

NOISE MANAGEMENT PLAN

Project	60 Oldham Street, Manchester
To	Phil Harrison, Founder & Owner, Escapism Bar Group
From	Robert Miller, Director, F1 Acoustics Company Limited
Date	03 August 2023
Reference	1865/Planning-NMP/Rev0

1 INTRODUCTION

F1 Acoustics Company Limited has been appointed by Escapism Bar Group to provide a Noise Management Plan (NMP) to support the planning application for the change of use at 60 Oldham Street from a restaurant to a ground and basement floor bar. Several questions regarding noise have been raised during the planning application process that this NMP seeks to provide information on.

The main topics that more information has been requested on are:

- structure borne noise and building mitigation measures;
- sound system specification and installation mitigation measures;
- operational hours and specific live music controls; and
- how compliance with the music noise level criteria will be managed.

2 STRUCTURAL NOISE MITIGATION MEASURES

The ground and basement floors of 60 Oldham Street will be completely refurbished with all existing fixtures removed before new walls and ceilings are installed. As part of the refurbishment sound insulation and mitigation have been considered at the forefront of the design process to reduce the impact of structure borne and airborne noise transfer to noise sensitive premises.

The sound insulation principals of a box within a box type construction have been used for this project and the following noise mitigation measures have been installed in both the ground floor and basement:

- Walls (ground floor and basement) – 3"x2" timber frame stud walls independent from the existing external and party walls, with 50 mm acoustic rockwool insulation, and 1x 15 mm soundBloc plasterboard.
- Ceiling (ground floor) – 2x existing fireboard to underside of first floor joists, 600 mm void with 100 mm acoustic insulation, metal frame hung off rubber hangers/mounts with 1x 12.5 mm fireboard and 1x 15 mm soundBloc.
- Cladding – Walls clad with thick hardwood boards and the ceiling will be clad with corrugated bitumen boards to reflect and diffuse the sound.
- New internal sound lobbies to be installed at each entrance to minimise sound break-out as people enter and leave.

Although it is possible to predict the individual element sound insulation properties it is not possible to predict all sound transmission paths cumulatively, reliably, or accurately, to the nearest noise sensitive premises. However, it is expected that these works will provide an improvement to the sound insulation of the venue. The music noise level criteria and compliance management are discussed in Sections 5 and 6 below.

3 SOUND SYSTEM SPECIFICATION AND MITIGATION MEASURES

The sound system specification and design has been carefully considered and a zonal approach to the design has been proposed. A distributed speaker layout with smaller speakers closer to the customers is being used rather than larger speakers at one end of the room so that an even sound coverage can be achieved. All speakers will be structurally isolated from the walls though the use of anti-vibration mounts.

The ground floor sound system proposed to be installed is:

- 2x RCF 8015LP Under seat sub woofers, mounted on acoustic matting. The surrounding area under the seat will be insulated with 100 mm rockwool red series insulation.
- 6x RCF Compact M08 mid/hi, wall mounted speakers, mounted on RCF proprietary yoke bracket, with isolating silicone bolt between bracket and Powerdrive Ref-1 wall bracket, in turn mounted on isolating pods off the wall.

The basement sound system proposed to be installed is:

- 2x RCF 8015LP Under seat sub woofers, mounted on acoustic matting. The surrounding area under the seat will be insulated with 100 mm rockwool red series insulation.
- 8x RCF Compact M06 mid/hi, on Powerdrive WME-80 brackets, isolated from wall with 4x pods per bracket.
- 2 x RCF Compact M04 infill speakers, built in bracket, isolated from wall with 4x pods per bracket.

The whole sound system will be controlled via a Soundweb London BLU-100 netorked programmable DSP system including equalisers and compression/limiting processing on the audio input and output. The sound level of individual zones can be set independently. The device has no knobs or buttons accessible to bar staff (other than a master fader with the maximum output fixed to the set limit) with the only person able to change the settings being the sound engineer with a password and access to the software.

Additional information on the sound system components and vibration isolating elements are provided in Annex A of this document.

4 PROPOSED OPENING HOURS AND OPERATIONAL INFORMATION

The opening hours of the proposed bar are to reflect the existing Premises Licence (ref. 285058) granted on 13/03/2023 by Manchester City Council (MCC), these are:

- Sunday to Thursday – 11:00 to 02:30 (the next day); and
- Friday and Saturday – 11:00 to 03:30 (the next day).

