

Wharfedale Pro

Service Manual: **EVP-X18PB** Professional Speaker Enclosures

EVP-X18PB

★ TABLE OF CONTENTS

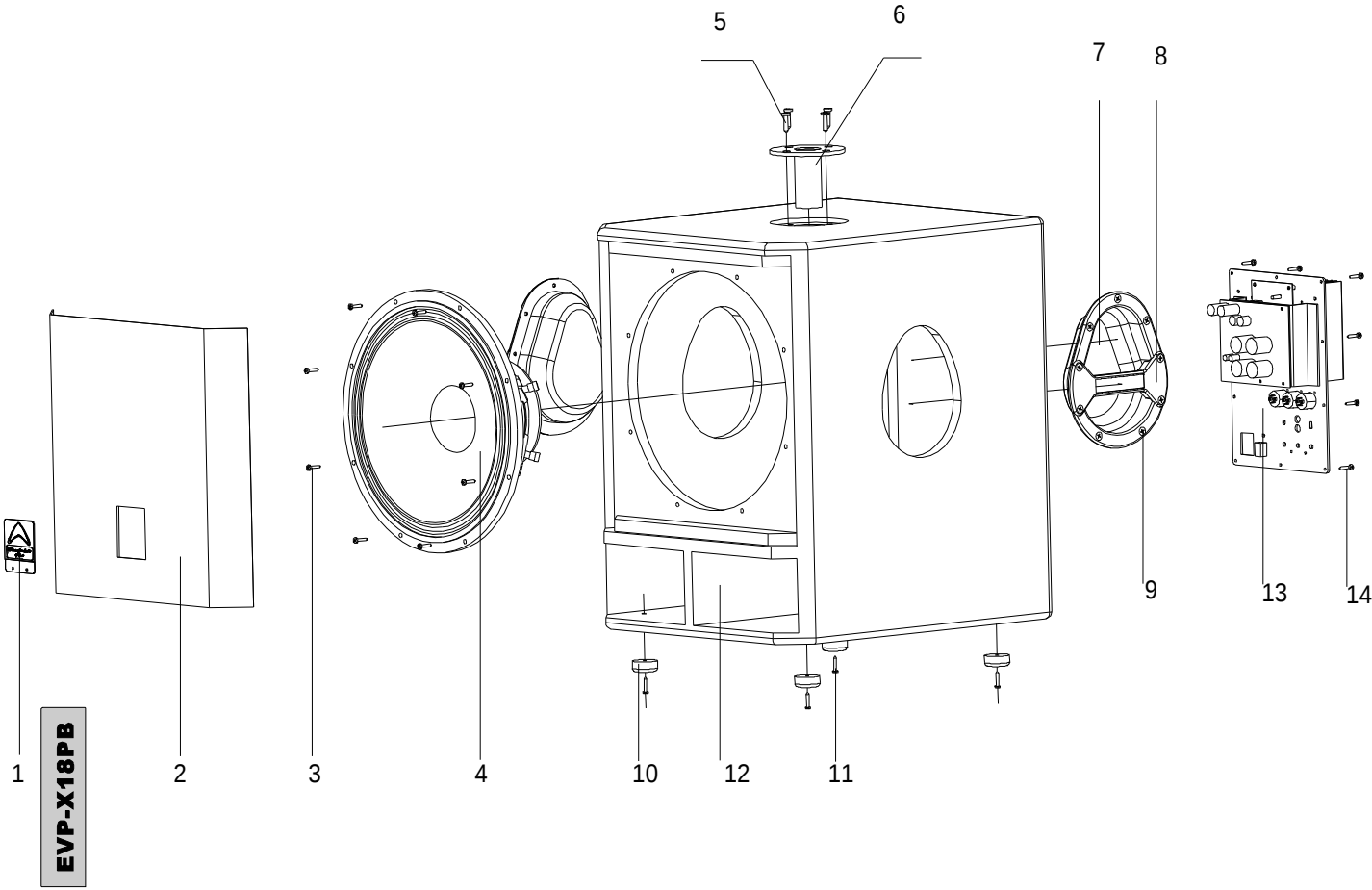
SPECIFICATIONS-----	2
ASSEMBLY SKETCH-----	3
ASSEMBLY PART LIST -----	4
SCHEMATIC DIAGRAM (AMP)-----	5
ASSEMBLY PART LIST (AMP)-----	6
ELECTRONICS PARTS LIST (AMP)-----	7

