

**NIGHTCLUB V1**

# Project Proposal

Prepared for:

Prepared by: David Bradshaw, Ui Consulting

15 June 2021

Proposal number: 999-1020



# EXECUTIVE SUMMARY

## Objective

Provide an audio system for a two room nightclub and VIP room.

## Goals

A performance dance music audio system for DJ playback in the larger room, a second system for the smaller second room, also for DJ playback. Audio routing available to and from each room. Audio source selection and volume control for end user operation in the VIP area. Wireless system control for management from iPad and iPhones. Automated volume ramping at pre programmed times to subtly increase audio levels throughout the evening, with manual override. Automatic system protection from over enthusiastic DJ's with visible readout in DJ booth's. DJ booth monitoring for both rooms, playback from Pioneer media players and mixers.

## Solution

Audio reinforcement in the main dance space is provided by 4 flown 3 way horn loaded speakers with a 70 x 40 dispersion pattern in a 15" LF, 10" Phase Ball loaded MF and 1" HF design. One each of these bi-amplified speakers located at the corners of the room, flown using the integral M10 insert points. Subwoofer reinforcement for the main dance space comprises 6 single 18" direct radiating subwoofers, formed of a single 3x2 block, with 2 elements reversed and suitable processing applied to form a cardioid subwoofer pattern.

The second room comprises 4 compact passive speakers in a 12" LF and 1" HF design on an 80 x50 dispersion pattern rotatable horn, and flown horizontally from its integral M8 inserts. 2x single 18" direct radiating subwoofers, formed in a single block are sufficient for this smaller space.

DJ booth monitoring is provided with speakers from the same series as the main system to retain the same sonic signature, wall controller for preset system selections.

VIP room features in ceiling speakers and a user operated wall controller offering system volume and source selection.

## Project Outline

- High power 4 way main room performance system
- Secure wireless network control of amplifiers, system processors
- Dante audio network for sharing between rooms and routing from DJ booth's
- Standard DJ media replay devices and mixers
- Automatic volume control based on time of night
- Automated input monitoring and reduction with digital readout in DJ booth
- Integration with fire alarm system for automatic audio reduction