There are several venues within the vicinity of this proposed application that advertise online as opening to similar and later times than this application as follows:

- 64 Oldham Street (Junior Jackson's) – Monday to Sunday 15:00 to 03:00.
- 33 Oldham Street (33 Oldham Street) – Monday to Thursday open until 01:00 (the next day), Friday and Saturday open until 03:00 (the next day) and Sunday open until 23:00.
- 73-75 Oldham Street (The Freemount) – Monday to Friday 12:00 to 02:00 and Saturday and Sunday 12:00 to 03:00.
- 107 Oldham Street (The Mancunian Bar) – Wednesday, Thursday and Sunday 12:00 to 23:00 and Friday and Saturday 24 hours a day.
- 11 Stevenson Square (Hula) – Wednesday and Thursday 20:00 to 03:00 (the next day) and Friday and Saturday 17:00 to 04:00 (the next day).

- 52 Church Street (Black Dog Ballroom) – Sunday to Friday 16:00 to 04:00 (the next day) and Saturday 12:00 to 05:00 (the next day).
- Short Street (Crazy Pedro's NQ) – Monday to Sunday 12:00 to 04:00 (the next day).

As shown the proposed opening hours (as already granted in the Premises Licence) are not uncommon in the local area and therefore will unlikely have a significant cumulative impact. Escapism Bar Group have traded for 20 years and our opening hours at most of our venues are until 4 am. Much of the late-night customers are from the hospitality industry as there are usually very few quality venues open to service the hospitality industry staff, once they have finished their shift at work early in the morning. The Escapism Bar Group strive to provide good, safe, quality venues that hospitality industry staff can socialise with their work mates and peers.

The following operational noise management practices will be in place at the bar:

- Bins – No waste to be taken out to the external bin store after 21:00. This will reduce noise break-out from open doors and prevent the bins being emptied as a noise nuisance.
- Live music – The venue will not operate any live music. All music will be recorded and be from a playlist or DJ.
- Signs shall be displayed in prominently at entrance and exit areas reminding customers to always respect neighbours by keeping the noise to a minimum.
- Staff shall actively manage anti-social behaviour associated with customers of the bar and the immediate vicinity, if appropriate.
- All staff will be briefed on the noise management policy and operational procedures.
- Free pizza will be served to qualifying customers Monday to Sunday from 12:00 to 21:30.

5 MUSIC NOISE LEVEL CRITERIA

The nearest noise sensitive premises is a residential unit on the first floor above the proposed bar at 60 Oldham Street, Manchester. Based on MCC guidance, music noise levels in the 63 Hz and 125 Hz octave centre frequency bands (L_{eq}) are suggested to be controlled such as not to exceed (in bedrooms) 47 dB and 41 dB, respectively. It is also appropriate to set a broadband (L_{Aeq}) limit based on achieving at least 5 dB below the corresponding BS 8233:2014 internal noise target. These limits would apply any time the ground floor or basement is operational, day or night.

It is noted that the first-floor residential unit is owned by the tenant to facilitate a “live-in” manager for the commercial unit below so the risk of complaint is low, however, it should be ensured that noise transfer levels are controlled in line with the requirements of MCC should the first-floor residential unit later be occupied by another party.

6 COMPLIANCE OF MUSIC NOISE LEVEL CRITERIA

To ensure compliance of the music noise level criteria at the nearest noise sensitive premises (at first-floor) commissioning testing will take place once the sound system is installed to set the appropriate sound level in the bar at ground floor and basement considering the real-world on-site sound insulation performance of the installed noise mitigation measures. The following points should be followed for the compliance testing procedure:

- The sound system shall be tested and set in zones (minimum of ground floor and basement floor zones) and internal sound limits set with a hard limiter on the sound system processing unit.
- A cumulative test will be undertaken with all zones operational at the same time with representative music to ensure compliance.
- During the test all amplifiers will be set to maximum output.

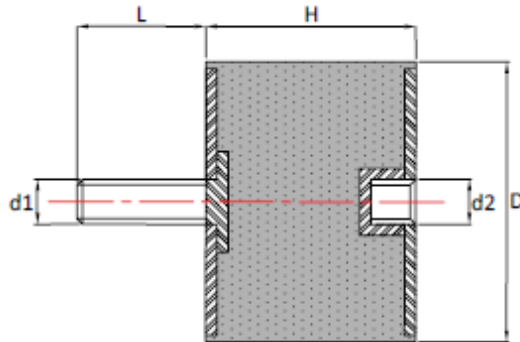
- The compliance testing should be carried out with a Class 1 integrating sound level meter capable of measuring broadband L_{Aeq} and 1/3 octave band L_{eq} sound levels. The sound level meter should be considered within a suitable period of traceable laboratory calibration.
- The noise compliance testing should be undertaken by a company or person with suitable qualifications and experience.
- The sound levels in both the residential property habitable rooms and the ground floor and basement bar areas should be recorded and presented in the results.
- If any significant alterations to the sound system components are made the compliance testing should be updated.
- If any minor changes are made to the sound system processor the internal sound levels of the bar area affected by the changes should be checked to ensure the maximum sound level has not changed.