1.SPECIFICATIONS

EVP-X18PB

System Type	18" compact subwoofer
Frequency Response +/- 3dB	38-250Hz
Finish Material	Black carpet
Tripol stand	
Stand Bottom	--
Stand Top	Yes
Input:	
Input A	Line level input
Input B	Line level input
Speaker Level Input	1/4" TS Phone Jack
Input Connectors	
Input A	Combined jack and XLR
Input B	Combined jack and XLR
Input Sensitivity	
Mic	--
RCA	--
LINE	0.775V
Input Impedance	
Mic	No
Line Input A	10K
Line Input B	10K
Line Output	
Type	Balanced Male XLR connector
Line Output High Pass Filter	
Main EQ	NA
Active Crossover	LPF:100Hz, 24dB/Oct
Infrasonic Filter	30Hz,18dB/ Oct.
Phase switch	0° or 180°
POWER SECTION	
Amplifier Power	Continuous:400W Peak:600w
Extention Speaker Output	NA
Protection Type	Dynamic /AGC
Power on indicator	Red LED
System Dynamic AGC activite Indicator	Yellow LED
ENCLOSURE	
Dimention(mm) H x W x D	610x522x610
weight Net (kg)	49.2kg
weight Gross (kg)	52.3kg

2.ASSEMBLY SKETCH

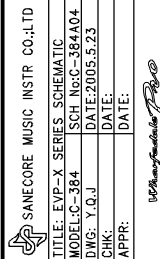


3.ASSEMBLY PARTS LIST

R/N	P/N	PART NAME	DESCRIPTION	QUA
1	217-2935000002R	LOGO PLATE		1
2	310-2934000001R	STEEL GRILLE		1
3	533-5001350801AR	SCREWS	MT (+) 5*35 BZn	8
4	ZD-59200-01R	WOOFER		1
5	534-6001400801AR	SCREWS	MK (+) 6*40 B Zn	4
6	259-2080000001R	SUPPORT HOLDER		1
7	328-2643000001R	HANDLE 1		2
8	328-2921000001R	HANDLE 2		2
9	554-4001208061AR	SCREWS	4*20KA H BZn	10
10	226-3800601111R	RUBBER FOOT		4
11	553-4001209061AR	SCREWS	4*20 TA H BZn	6
12	344-2109700001R	CABINET		1
13	ZC-38601-01R	AMPLIFIER		1
14	537-4002300801AR	SCREWS	MP (+) 4*30 BZn	12

EVP-X18PB

EVP-X18PB



5.ASSEMBLY PARTS LIST (AMP)

R/N	P/N	PART NAME	DESCRIPTION	QUA
1	300-1386010002R	AL PANEL		1
2	306-1384020001R	HEAT SINK		1
3	307-1300540151R	COPPER POST		5
4	307-2300500241R	COPPER POST		1
5	310-1385130000R	GRILLE		1
6	527-3012100811AR	SCREWS	SP (+) 3*10 DC H BZn	8
7	535-3031080801AR	SCREWS	MPW (+) 3*8 BZn	7
8	537-3001080801AR	SCREWS	MP (+) 3*8 BZn	2
9	537-3001140801AR	SCREWS	MP (+) 3*14 BZn	12
10	537-4001120801AR	SCREWS	MP (+) 4*12 BZN	12
11	215-1017000001R	KNOB		1

EVP-X18PB

6.ELECTRONIC PARTS LIST (AMP)