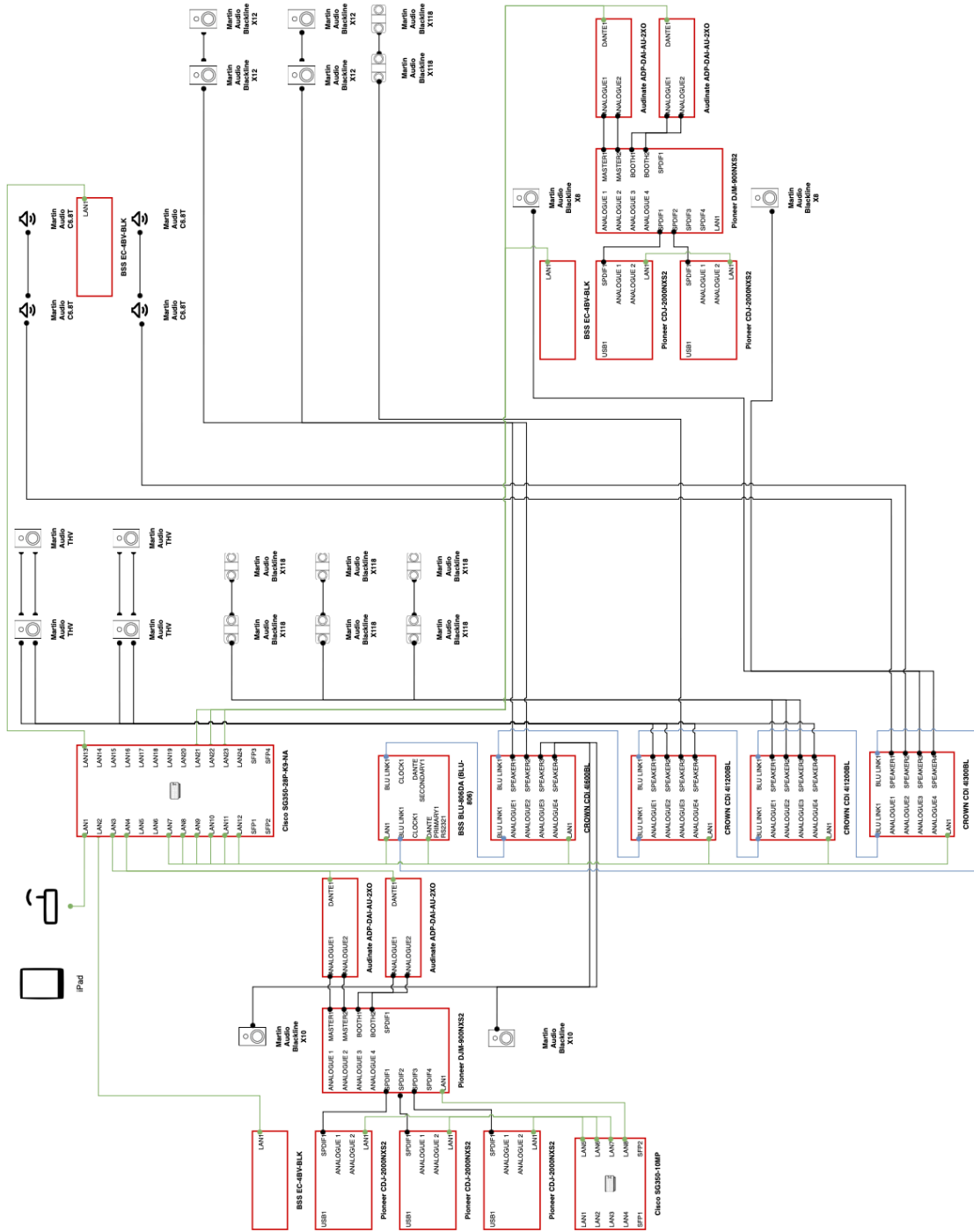
# BILL OF MATERIALS

S.No.	Description	Brand	Model	Qty	Unit Price	Amount
<b>Audio</b>						
1	18" Compact, direct radiating subwoofer	Martin Audio	Blackline X118	6	£850.00	£5,100.00
2	Analog + BLU link Input, 4 channel, 600W per output channel	CROWN	CDi 4 600BL	1	£2,057.00	£2,057.00
3	8" Ultra-compact, passive two-way system	Martin Audio	Blackline X8	2	£350.00	£700.00
4	Analog + BLU link Input, 4 channel, 1200W per output channel	CROWN	CDi 4 1200BL	2	£1,769.00	£3,539.00
5	6.5 Ceiling Mounted, Two-Way Vented Enclosure with tappings	Martin Audio	C6.8T	4	£171.00	£684.00
6	12" Compact, passive two-way system	Martin Audio	Blackline X12	4	£625.00	£2,500.00
7	Professional DJ multi player with disc drive	Pioneer	CDJ-2000NXS2	5	£1,700.00	£8,500.00
8	4-channel professional DJ mixer	Pioneer	DJM-900NXS2	2	£1,959.00	£3,918.00
9	10" Compact, passive two-way system	Martin Audio	Blackline X10	2	£525.00	£1,050.00
10	15 Three-way bi-amp trapezoid Hybrid fully horn loaded, Vertical form	Martin Audio	THV	4	£3,000.00	£12,000.00
11	Analog + BLU link Input, 4 channel, 300W per output channel	CROWN	CDi 4 300BL	1	£1,547.00	£1,547.00
12	Digital Configurable DSP with 4 I/O Card slots, BLU link and Dante.	BSS	BLU-806DA (BLU-806)	1	£4,520.00	£4,520.00
<b>Networking</b>						
13	SG350-28P 28-port GB POE	Cisco	SG350-28P-K9-NA	1	£854.00	£854.00
14	8+ 2sfp Port Gigabit PoE Managed Switch	Cisco	SG350-10MP	1	£0.00	£0.00
<b>Accessories</b>						
15	Ethernet Controller with 4 Buttons and Volume (Black - US)	BSS	EC-4BV-BLK	3	£214.00	£643.00
16	2-Channel Analog Input Adapter - Dante AVIO	Audinate	ADP-DAI-AU-2XO	4	£154.00	£619.00
					<b>Total Price</b>	<b>£48,226.00</b>