ANNEX A

Male Female Bobbins

Male Female Bobbins

STANDARD MOUNTINGS



Part No	D x H	d1 x L	d2	45° Shore A	60° Shore A	70° Shore A	mm
1008MF10	10 x 08	M4 x 10	M4	2.4	4.4	6.2	0.6
1010MF06	10 x 10	M4 x 06	M4	2.1	4.0	5.5	0.8
1513MF10	15 x 13	M4 x 10	M4	4.0	7.8	10.8	1.1
1515MF10	15 x 15	M4 x 10	M4	6.0	11.0	15.4	1.3
2015MF18	20 x 15	M6 x 18	M6	9.3	17.5	24.0	1.2
2020MF18	20 x 20	M6 x 18	M6	7.2	13.4	18.5	1.6
2025MF18	20 x 25	M6 x 18	M6	6	12	17.5	2.1
2030MF18	20 x 30	M6 x 18	M6	5.5	9.9	13.9	2.6
2515MF18	25 x 15	M6 x 18	M6	18.5	35.0	49.0	1.2
2520MF20	25 x 20	M8 x 20	M8	16.5	30.0	40.0	1.6
2525MF18	25 x 25	M6 x 18	M6	12.8	24.0	33.0	2.1
2530MF20	25 x 30	M8 x 20	M8	11.8	23.0	30.0	2.7
3015MF20	30 x 15	M8 x 20	M8	23.0	42.0	59.0	1.1
3020MF20	30 x 20	M8 x 20	M8	21.0	39.0	53.0	1.6
3025MF20	30 x 25	M8 x 20	M8	17.5	30.0	41.0	2.1
3030MF20	30 x 30	M8 x 20	M8	15.5	29.0	39.0	2.6
3040MF20	30 x 40	M8 x 20	M8	14.5	28.0	37.0	3.6
4020MF23	40 x 20	M8 x 23	M8	42.0	79.0	109.0	1.6
4020MF25	40 x 20	M10 x 25	M10	42.0	79.0	109.0	1.6
4025MF20	40 x 25	M8 x 20	M8	39.0	73.0	100.0	2.1
4030MF23	40 x 30	M8 x 23	M8	34.0	64.0	89.0	2.6
4030MF25	40 x 30	M10 x 25	M10	34.0	64.0	89.0	2.6
4035MF23	40 x 35	M8 x 23	M8	31.0	57.0	80.0	3.1
4035MF25	40 x 35	M10 x 25	M10	31.0	57.0	80.0	3.1
4040MF20	40 x 40	M8 x 20	M8	30.0	55.0	76.0	3.6
4040MF25	40 x 40	M10 x 25	M10	30.0	55.0	76.0	3.6
5020MF28	50 x 20	M10 x 28	M10	87.0	164.0	226.0	1.5
5025MF25	50 x 25	M10 x 25	M10	81.0	151.0	209.0	2.0
5030MF25	50 x 30	M10 x 25	M10	70.0	129.0	178.0	2.5
5035MF25	50 x 35	M10 x 25	M10	61.0	113.0	156.0	3.0
5040MF25	50 x 40	M10 x 25	M10	50.0	94.0	130.0	3.5
5045MF28	50 x 45	M10 x 28	M10	45.0	84.0	117.0	4.0
5050MF25	50 x 50	M10 x 25	M10	41.0	78.0	107.0	4.5
6025MF25	60 x 25	M10 x 25	M10	126.0	234.0	323.0	2.0
6030MF25	60 x 30	M10 x 25	M10	111.0	206.0	284.0	2.5
6036MF25	60 x 36	M10 x 25	M10	109.0	203.0	280.0	3.1
6036MF37	60 x 36	M12 x 37	M12	109.0	203.0	280.0	3.1
6040MF25	60 x 40	M10 x 25	M10	101.0	188.0	256.0	3.5
6040MF37	60 x 40	M12 x 37	M12	101.0	188.0	256.0	3.5
6045MF25	60 x 45	M10 x 25	M10	92.0	171.0	237.0	4.0
6535MF25	65 x 35	M10 x 25	M10	133.0	247.0	342.0	3.0
6540MF37	65 x 40	M12 x 37	M12	118.0	216.0	298.0	3.5
6545MF37	65 x 45	M12 x 37	M12	103.0	190.0	264.0	4.0
6550MF37	65 x 50	M12 x 37	M12	88.0	163.0	226.0	4.5
7030MF37	70 x 30	M12 x 37	M12	175.0	326.0	445.0	2.4
7040MF25	70 x 40	M10 x 25	M10	143.0	266.0	367.0	3.4
7040MF37	70 x 40	M12 x 37	M12	143.0	266.0	367.0	3.4
7045MF25	70 x 45	M10 x 25	M10	129.0	239.0	321.0	3.9
7045MF37	70 x 45	M12 x 37	M12	129.0	239.0	321.0	3.9
7050MF37	70 x 50	M12 x 37	M12	117.0	217.0	300.0	4.4
7060MF37	70 x 60	M12 x 37	M12	116.0	214.0	296.0	5.4
7525MF37	75 x 25	M12 x 37	M12	221.0	420.0	577.0	1.9
7540MF37	75 x 40	M12 x 37	M12	154.0	288.0	397.0	3.4
7550MF37	75 x 50	M12 x 37	M12	147.0	276.0	381.0	4.4
7555MF37	75 x 55	M12 x 37	M12	128.0	242.0	333.0	4.9
10050MF44	100 x 50	M16 x 44	M16	300.0	540.0	750.0	4.2
10055MF44	100 x 55	M16 x 44	M16	275.0	515.0	710.0	4.7
10060MF44	100 x 60	M16 x 44	M16	265.0	480.0	670.0	5.2
10075MF44	100 x 75	M16 x 44	M16	220.0	390.0	540.0	6.7
100100MF44	100 x 100	M16 x 44	M16	170.0	300.0	420.0	9.2
12555MF44	125 x 55	M16 x 44	M16	400.0	800.0	1150.0	4.7
15055MF41	150 x 55	M16 x 41	M16	505.0	920.0	1296.0	4.7
15075MF44	150 x 75	M16 x 44	M16	400.0	720.0	1000.0	6.7