R/N	P/N	PART NAME	DESCRIPTION	QUA	
	088-1386000700	SWITCH POP PCB			
1	043-2210120112	MOVE SWITCH	SS-42H03-G12	1	
2	053-1356001152	SWITCH PCB	33*18mm	1	
3	057-2541112061	GROUP PIN	6PIN PH=2.54mm	1	
4	057-2541112081	GROUP PIN	8PIN PH=2.54mm	1	
	088-1386011000	AMP POP PCB			
1	053-1384001110	AMP PCB		1	
2	001-4703205010	RESISTOR	47K 1/4W	1	R1
3	001-6802205010	RESISTOR	6.8K 1/4W	1	R10
4	001-1003205010	RESISTOR	10K 1/4W	5	R5, 6, 29, 44, 53
5	001-2704205010	RESISTOR	270K 1/4W	3	R3, 46, 49
6	001-4702205010	RESISTOR	4.7K 1/4W	4	R8, 11, 47, 48
7	001-2204205010	RESISTOR	220K 1/4W F	2	R27, 51
8	001-2202205010	RESISTOR	2.2K 1/4W	3	R19, 23, 24,
9	001-3903205010	RESISTOR	39K 1/4W	1	R30
10	001-1005205010	RESISTOR	1M 1/4W	1	R7
11	001-1004205010	RESISTOR	100K 1/4W	2	R20, 22
12	001-1501205010	RESISTOR	150R 1/4W	2	R33, 35,
13	001-1503205010	RESISTOR	15K 1/4W	1	R26
14	001-6801205010	RESISTOR	680R 1/4W	1	R21
15	001-1002205010	RESISTOR	1K 1/4W	3	R9, 43, 45
16	001-2002205010	RESISTOR	2K 1/4W	1	R31
17	001-1802205010	RESISTOR	1.8K 1/4W	1	R32
18	001-1001205010	RESISTOR	100R 1/4W	4	R12, 18, 36, 39
19	001-3303205010	RESISTOR	33K 1/4W	2	R37, 40
20	001-4700205010	RESISTOR	47R 1/4W	2	R38, 41
21	001-4709205010	RESISTOR	4.7R 1/4W	2	R16, 17
22	001-1000205100	RESISTOR	10R 1/4W	1	R50
23	001-5602205010	RESISTOR	5.6K 1/4W	1	R2
24	001-0229510050	RESISTOR	0.22R 5W	6	R13, 14, 15, 25, 28, 34
25	001-0470308050	RESISTOR	4.7R 2W	1	R42
26	005-2001306101	RESISTOR	PA0631-HA1-B201	1	TR1
27	006-1004061194	CAPACITOR	10uF 100V	6	C4, 6, 7, 16, 17, 11
28	006-1001051163	CAPACITOR	10uF 50V	3	C15, 21, 22
29	006-2201051163	CAPACITOR	22uF 50V	1	C10
30	006-1011061143	CAPACITOR	100uF 25V	4	C18, 19, 23, 24

EVP-X18PB

6.ELECTRONIC PARTS LIST (AMP)