# CABLE SCHEDULE

S.No.	ID	Source Device	Destination Device	Source Port	Destination Port	Length	Cable Type	Signal
1		Martin Audio THV	Martin Audio THV	Martin Audio THV	Martin Audio THV		Speaker Cable	Audio
2		Martin Audio THV	Martin Audio THV	Martin Audio THV	Martin Audio THV		Speaker Cable	Audio
3		Martin Audio THV	Martin Audio THV	Martin Audio THV	Martin Audio THV		Speaker Cable	Audio
4		Martin Audio THV	Martin Audio THV	Martin Audio THV	Martin Audio THV		Speaker Cable	Audio
5		Martin Audio Blackline X1	Martin Audio Blackline X118	Martin Audio Blackl	Martin Audio Blackline X118		Speaker Cable	Audio
6		Martin Audio Blackline X1	Martin Audio Blackline X118	Martin Audio Blackl	Martin Audio Blackline X118		Speaker Cable	Audio
7		Martin Audio Blackline X1	Martin Audio Blackline X118	Martin Audio Blackl	Martin Audio Blackline X118		Speaker Cable	Audio
8		Martin Audio Blackline X1	Martin Audio Blackline X118	Martin Audio Blackl	Martin Audio Blackline X118		Speaker Cable	Audio
9		Martin Audio Blackline X1	Martin Audio Blackline X12	Martin Audio Blackl	Martin Audio Blackline X12		Speaker Cable	Audio
10		Martin Audio Blackline X1	Martin Audio Blackline X12	Martin Audio Blackl	Martin Audio Blackline X12		Speaker Cable	Audio
11		CROWN CDi 4 1200BL	Martin Audio Blackline X118	SPEAKER1	Martin Audio Blackline X118		Speaker Cable	Audio
12		CROWN CDi 4 1200BL	Martin Audio Blackline X118	SPEAKER2	Martin Audio Blackline X118		Speaker Cable	Audio
13		CROWN CDi 4 1200BL	Martin Audio Blackline X118	SPEAKER3	Martin Audio Blackline X118		Speaker Cable	Audio
14		CROWN CDi 4 1200BL	Martin Audio Blackline X118	SPEAKER3	Martin Audio Blackline X118		Speaker Cable	Audio
15		CROWN CDi 4 600BL	Martin Audio Blackline X12	SPEAKER1	Martin Audio Blackline X12		Speaker Cable	Audio
16		CROWN CDi 4 600BL	Martin Audio Blackline X12	SPEAKER2	Martin Audio Blackline X12		Speaker Cable	Audio
17		CROWN CDi 4 600BL	Martin Audio Blackline X10	SPEAKER3	Martin Audio Blackline X10		Speaker Cable	Audio
18		CROWN CDi 4 600BL	Martin Audio Blackline X10	SPEAKER4	Martin Audio Blackline X10		Speaker Cable	Audio
19		CROWN CDi 4 300BL	Martin Audio Blackline X8	SPEAKER4	Martin Audio Blackline X8		Speaker Cable	Audio
20		CROWN CDi 4 300BL	Martin Audio Blackline X8	SPEAKER3	Martin Audio Blackline X8		Speaker Cable	Audio
21		Pioneer CDJ-2000NXS2	Pioneer DJM-900NXS2	SPDIF1	SPDIF1		2 Core Audio	Audio
22		Pioneer CDJ-2000NXS2	Pioneer DJM-900NXS2	SPDIF1	SPDIF2		2 Core Audio	Audio
23		Pioneer CDJ-2000NXS2	Pioneer DJM-900NXS2	SPDIF1	SPDIF1		2 Core Audio	Audio
24		BSS BLU-806DA (BLU-806)	CROWN CDi 4 600BL	BLU LINK1	ANALOGUE1		CATx	Audio
25		CROWN CDi 4 600BL	CROWN CDi 4 1200BL	BLU LINK1	BLU LINK1		CATx	Audio
26		CROWN CDi 4 1200BL	CROWN CDi 4 1200BL	BLU LINK1	BLU LINK1		CATx	Audio
27		CROWN CDi 4 1200BL	CROWN CDi 4 300BL	BLU LINK1	BLU LINK1		CATx	Audio
28		CROWN CDi 4 300BL	Martin Audio C6.8T	SPEAKER1	Martin Audio C6.8T		Speaker Cable	Audio
29		CROWN CDi 4 300BL	Martin Audio C6.8T	SPEAKER2	Martin Audio C6.8T		Speaker Cable	Audio
30		Pioneer DJM-900NXS2	Audinate ADP-DAI-AU-2XO	MASTER2	ANALOGUE2		2 Core Audio	Audio
31		Pioneer DJM-900NXS2	Audinate ADP-DAI-AU-2XO	BOOTH1	ANALOGUE1		2 Core Audio	Audio
32		Pioneer DJM-900NXS2	Audinate ADP-DAI-AU-2XO	BOOTH2	ANALOGUE2		2 Core Audio	Audio
33		Pioneer DJM-900NXS2	Audinate ADP-DAI-AU-2XO	MASTER1	ANALOGUE1		2 Core Audio	Audio
34		Pioneer DJM-900NXS2	Audinate ADP-DAI-AU-2XO	MASTER2	ANALOGUE2		2 Core Audio	Audio
35		Pioneer DJM-900NXS2	Audinate ADP-DAI-AU-2XO	BOOTH1	ANALOGUE1		2 Core Audio	Audio
36		Pioneer DJM-900NXS2	Audinate ADP-DAI-AU-2XO	BOOTH2	ANALOGUE2		2 Core Audio	Audio
37		BSS EC-4BV-BLK	Cisco SG350-28P-K9-NA	LAN1	LAN2		CATx	Control
38		CROWN CDi 4 300BL	BSS BLU-806DA (BLU-806)	BLU LINK1	BLU LINK1		CATx	Audio
39		BSS EC-4BV-BLK	Cisco SG350-28P-K9-NA	LAN1	LAN23		CATx	Control
40		Audinate ADP-DAI-AU-2XO	Cisco SG350-28P-K9-NA	DANTE1	LAN22		CATx	Audio
41		Audinate ADP-DAI-AU-2XO	Cisco SG350-28P-K9-NA	DANTE1	LAN21		CATx	Audio
42		Audinate ADP-DAI-AU-2XO	Cisco SG350-28P-K9-NA	DANTE1	LAN3		CATx	Audio
43		Audinate ADP-DAI-AU-2XO	Cisco SG350-28P-K9-NA	DANTE1	LAN4		CATx	Audio
44		Cisco SG350-28P-K9-NA	BSS BLU-806DA (BLU-806)	LAN12	LAN1		CATx	Control
45		CROWN CDi 4 600BL	Cisco SG350-28P-K9-NA	LAN1	LAN11		CATx	Control
46		CROWN CDi 4 1200BL	Cisco SG350-28P-K9-NA	LAN1	LAN10		CATx	Control
47		CROWN CDi 4 1200BL	Cisco SG350-28P-K9-NA	LAN1	LAN9		CATx	Control
48		CROWN CDi 4 300BL	Cisco SG350-28P-K9-NA	LAN1	LAN8		CATx	Control
49		Cisco SG350-28P-K9-NA		LAN1			CATx	Control
50		BSS BLU-806DA (BLU-806)	Cisco SG350-28P-K9-NA	DANTE PRIMARY	LAN7		CATx	Audio
51		Pioneer CDJ-2000NXS2	Pioneer DJM-900NXS2	SPDIF1	SPDIF3		2 Core Audio	Audio
52		Pioneer DJM-900NXS2	Cisco SG350-10MP	LAN1	LAN8		CATx	Audio
53		Pioneer CDJ-2000NXS2	Cisco SG350-10MP	LAN1	LAN7		CATx	Audio
54		Pioneer CDJ-2000NXS2	Cisco SG350-10MP	LAN1	LAN6		CATx	Audio
55		Pioneer CDJ-2000NXS2	Cisco SG350-10MP	LAN1	LAN5		CATx	Audio
56		CROWN CDi 4 1200BL	Martin Audio THV	SPEAKER4	Martin Audio THV		Speaker Cable	Audio
57		CROWN CDi 4 1200BL	Martin Audio THV	SPEAKER4	Martin Audio THV		Speaker Cable	Audio
58		CROWN CDi 4 1200BL	Martin Audio THV	SPEAKER1	Martin Audio THV		Speaker Cable	Audio
59		CROWN CDi 4 1200BL	Martin Audio THV	SPEAKER2	Martin Audio THV		Speaker Cable	Audio
60		Pioneer CDJ-2000NXS2	Pioneer CDJ-2000NXS2	LAN1	LAN1		CATx	Audio
61		BSS EC-4BV-BLK	Cisco SG350-28P-K9-NA	LAN1	LAN13		CATx	Control