Max compression load in Kg deflection in mm.

This information is for guidance only. Customers are recommended to contact us for further technical information on products and applications. We reserve the right to alter specifications or withdraw products without notice.

Suspended Mounts

Suspended Mounts



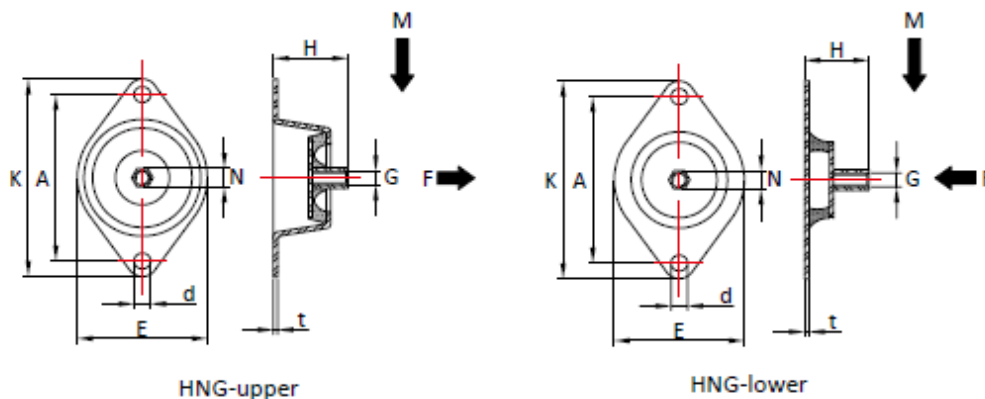
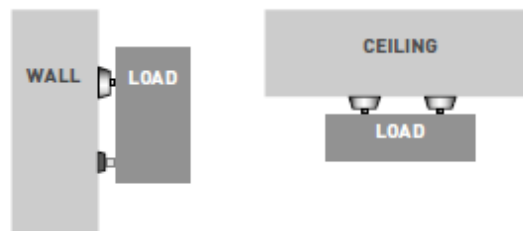
The Suspended Mountings are ideal for hanging or suspending equipment from walls, vertical surfaces, ceilings or supporting structures. The HNG Upper is used to accommodate tensile mounted loads at the top fixing of the equipment, whilst the HNG Lower is used to accommodate the compressive loads at the bottom of the equipment.