31	006-4704101392	CAPACITOR	47uF 100V	2	C27. 28
32	013-1040210801	CAPACITOR	104P 63V	3	C1. 2. 29
33	013-1520210501	CAPACITOR	152NF 63V	1	C9
34	008-2201050004	CAPACITOR	22PF 500V	2	C13. 14
35	008-1512050004	CAPACITOR	150P 500V	2	C12. 8.
36	014-4730300001	CAPACITOR	47N-100V-J	1	C20
37	008-4700005004	CAPACITOR	47PF 50V	1	C3
38	067-1104148000	DIODE	IN4148	6	D1. 2. 5. 6. 7. 8
39	067-2204004000	DIODE	IN4004	2	D3. 4
40	067-2205404000	DIODE	IN5404	2	D9. 10
41	018-2905401115	TRANSISTOR	2N5401 T0-92	5	Q6. 7. 8. 12. 15
42	018-2905551115	TRANSISTOR	2N5551 T0-92	4	Q4. 5. 9. 14.
43	018-1900350113	TRANSISTOR	MJE350 T0-92	1	Q10
44	018-1900340113	TRANSISTOR	MJE340 T0-90	1	Q13
45	018-0101492116	POWER TUBE	2SA1492 0! T0-3P	3	Q18. 19. 20
46	018-0101859113	TRANSISTOR	2SA1859A	1	Q17
47	018-0303856116	POWER TUBE	2SC3856 0! T0-3P	4	Q11. 21. 22. 23
48	018-0304883113	TRANSISTOR	2SC4883A	1	Q16
49	018-2800112115	FIELD EFFECT TRANSISTOR	J112 T0-92	2	Q1. 2
50	017-3060000000A	IC	NE5534	1	IC1
51	026-2794103170	INDUCTOR		1	L1
52	004-6609000000	RESISTOR	0ED-PCC-9P5-3	1	OC1
53	019-0315132000	LED		1	
54	079-0401000000	PROTECTOR	REX040	2	REX2. 3
55	066-0095010000	SWITCH	KSD01F95B3	1	TS
56	056-6104224400	JACK	PH3. 96 4PIN	1	CON3
	088-1386001300	SIGNAL INPUT PCB			
1	001-1002203010	RESISTOR	1K 1/8W F	4	R109. 106. 131. 128
2	001-1003203010	RESISTOR	10K 1/8W F	19	R100. 101. 107. 108. 102. 103. 110. 115. 117. 122. 123. 124. 125. 129. 130. 112. 114. RLD1. RLD2. 116
3	001-2003203010	RESISTOR	20K 1/8W F	1	R111
4	001-2203203010	RESISTOR	22K 1/8W F	8	R104. 105. 118. 119. 120. 121. 126. 127
5	006-1001051163	CAPACITOR	SM10uF 50V 10%	13	C100. 101. 106. 107. 112. 118. 110. 126. 127. 119. 120. 128. 129
6	008-1003005015	CAPACITOR	103/50V 20%	1	C111
7	008-4700005004	CAPACITOR	47P-50V-J	8	C105. 102. 108. 109. 113. 125. 121. 122

EVP-X18PB

6.ELECTRONIC PARTS LIST (AMP)

8	013-3930210501	CAPACITOR	39N 63V J	2	C114, 116
9	014-1040211028	CAPACITOR	MKS2 100nF 63V 10%	4	C103, 104, 123, 124
10	014-1830100001	CAPACITOR	CL11 18NF/50V-J	2	C115, 117
11	017-1530000000	IC	TL074CN	3	IC4, 5, 6
12	020-5052119425	POTENTIOMER	16K124A068-50KCBX2STII	1	VR5
13	048-3000000000	CONNECTOR	NYS143 J3Y1 3pin	2	XLR7, 9
14	049-1304113120	MICRO-SOCKET	LS-2031-4	1	JACK1
15	049-2510222016	SOCKET	CXLF-07	2	XLR6, 8
16	053-1385003156	SPEAKER SOCKET PCB		1	
17	053-1386001113	SIGNAL INPUT PCB		1	
18	056-4106221100	SOCKET	6PIN PH=2.54mm	1	CON6
19	079-0401000000	PROTECTOR	PTC RXE040	1	REX1
20	089-0500000012	MOVE SWITCH	SS-22F20-G12	1	SW1
	088-1384005000R	POWER POP PCB		1	
1	001-0220106050R	RESISTOR	2, 2 OHM 1/2W J	1	R33
2	001-0393108050R	RESISTOR	39K 2W 5%	3	R24, 25, 30
3	001-0398810050R	RESISTOR	0, 39R 5W 5%	2	R22, 23
4	001-1000203010R	RESISTOR	10 OHM 1/8W F	1	R29
5	001-1001203010R	RESISTOR	100 OHM 1/8W F	1	R3
6	001-1002203010R	RESISTOR	1K 1/8W F	1	R28
7	001-1003203010R	RESISTOR	10K 1/8W F	5	R14, 12, 1, 2, 9
8	001-1004208050R	RESISTOR	100K2W 5%	1	R7
9	001-1732203010R	RESISTOR	13, 7K 1/8W 1%	1	R15
10	001-1803203010R	RESISTOR	18K 1/8W F	4	R11, 13, 16, 34
11	001-2203203010R	RESISTOR	22K 1/8W F	1	R21
12	001-2203208010R	RESISTOR	22K 2W 1%	1	R32
13	001-2702203010R	RESISTOR	2, 7K 1/8W F	1	R20
14	001-3300103050R	RESISTOR	33 OHM 1/8W J	2	R17, 18
15	001-3904203010R	RESISTOR	390KOHM 1/8W F	1	R35
16	001-4702203010R	RESISTOR	4, 7K 1/8W F	2	R6, 31
17	001-4703107050R	RESISTOR	470K 1W 5%	1	R10
18	001-6801203010R	RESISTOR	680 OHM 1/8W F	1	R26
19	001-6802203010R	RESISTOR	6, 8K 1/8W F	1	R27
20	001-9102203010R	RESISTOR	9, 1K 1/8W F	1	R19
21	004-3307000000R	RESISTOR	10D-20	3	R4, 5, 8
22	004-3312000000R	RESISTOR	NTC 10K	1	NT1
23	006-1001051163R	CAPACITOR	SM10uF 50V 10%	2	C3, 20