<b>ui consulting</b> AV design and consulting services	
<b>Account</b>	AM PM
<b>Project</b>	Nightclub v1
<b>Notes</b>	
<b>Legends</b>	
<b>Design:</b>	Eden
<b>Drawn By:</b>	David
<b>Checked By:</b>	
<b>Created On:</b>	2021-06-23
<b>Revision:</b>	



# THV

Three-way bi-amp trapezoid Hybrid® fully horn loaded

TH  
SERIES

### Features

- All-horn three-way system
- 'Phase-ball' loaded mid-driver
- Hybrid® LF section
- Fitted with handles and castors
- Vertical format
- Five year limited warranty

### Applications

- Larger club performance
- Large scale installs



THV is a very high performance, all-horn, three-way system in a single wide-bandwidth package.

The driver complement has been engineered for exemplary performance in all bands.

The Hybrid® low frequency section comprises a horn-loaded 15" (380mm)/4" (100mm) voice coil driver that is reflex loaded to extend the LF output to below the natural horn cut-off point. The LF driver features a water resistant cone and triple roll surround for increased excursion.

The mid-horn of the THV has a unique 'phase-ball' loading device which maintains the constant directivity characteristics of the horn at the upper end of its range. It is driven by a 10" (250mm) midrange driver with an aluminium demodulating ring for improved high-mid clarity and reduced distortion when driven hard. The 70° x 40° HF section of the THV features a neodymium 1" (25mm) exit compression driver with a Kapton diaphragm for high sensitivity and extended HF performance.

The internal mid/ high passive crossover allows this three-way system to be driven in a bi-amp configuration.

The THV is configured in a vertically formatted, trapezoidal birch ply cabinet and fitted with twelve M10 inserts to facilitate ease of mounting. The enclosure has generous pocket handles on the sides and rear castors are fitted as standard.

A Martin Audio iK42 or VIA5002/5004 are the recommend amplifier partners with the DX range of controllers also compatible

Martin Audio Ltd  
Century Point, Halifax Road, High Wycombe  
Buckinghamshire HP12 3SL, England

Telephone: +44 (0) 1494 535 312  
Facsimile: +44 (0) 1494 438 669  
Email: [info@martin-audio.com](mailto:info@martin-audio.com)



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PORTABLE + INSTALLATION

# Blackline X118

## Compact Subwoofer



### Features

- Compact, direct-radiator subwoofer
- 1 x 18" (460mm) driver with 3" (75mm) voice coil
- Large ports for reduced air noise
- Screw-free perforated steel grille
- 35mm pole-mount socket
- 8Ω nominal impedance
- M10 flying inserts

### Applications

- Portable sound reinforcement
- Live music clubs
- Bars and restaurants
- Nightclubs
- Corporate AV events and conferences
- Weddings and parties
- Secondary stages at festivals
- HoW, leisure centres and retail outlets



The X118 is a compact, high performance subwoofer for use with BlacklineX Series full-range loudspeakers. It extends the low frequency operating range of the combined system to 42Hz and provides exceptional low frequency impact. It can be used singly, stacked or flown via integral M10 insets and features a long-excursion 18" (460mm)/3" (75 mm) voice coil driver in a compact reflex enclosure. Its four reflex ports have a large frontal area to reduce turbulent air noise at very high levels.

The X118 enclosure is constructed from plywood and finished in black textured paint as standard, with white and RAL colour finishes available to special order. An impact-resistant perforated steel grille protects the driver, and the enclosure has a 35mm pole-mount fitting in the top surface and two side handles for ease of handling. Rubber feet on the base of the enclosure resist movement and align with recesses in the top surface for stable stacking.

When used with BlacklineX Series full-range systems, crossover and EQ functions can be performed by the DX0.5.

Martin Audio Ltd  
Century Point, Halifax Road, High Wycombe  
Buckinghamshire HP12 3SL, England

Telephone: +44 (0) 1494 535 312  
Facsimile: +44 (0) 1494 438 669  
Email: [info@martin-audio.com](mailto:info@martin-audio.com)



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# Blackline X10

## Compact Passive Two-Way System



### Features

- Compact passive two-way system
- Symmetrical multi-angle plywood enclosure
- User-rotatable 90° x 50° horn
- Vertical and horizontal orientation
- Screw-free, cloth-backed perforated steel grille
- Integral ergonomic handle
- Pole-mount bung maintains clean lines
- 8Ω nominal impedance
- Twin NL4 connectors
- Flexible mounting options via M8 inserts



### Applications

- Portable sound reinforcement
- Bars and restaurants
- Nightclubs
- Unobtrusive stage monitoring
- Corporate AV events and conferences
- Weddings and parties
- Main PA infill
- Secondary stages at festivals
- HoW, leisure centres and retail outlets

The X10 is a high performance yet very compact two-way passive loudspeaker system which utilises a 10" (250mm)/2.5" (63mm) voice coil LF driver and a 1" (25mm) exit HF compression driver with a 1.4" (35mm) polyimide diaphragm. The rotatable 90° x 50° HF horn has equal horizontal and vertical mouth dimensions for directivity control in both planes.

