)	2 remote inputs for Volume Control user interface (PC041966), Mute input control via a normally open contact closure

FreeSpace® ZA 2120-HZ Zone Amplifier

BOSE

TECHNICAL DATA SHEET



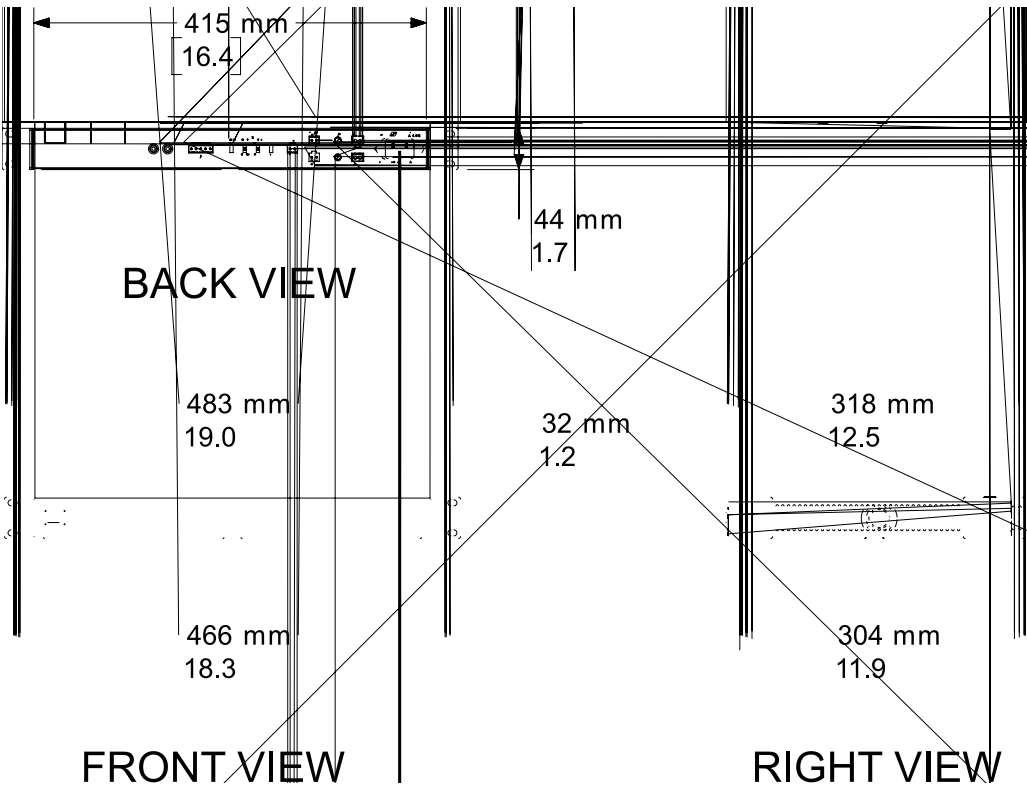
FreeSpace® ZA 2120-HZ Zone Amplifier



AC Current Draw and Thermal Dissipation Information

Test Signal & Power Level	Load Configuration (Both IZA channels driven)	Total Audio Output, W	120VAC 60Hz. Line Current, A	230VAC 50Hz. Line Current, A	Thermal Dissipation, Max		
					Watts	BTU/hr.	kCal/hr.
Power On, Idling		0	0.20	0.15	34	116	29
1/8th Rated Power IEC65 Bandlimited Pink Noise	70V / Ch	30	0.57	0.31	71	242	61
6dB Crest Factor DS 16 EQ Enabled	100V / Ch	30	0.66	0.35	81	276	71
1/3rd Rated Power IEC65 Bandlimited Pink Noise	70V / Ch	80	1.13	0.58	133	454	114
6dB Crest Factor DS 16 EQ Enabled	100V / Ch	80	1.25	0.65	150	512	129