EVP-X18PB

6.ELECTRONIC PARTS LIST (AMP)

24	006-1011061143R	CAPACITOR	SM 100uF 25V 10%	2	C29, 30
25	006-1014081463R	CAPACITOR	GS101M050F115Z	1	C17
26	006-2214081443R	CAPACITOR	220uF 25V	1	C1
27	006-4711102053R	CAPACITOR	470uF 35V 10%	2	C26, 27
28	006-4714162593R	CAPACITOR	470UF/100V	2	C25, 28
29	006-6814253603R	CAPACITOR	680UF 200V	4	C12, 13, 14, 15
30	008-1004005017R	CAPACITOR	104-Y5P-50V-Z	4	C2, 4, 5, 6
31	008-1005027505R	CAPACITOR	1UF/275VAC	1	C8
32	008-1021040005R	CAPACITOR	102PF 400V M	4	C10, 11, 23, 24
33	013-3340722502R	CAPACITOR	0.33uF 275V 10%	1	C7
34	014-1020100002R	CAPACITOR	AMZ 0.001UF 50V 5%	2	C18, 19
35	014-1050411006R	CAPACITOR	1UF/250V 10%	1	C16
36	014-4740211028R	CAPACITOR	MKS2 470nF 63V 10%	1	C21
37	017-0190000000R	IC	NJM7815FA TO-220F(JRC)	1	U1
38	017-0200000000R	IC	NJM7915FA TO-220F(JRC)	1	U5
39	017-4660000000R	IC	DT5268S Dip 8P	1	U4
40	018-3408050115R	TRANSISTOR	SS8050	3	Q4, 7, 8
41	018-3408550115R	TRANSISTOR	SS8550C TO-92	1	Q6
42	018-7000460125R	FIELD EFFECT TRANSISTOR	IRFP160A	2	Q2, 3
43	022-1014101245R	TRANSFORMER	EC40	1	T2
44	034-1119992508R	BRIDGE RECTIFIERS	RBV2510	1	BR1
45	053-9384001604R	PCB	152*120*1.6MM	1	
46	056-0106003300R	JACK	6PIN 3.96PH	1	CN1
47	056-4103221100R	JACK	DJ2802-3P	1	CN3
48	056-4105221100R	JACK	DJ2802-05	1	CN2
49	067-1104148000R	DIODE	1N4148	7	D1, 11, 12, 13, 14, 15
50	067-2200107000R	DIODE	HER107 JAL	3	D2, 3, 4
51	067-2200207000R	DIODE	HER204	4	D7, 8, 9, 10
52	067-2201620000R	DIODE	F16C20C	1	D6
53	067-2201620001R	DIODE	F16C20A	1	D5
54	067-3305246000R	ZENER	16V 1/2W 1N5246	2	ZD1, 2
55	080-0210012016R	INDUCTOR	13.6MH 0.8MM 230V AC	2	T1, 3
56	085-0070290200R	PLASTIC MAP		2	
57	306-1385080000R	HEAT SINK	36*45.5*65.5mm	1	
58	306-1386200000R	HEAT SINK	182*120*33mm	1	

EVP-X18PB