It has a multitude of professional applications — from distributed sound reinforcement, HoW and AV events to frontfill/infill and use as an unobtrusive stage monitor. With a maximum SPL of 124dB @ 1m, it is uniquely placed to meet the foreground requirements of music bars and clubs that require upfront sound levels from a very compact enclosure. Use with a BlacklineX Series subwoofer will enable the X10 to operate as small dancefloor or sound reinforcement system that is remarkably powerful for its size, as well as being extremely portable.

The X10 is constructed from plywood and fitted with a screw-free steel grille, M8 inserts for wall brackets and eyebolt suspension, plus a pole-mount socket with a removable bung that maintains clean lines in install applications. Finished in black textured paint as standard, the X10 can be supplied in white or any RAL colour to order.

A full-range passive two-way system, the X10 may be used without a controller. However, the EQ and limiter functions of a controller such as the Martin Audio DX0.5 will maximise its capabilities. When used in conjunction with an X115, X118 or X210 subwoofer, crossover and EQ functions can be performed by the DX0.5.

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Buckinghamshire HP12 3SL, England

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Facsimile: +44 (0) 1494 438 669  
Email: [info@martin-audio.com](mailto:info@martin-audio.com)



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# Blackline X12

## Compact Passive Two-Way System



### Features

- Compact passive two-way system
- Symmetrical multi-angle plywood enclosure
- User-rotatable 80° x 50° horn
- Vertical and horizontal orientation
- Screw-free, cloth-backed perforated steel grille
- Integral ergonomic handle
- Pole-mount bung maintains clean lines
- 8Ω nominal impedance
- Twin NL4 connectors
- Flexible mounting options via M8 inserts

### Applications

- Portable sound reinforcement
- Live music clubs
- Bars and restaurants
- Nightclubs
- Stage monitoring
- Corporate AV events and conferences
- Weddings and parties
- Main PA infill
- Secondary stages at festivals
- HoW, leisure centres and retail outlets



The X12 fulfils the requirement for a compact system that can deliver high sound levels — either as a stand-alone system or supplemented by a BlacklineX subwoofer. Featuring a 12" (300mm) LF driver unit and a 1" (25mm) exit compression driver on a user-rotatable horn, its 80° x 50° dispersion pattern is ideal for medium throw applications.

The LF driver has a 2.5" (63mm) voice coil and a high BL motor, while the HF compression driver utilises a 1.75" (44mm) polyimide diaphragm for extended high frequency response. Use with a BlacklineX Series subwoofer will enable the X12 to operate as a dancefloor or sound reinforcement system that is remarkably powerful for its size, as well as being extremely portable.

The X12 is constructed from plywood and fitted with a screw-free steel grille, M8 inserts for wall brackets and eyebolt suspension, plus a pole-mount socket with a removable bung that maintains clean lines in install applications. Finished in black textured paint as standard, the X12 can also be supplied in white or any RAL colour to order.

A full-range passive two-way system, the X12 may be used without a controller. However, the EQ and limiter functions of a controller such as the Martin Audio DX0.5 will maximise its capabilities. When used in conjunction with an X115, X118 or X210 subwoofer, crossover and EQ functions can be performed by the DX0.5.

Martin Audio Ltd  
Century Point, Halifax Road, High Wycombe  
Buckinghamshire HP12 3SL, England

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Facsimile: +44 (0) 1494 438 669  
Email: [info@martin-audio.com](mailto:info@martin-audio.com)



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PORTABLE + INSTALLATION

# Blackline X118

## Compact Subwoofer



### Features

- Compact, direct-radiator subwoofer
- 1 x 18" (460mm) driver with 3" (75mm) voice coil
- Large ports for reduced air noise
- Screw-free perforated steel grille
- 35mm pole-mount socket
- 8Ω nominal impedance
- M10 flying inserts

### Applications

- Portable sound reinforcement
- Live music clubs
- Bars and restaurants
- Nightclubs
- Corporate AV events and conferences
- Weddings and parties
- Secondary stages at festivals
- HoW, leisure centres and retail outlets



The X118 is a compact, high performance subwoofer for use with BlacklineX Series full-range loudspeakers. It extends the low frequency operating range of the combined system to 42Hz and provides exceptional low frequency impact. It can be used singly, stacked or flown via integral M10 insets and features a long-excursion 18" (460mm)/3" (75 mm) voice coil driver in a compact reflex enclosure. Its four reflex ports have a large frontal area to reduce turbulent air noise at very high levels.

The X118 enclosure is constructed from plywood and finished in black textured paint as standard, with white and RAL colour finishes available to special order. An impact-resistant perforated steel grille protects the driver, and the enclosure has a 35mm pole-mount fitting in the top surface and two side handles for ease of handling. Rubber feet on the base of the enclosure resist movement and align with recesses in the top surface for stable stacking.

When used with BlacklineX Series full-range systems, crossover and EQ functions can be performed by the DX0.5.