Mechanical Diagrams



FreeSpace® ZA 2120-HZ Zone Amplifier



Architects' and Engineers' Specifications

V@^Áæ { |]á,^!Á@×æ||^Á { |] [^Ô!æ••ÖÖÁæ { |]á,&æç []^c [|] [[*^ÉAV@^Áæ { -
|]á,^!Á@×æ||^Á { & [] [æc^ÁæÁ• ,^c&@É { [^Á^Á [,^!Á•~]] ^Áæ|| [,^á } *^Á { | [-
{ æ||^Á] ^!æç [] ^!- [{ ^ÁÖÖÁ [^c|^c^Áæ } *^á } *^Á- [{ ^ÁÉÉÁ .AGIÉAXAC±FÉÁDÁæçÁ
IÉIÉAP:ÉAV@^Áæ { |]á,^!Á@×æ||^Áæç^ÁæÁÁÖÖÁHGÉÖFÍÁ^!^&c!á&æ|| [,^!Á
á } ^!çkæ } áÁ@×æ||^Á^!^~ á] ^!^Á ,^c@^ÁæÁ^ { [çæà|^Á [,^!Á•~]] ^!^Á& [^!áÉÖÉ
 [,^!Á• ,^c&@Á@×æ||^Á^!^Á] ^!æç^Áá [] ^c@^!- [] çkæ } ^!ÉAV@^Á } [^!á~çk@×æ||
á } & [^!á^!] :|^c&ç [] ^!- [^!@ [|^c^Á^! [çæ^Áæ } áÁ^* } ^!æ||^Á [^!^!@^æç } *ÉAV@^Á
æ { |]á,^!q@^!•• } •&æ||^Á: ^!Á@×æ||^Á^!FÜWÁæ } Á@^* ^!çá^!FÁÜWÁæ } ,^!ác@
^!á^Á^!Áæ } áæ|^Á^!^!Áæ & ^!Á^! [] ^!çç } ^!ÉAV@^Á } [^!á~çk@×æ||^Áæç^Áç } ç } *^Á
,^c@^ÁæÁ: } *^!^!ç } ÉÁ& [] çá [] ^!•^!ÉÉ [É!á*@çkæ! [,^!ÁÖÖÁ&@Á@×æ||^Á [^!ç } ^!ç&@æ } -
 } ^!Á@×æ||^Áæç^Á^!^!ç } çáç!á { Á& [] ç! [] É

V@^h{æ }|j|,h|A^o@x|A@xç^Ac, [Á[ç]ç^c&@x} }h|A^,ac@Aæh|A^~^h}&^A
 Á^h| } }^h|A^|A^|P:Ac|ÁGE^N^P:ÁÇE@.HAA@Oæ}áá|áç|ç|Á^|E^F^E^X^A
 áá^c|áá^c^h^áæ^áá|A^o^c^h| }E^AV@^h| }|j|,h|A^o@x|A@xç^AVPÖE^P^æcA|æc^áA
 | } }^h|A^|A^o@x} }h|A^|E^h|A^U^c| }ç^c| } }^c&| } }^A^o@x|h|á^h|A^
 }æh|A^cæGE^j|Ac| }^@E| }|A^O^| }|a|(^U^A^c| } }^c&| } }^E

V@^Áæ { |]á, ^!Á•@æ|Á { ^cÁ |!Ác&^ÁÁc@^Á- || |]_á } *Á!^- |! { æ } &^Á
 ♣ |^&á, &æcá { •Á&@æ } |^!Á•^ æ!æcá { } ÁC& | ••cae|VÁ!••Ác@æ } Á |!Á^~ æ!Á
 c|ÁÉ!ÉÁÓÁ^ |]_á, ^!æcÁÁ^ |]_á, ^!æcÁFÁP:Áæ } áÁ^ } æ { &á!æ } *^Á |!Á! Á
 áÓÉÁV@^Áæ { |]á, ^!Á•@æ|Á@æcÁFÁ]á } ^É|Ác^Á]á }]_cÁÜÖÖÁ•c^Á |!Á!É |]á }
 Ó~! |]á |^&VÁæ } áFÁ!^ { c^Á& |]c |!Á]á }]_cÁV@!^!ÁSÖÖÁ•@æ|!Á^!Á^!á!Á
 } Ác@^Á- |! { cÁ } æ |Á• Á } ^ÁÇÁ |^ÁD- |!Á |]_á, ^!D•cae } áá^Á } á&æcá |]ÉÁc@^Á
 •&^ } áÁc |!Ác |!Á]á }]_cÁ |^cÁ |!ÁÇÁ |!ÁJÁÁÖXÁæ } áÁc@^Ác@!áÁÇ |!ÁD- |!Á
 Á~c |]c |!Ác |!Á |!Á•Á. GÁáÖÖÜÁ