Advantages:

- Fail Safe Design
- Easy to Install
- Suspends from Ceilings & Walls

Applications:

- HVAC
- Ducting and Pipework
- Instrument Cabinets
- Control panels



INSTRUMENT MOUNTINGS

TYPE	E	K	A	H	d	N	t	G
HNG-upper	75	114	96	33	9	15	2.5	M8
HNG-lower	75	114	96	33	9	15	2.5	M8

TYPE	M-Max (KG)		F-Max (KG)	
	40° Sh	60° Sh	40° Sh	60° Sh
HNG-upper	14	25	30	70
HNG-lower	14	25	30	70

Max compression load in Kg deflection in mm.

This information is for guidance only. Customers are recommended to contact us for further technical information on products and applications. We reserve the right to alter specifications or withdraw products without notice.



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Soundweb London BLU-100

The Soundweb London BLU-100 represents a premium, open-architecture solution in the form of a highly flexible, cost-effective and scalable package.



FIXED I/O CONFIGURATION

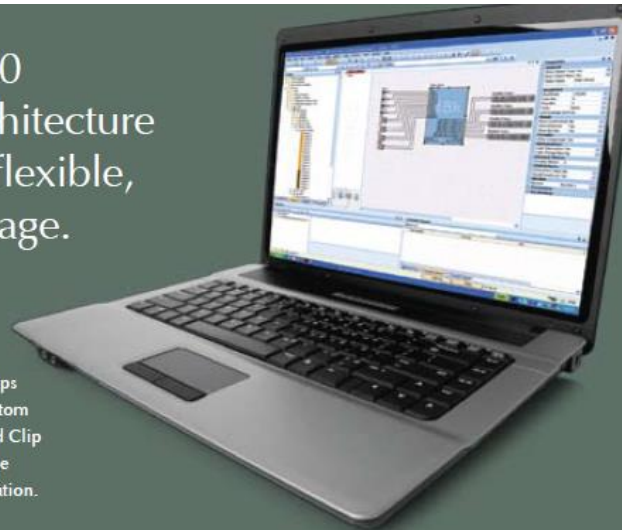
The BLU-100 offers a fixed configuration of 12 inputs and eight outputs. The analog inputs of the BLU-100 provide software configurable gain in 6dB steps up to +48dB per channel and software selectable Phantom Power per channel. Phantom Power, Signal Present and Clip information per channel is easily accessible, without the requirement for a PC, from clear front panel LED indication.

OPEN-ARCHITECTURE PROCESSING

The BLU-100 features configurable signal processing and logic processing. The signal path between the inputs and outputs can be completely tailored to an application, and all of the processing objects and logic objects used in larger Soundweb London systems are made available to designers within the BLU-100. The configurable signal processing offered by the BLU-100 is roughly twice that of the Soundweb London BLU-80 and BLU-16 devices.

DIGITAL AUDIO BUS

The BLU-100 features a low latency, fault tolerant digital audio bus of 48 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 10km (6.2 miles) using single mode fiber. This 48 channel digital audio bus represents channels 1-48 of the larger 256 channel digital audio bus when integrated with the BLU-800, BLU-320, BLU-160, BLU-120 and BLU-BOB devices. Up to 60 digital audio bus compatible devices can share channels on a single bus.



CONFIGURATION, CONTROL AND MONITORING

The BLU-100 is configured, controlled and monitored from HiQnet™ London Architect v3.0 or later. This facilitates the straightforward design process of systems including any mix of the Soundweb London family members. Whether the system includes a single BLU-100, BLU-100 devices with BLU-BOB break-out boxes, multiple BLU-100 devices or larger hybrid systems, the design is encapsulated within a single software application.

EXTERNAL CONTROL

As with other Soundweb London devices, 12 Control Inputs and six Logic Outputs allow the BLU-100 to be integrated with GPIO compatible devices. An RS-232 port allows integration with third-party control systems or simple serial control of third-party devices such as projectors, displays and lighting controllers. In addition to providing the connection for configuration, control and monitoring, the Ethernet port allows integration with third-party control systems using IP control.

EVOLUTION

The BLU-100 is an example of where user feedback, combined with the leveraging of Soundweb London's technology, functionality and flexibility has resulted in the development of a truly game-changing product. The BLU-100 broadens the reach of Soundweb London and makes a solution strongly associated with high-profile projects available to many more applications.

The BLU-100 and the other members of the Soundweb London family provide the building blocks of the perfectly tailored system solution.