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Buckinghamshire HP12 3SL, England

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Facsimile: +44 (0) 1494 438 669  
Email: [info@martin-audio.com](mailto:info@martin-audio.com)



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# Blackline X8

## Ultra-Compact Passive Two-Way System



### Features

- Ultra-compact passive two-way system
- Symmetrical multi-angle plywood enclosure
- User-rotatable 90° x 50° horn
- Vertical and horizontal orientation
- Screw-free, cloth-backed perforated steel grille
- Integral ergonomic handle
- Pole-mount bung maintains clean lines
- 8Ω nominal impedance
- Twin NL4 connectors
- Flexible mounting options via M8 inserts



### Applications

- Portable sound reinforcement
- Live music clubs
- Bars and restaurants
- Nightclubs
- Unobtrusive stage monitoring
- Corporate AV events and conferences
- Weddings and parties
- Main PA infill
- Secondary stages at festivals
- HoW, leisure centres and retail outlets

The X8 is an ultra-compact passive two-way system with an 8" (200mm)/2" (50mm) voice coil LF driver and a 1" (25mm) HF driver mounted on a 90° x 50° horn which can be easily rotated for horizontal or vertical orientation, depending on venue requirements. Its very small size gives no indication of its high output capability.

As a stand-alone loudspeaker, it has a multitude of professional applications — from distributed sound reinforcement, HoW and AV events to frontfill/infill and use as a micro stage monitor. Complemented by a BlacklineX subwoofer, it is the ideal, simple-to-use system for portable applications and installations which call for an unobtrusive system that can deliver pristine sound over short and medium throw distances.

The X8 is constructed from plywood and fitted with a screw-free steel grille, M8 inserts for wall brackets and eyebolt suspension, plus a pole-mount socket with a removable bung that maintains clean lines in install applications. Finished in black textured paint as standard, the X8 can be supplied in white or any RAL colour to order.

A full-range passive two-way system, the X8 may be used without a controller. However, the EQ and limiter functions of a controller such as the Martin Audio DX0.5 will maximise its capabilities. When used in conjunction with an X115, X118 or X210 subwoofer, crossover and EQ functions can be performed by the DX0.5.

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Buckinghamshire HP12 3SL, England

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Facsimile: +44 (0) 1494 438 669  
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# C6.8T

Ceiling mounted, two-way vented enclosure

architectural

## features

- ▶ Two-way high performance flush mounting ceiling speaker
- ▶ 6.5" (165mm) UL94V-0 carbon fibre loaded polypropylene cone bass driver
- ▶ Very wide dispersion – 150° conical up to 7kHz
- ▶ High & low impedance operation – transformer included
- ▶ 106dB continuous max SPL @ 1 metre
- ▶ 75W power handling – 16 ohm (40W transformer)
- ▶ Polyswitch and thermal fuse protection
- ▶ Steel backcan

## applications

- ▶ Fixed installs in ceilings and walls
- ▶ Low ceiling environments

Featuring a 6.5" (165mm) bass driver and a 0.8" (19mm) dome tweeter, The C6.8T is ideal for flush mounted applications where full frequency performance and wide dispersion are required from a compact, ported enclosure. The side-by-side arrangement of the drive units maintains smooth response up to 75° off-axis and makes the C6.8T perfectly suited for use in low ceilings, where its broad coverage means that fewer units will be required to deliver premium sound over the required listening area. The C6.8T features a 4-point mounting system for ease of installation and a rising clamp plug and socket permit easy pre-wiring with up to 2.5mm<sup>2</sup> conductors.

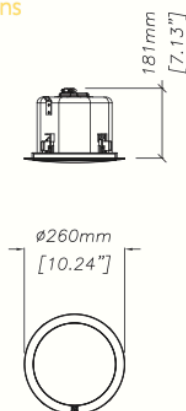
**These products comply with UL2043 Fire Tests for Heat & Visible Smoke Release for Discrete Products and their Accessories Installed in Air Handling Spaces. Listed UL1480 General Signalling Speakers. SUITABLE FOR USE IN AIR HANDLING SPACES**



## technical specifications

TYPE	Ceiling mounted, two-way vented enclosure
FREQUENCY RESPONSE (1)	90Hz-20kHz ± 3dB -10dB @ 70Hz
DRIVERS	6.5" (165mm) UL94V-0 PP bass driver 0.8" (19mm) dome tweeter
RATED POWER (2)	75W AES, 300W peak
SENSITIVITY (3)	89dB
MAXIMUM SPL (4)	106dB continuous, 112dB peak
NOMINAL IMPEDANCE	16 ohms
DISPERSION (-6dB)	150° conical up to 7kHz
CROSSOVER	4kHz passive
ENCLOSURE	Steel backcan
FINISH	Bezel & grille – white UV resistant Overpaintable Backcan – zinc plated
PROTECTIVE GRILLE	Perforated steel
CONNECTORS	Rising clamp plug and socket
ACCESSORIES (included)	40W 70/100V line transformer Tile rails C bracket Paint mask Cut-out template
VOLTAGE TAPS	100V – 40W, 20W, 10W 70V – 40W, 20W, 10W, 5W
DIMENSIONS	(OD) 260mm x (D) 181mm (OD) 10.2ins x (D) 7.1ins
CUT-OUT DIAMETER	224mm (8.83ins)
WEIGHT	3.5kg (7.7lbs)

## overall dimensions



C6.8T

Century Point, Halifax Road, Cressex Business Park,  
High Wycombe, Buckinghamshire HP12 3SL, England.  
Telephone: +44 (0)1494 535312 Facsimile: +44 (0)1494 438669  
E-mail: info@martin-audio.com  
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[www.martin-audio.com](http://www.martin-audio.com)



# soundweb™ LONDON



## BLU-806DA networked signal processor



### Overview

Formerly known as BLU-806, the Soundweb London BLU-806DA offers configurable I/O, configurable signal processing, Dante™ / AES67 audio and a high bandwidth, fault tolerant digital audio bus.