[illegible]

V@^hæ { []ä, ^!ä&@æ.ö.ä.ä.ä@æ||ä^hæ []ci: ^cäÄ^[-ä]æäcä.ä.ä^hÉÄV@^h
ää { ^}.ä [].Ä-^h@^hæ { []ä, ^!ä@æ||æ|| [].Ä-^!äFJÉä }&@ÄI I H Ä { { DÄÖCEÄ
cæ } ää:ä!ä:ä^h { []cä } *ÉÄV@^h&@æ.ö.ä.ä.ä@æ||ä^hÄFÉ!ä }&@^hÄI I Ä { { DÄ
ä } Ä@^ä*öÉÄFJÉä }&@^hÄI I H Ä { { DÄä } Ääc@æ } äÄFGÉ!ä }&@^hÄHG I Ä
{ { DÄä } Ää@æ } cÉÄV@^hæ { []ä, ^!ä&@æ.ö.ä.ä.ä@æ||ä, ^ä*ä!É!Ä [] } ä.ÄCHÉJÄ
^*ÉÄV@^hæ { []ä, ^!ä.ä@æ||ä^h@^hÄO []^hØ;^h^U } æ&^hZÖÄFGÉÉPZÄ: []^h
æ { []ä.ÄÉ

Safety and Regulatory Compliance

V@^!ð@^!^Ü]æ&^!ZOE!GFGEÉPZ! : { } ^!Áæ { }]!ä, ^!&A { }]!ä~^!Á
 æ@ÄÖÖ!Ä!~^!ä!^ { } ^!c^!Äæ } !ä!Ä~!AWS!jä~^!c^!ä!æ& { } !ä!ä } ^!cA [A
 W!S!€€!i!ÄÇ!c@Ä!ä!ä!c { } D!æ } !ä!ÖÇÉP=ÖÜXÖ!ÖGGG!P!É!i€€!iÉ
 €H!Ä!ÖÖ!äæ }]! { } Ç!ä!É!æ& { } !ä!ä } ^!cA [ÄQÖÖ!i€€!i!ÄÇ!c@Ä!ä!ä!c { } D!É!
 ä } &~!ä!ä } ^!A*!i [^!Äæ } !ä!ä } æ!c { } æ!Ä!ä~!ä!^ { } &^!É!V!ö!ä~! { } [!ä!Ä
 } & { } !Ä!Ä { }]!ä!ä~^!ä, æ@ÄÖÖ!ÄÜ!æ!c!Ä!F!iÖ!Ö!æ~^!ÄÇ!ÇG€€H!ÉD!É!
 ÖP!i!F€H!Ç!ÄÇ!F!J!D!É!ÖP!i!F€H!É!ÄÇ!F!J!D!É!æ } !ä!ÖÜÜÜF!H!
 ÇG€€H!D!Ä!^~^!ä!^ { } ^!c^!Äæ }

Product Codes

ø!^ ^ù]æ&^ÁZœÁGFG€ËPZÄä}c^*!æc^áÁ: [] ^Áæ {] |ä, ^!

FG€XÁ.ÁWÙÁÁ ÏGGFJÎËFIF€

GH€XÁ.ÁÒWÁÁ ÌGGFJÎËGIF€

F€€XÁ.ÁRæ]æ}ÁÁ ÌGGFJÎËHIF€

GH€XÁ.ÁWSÁÁ ÌGGFJÎËIIF€

G | € X Á . Á Ć W Á Á Ĩ G G F J Î Ě Í I F €

Accessories

X[|~ {^Á&[}c! [|Á~ •^!|ä }c^!~æ&^ÁĆÚÔË€|FJÎÎD