The BLU-806DA has open architecture which is fully configurable through HiQnet London Architect™. A rich palette of processing and logic objects and a "drag and drop" method of configuration provide a simple and familiar design environment.

The BLU-806DA features Dante™ / AES67 audio. The BLU-806DA is capable of simultaneously transmitting and receiving up to 64 channels of Dante™ / AES67 audio (64 x 64). Primary and Secondary ports are provided for fault tolerance. Control is through a separate Ethernet port.

The BLU-806DA also features a low latency, fault tolerant digital audio bus of 256 channels which uses standard Category 5e cabling giving a distance of 100m between compatible devices. Fiber media converters can be used to increase the distance between devices to over 40km.

Four card slots facilitate many different device I/O configurations. Each slot can accommodate any of six available I/O cards, including the Analog Input Card, Analog Output Card, Digital Input Card, Digital Output Card, AEC Input Card, and Telephone Hybrid Card. Each card supports four channels.

### Key Features

- 4 input/output card slots
- Configurable inputs/outputs
  - Analog inputs (with Phantom Power per channel)
  - Analog outputs
  - Digital inputs (AES/EBU and S/PDIF)
  - Digital outputs (AES/EBU and S/PDIF)
  - AEC inputs
  - Telephone interface
- Rich palette of processing and logic objects
- Dante™ / AES67 audio
  - 64 x 64 audio input/output channels per device

Analog Input Cards provide software configurable gain in 6dB steps up to +48dB per channel and software selectable Phantom Power per channel. Digital Input Cards and Digital Output Cards process AES/EBU and/or S/PDIF audio and offer a variety of clocking and syncing options. AEC Input Cards and Telephone Hybrid Cards facilitate specialized processing and interfacing primarily for teleconferencing applications. (Further information about the I/O cards can be found on dedicated datasheets).

Phantom Power, Sync, Signal Present and Clip information per channel is easily accessible, without the requirement for a PC, from clear front panel LED indication. Device-specific information such as Device Name, Device Type, Firmware Version Number, Time, IP Address and Subnet Mask is available from the front panel display. A bi-directional locate function allows devices to be identified both from and within HiQnet London Architect.

12 Control Inputs and 6 Logic Outputs allow the BLU-806DA to be integrated with GPIO compatible devices. The Soundweb London Interface Kit, comprehensive documentation which details how Soundweb London systems can be integrated with third party control systems, is included within the installation of HiQnet London Architect.

The BLU-806DA and the other members of the Soundweb London family provide the building blocks of the perfectly tailored system solution.

- 256 channel, low latency, fault tolerant digital audio bus
- Clear front panel LED indication
- Informative front panel display
- Bi-directional locate functionality
- 12 control inputs and 6 logic outputs for GPIO integration
- Soundweb London interface kit for third party control system integration (documentation)
- HiQnet device
- Configuration, control and monitoring from HiQnet London Architect
- AES67 Compatible

# soundweb CONTRIO™



## EC-4BV ethernet controller with 4 buttons and volume control



### Overview

The Soundweb Contrio EC-4BV is an Ethernet wall controller for use in HARMAN HiQnet™ systems. The EC-4BV can control and monitor parameters within BSS Audio Soundweb London™ and other HiQnet devices, including Crown DriveCore™ Install Series amplifiers. The EC-4BV is available in black or white, and in single-gang US decora or single-gang EU form factor. The EC-4BV contains a single Ethernet port for configuration, control, monitoring, and power via PoE. The EC-4BV is configured via simple drag-and-drop operations within the software application HiQnet Audio Architect™.

The EC-4BV contains one push/rotary encoder, one encoder ring, four buttons, and one LCD screen. The buttons, encoder ring, and LCD screen are multicolor backlit, capable of eight different colors with adjustable intensity.

The push/rotary encoder can be rotated for continuous parameter control (e.g. volume). The push/rotary encoder can also be pressed for binary parameter control (e.g. mute) or preset recall. The encoder ring can display a bouncing audio meter. When the push/rotary encoder is rotated, the encoder ring can temporarily display a volume setting. When the push/rotary encoder is pressed,

### Key Features

- Ethernet wall controller
- Compatible with Soundweb London, Crown DCi, and other HiQnet devices
- Available in black or white
- Available in US decora or EU version
- Single-gang size
- PoE (Power Over Ethernet)
- Configured within Audio Architect via drag-and-drop

the encoder ring can temporarily display a binary parameter setting (e.g. red/green for muted/unmuted status).

The four buttons can be pressed for binary parameter control (e.g. mute), preset recall, or source selection.

The LCD screen has a screen resolution of 64 x 128 pixels, and can display custom text and graphics.

The EC-4BV supports 'sleep' functionality. After a specified amount of time with no user input, the EC-4BV can turn off all LEDs. This is useful to avoid distraction in a dimly lit environment. Any user interaction will 'wake up' the controller.

The EC-4BV can be remotely locked and unlocked via other control systems. The EC-4BV can be locally unlocked via a four-digit PIN entry on the buttons.

The EC-4BV supports multiple modes of operation. This allows the push/rotary encoder and encoder ring to be reassigned dynamically to different parameters based on which buttons are selected.

- 1 programmable push/rotary encoder
- 1 programmable encoder ring (multicolored)
- 4 programmable buttons (multicolored)
- 1 programmable 64 x 128 pixel LCD (multicolored)
- Sleep function
- Security:
  - remote lock/unlock
  - Local unlock via PIN entry
- Multiple modes of operation

# Dante AVIO™



Network all your analog audio gear easily and cost-effectively with Dante AVIO

Dante AVIO Analog Adapters let you use your favorite analog audio gear with any Dante-connected system, delivering the interoperability, performance and scalability that only networking can bring. Cost effective, compact and built for the road, Dante AVIO adapters bring the modern network connectivity that every audio pro needs in their toolbox.

**Dante AVIO analog adapters are available as input or output versions in 1- or 2-channel configurations.**

#### PLUG & PLAY

Each Dante AVIO analog adapter is a complete, high performance Dante device, delivering all the automation and ease of use that have made Dante the most popular audio networking solution worldwide. Dante AVIO analog adapters are automatically discovered and ready to use when connected, and no separate power supplies are required – just use a common PoE (Power over Ethernet) switch and Dante AVIO analog adapters are ready to go.



#### USE CASES

##### ANALOG INPUT

- ▶ Connect legacy mixers and consoles to a Dante network
- ▶ Patch favorite DSPs, analog compressors and equalizers into a Dante system using a combination of Input and Output adapters
- ▶ Connect stage DI boxes and keyboard instruments directly to a Dante network
- ▶ Connect your wireless mic receiver to a Dante network

##### ANALOG OUTPUT

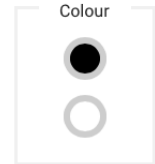
- ▶ Connect analog powered speakers to your Dante audio network.
- ▶ Send audio to analog power amplifiers over a Dante audio network.
- ▶ Create easy drop-points for connecting cry rooms and overflow areas to a Dante network.
- ▶ Connect non-networked hearing aid loop amplifiers to your Dante audio network.

##### FEATURES

- ▶ Plug & play operation
- ▶ Built for the road
- ▶ Sample rates up to 96 kHz
- ▶ 16, 24 and 32-bit audio support
- ▶ Excellent dynamic range, SNR and THD performance
- ▶ Configurable gain / attenuation
- ▶ Dante Audio over IP and AES67 RTP transport formats
- ▶ Power over Ethernet (PoE) support
- ▶ Dante Domain Manager ready








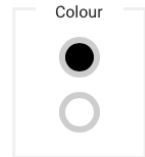
View all photos

## Refined, Remastered, Reborn

The CDJ-2000NXS2 inherits all the best features from its predecessor – the [CDJ-2000NXS](#) – and takes a giant leap forward. We've added a larger, multicolour touch screen with a Qwerty keyboard and search filters to help you select tracks faster. 2 banks of 4 Hot Cues give you more creative freedom, while a 96 kHz/24-bit sound card and support for FLAC/Apple Lossless Audio (ALAC) means you can play with higher resolution formats.

Download the [rekordbox™](#)  music management software or the rekordbox app to prepare your sets.

# NIGHTCLUB V1- DJ MIXERS



View all photos

## Attention to detail

Take your performance to new heights with the DJM-900NXS2, which features our first ever 64-bit mixing processor for a warmer, more nuanced sound. We've fine-tuned the EQ and fader curves and enhanced the FX controls to give you even more creative choice. Plus the versatile DJM-900NXS2 has an independent Send/Return, 4 phono inputs and 2 USB ports – giving you flexibility to set it up your way.

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### Easy-to-Use Managed Switches That Provide the Ideal Combination of Features and Affordability

To stay ahead in a competitive marketplace, businesses need to make every dollar count. That means getting the most value from your technology investments, but it also means making sure that employees have fast, reliable access to the business tools and information they need. Every minute an employee waits for an unresponsive application and every minute your network is down has an effect on your profits. The importance of maintaining a strong and dependable business network only grows as your business adds more employees, applications, and network complexity.

When your business needs advanced security and features but value is still a top consideration, you're ready for the new generation of Cisco® Small Business managed switches: the Cisco 350 Series (Figure 1).



**Figure 1.**  
Cisco 350 Series Managed Switches

### Cisco 350 Series Switches

The Cisco 350 Series, part of the Cisco Small Business line of network solutions, is a portfolio of affordable managed switches that provides a reliable foundation for your business network. These switches deliver the features you need to improve the availability of your critical business applications, protect your sensitive information, and optimize your network bandwidth to deliver information and applications more effectively. Easy to set up and use, the Cisco 350 Series provides the ideal combination of affordability and capabilities for small businesses and helps you create a more efficient, better-connected workforce.

The Cisco 350 Series is a broad portfolio of fixed-configuration managed Ethernet switches. Models are available with 8 to 48 ports of Fast Ethernet and 10 to 52 ports of Gigabit Ethernet connectivity, providing optimal flexibility to create exactly the right network foundation for your business. However, unlike other small business switching solutions that provide managed network capabilities only in the costliest models, all Cisco 350 Series Switches support the advanced security management capabilities and network features you need to support business-class data, voice, security, and wireless technologies. At the same time, these switches are simple to deploy and configure, allowing you to take advantage of the managed network services your business needs.

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# Project Proposal

Prepared for:

Prepared by: David Bradshaw, Ui Consulting

15 June 2021

Proposal number: 999-1020

A dark blue rectangular box containing the company name and services in white text.

ui consulting  
AV design and consulting services

## Contact

David Bradshaw

[uiavconsulting@icloud.com](mailto:uiavconsulting@icloud.com)

+44 (0) 7926 191960

+65 9380 3761

[www.uiconsulting.co.uk](http://www.uiconsulting.co.uk)

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