



Service Manual

KPS2

12" 2-Way Full-Range Loudspeaker





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KPS2

12-Inch 2-Way Full-Range Loudspeaker System

Professional Series

Key Features:

- ▶ Specially designed 12" woofer with demodulating aluminum ring for high power handling, low distortion and minimum power compression
- ▶ JBL 2414H NdFeB magnet HF compression driver for clear and accurate midrange vocal rendering
- ▶ 100° × 70° (H × V) coverage pattern for even and smooth response on and off axis
- ▶ Trapezoid enclosure made from 15 mm premium quality board
- ▶ Stylish front grille design for neutral blend with different room décors
- ▶ Rotatable JBL lighting logo to fit different installation orientations
- ▶ Multiple suspension points for flying installation
- ▶ OmniMount socket for pole mounting

Applications:

- ▶ Sound reinforcement for karaoke lounges and nightclubs
- ▶ High-performance satellite speaker for use with subwoofers

KPS2 is a 12" two-way full range speaker system designed for sound reinforcement at karaoke lounges and nightclubs.

The two-way system uses a 12" (304.8 mm) woofer equipped with an optimum demodulating/cooling ring, and a 1" (25.4 mm) 2414H NdFeB magnet high frequency compression driver, therefore, is capable of reproducing powerful music and pristine vocal in high fidelity and volume. A high-order passive network eliminates band overlap and brings subtle vocal details into full play. Whenever the speaker is positioned in landscape or portrait mode, the 100° × 70° (H × V) horn ensures smooth and even coverage across the entire space.

KPS2 constructs its trapezoid enclosure from 15 mm premium quality board and improves its internal structure and transducer layout after rounds of simulations and tests. Multiple high-strength suspension points and an OmniMount socket are available for either flying installation or pole mounting of the system. To protect the system from human damage and drink splash, dent-free steel backed with acoustically transparent cloth is used for the grille. Convex edges slant through the front grille, enhancing aesthetic appeal of the piece and making it easier to blend with any room décors. A new identification of JBL speakers, the luminous JBL logo by PSL (Passive Sound Lighting) technology will be constantly on when audio signal is present, and is adjustable to fit different installation orientations.



Specifications:

System:

Frequency Range (-10 dB) ¹ :	48 Hz - 20 kHz
Frequency Response (±3 dB) ¹ :	80 Hz - 19 kHz
Coverage Pattern:	100° × 70° (H × V)
System Power Rating ³ :	350 W / 700 W / 1400 W (continuous/program / peak)
Maximum SPL (1 m) ² :	122 dB continuous average (128 dB peak)
System Sensitivity ¹ :	97 dB
Nominal Impedance:	8 Ohms

Transducer:

LF Driver:	1 × 12" (304.8 mm) woofer
HF Driver:	1 × 2414H (1" or 25.4 mm) Dome Polymer Diaphragm NdFeB magnet Compression Driver

Physical:

Enclosure:	Trapezoidal, 15 mm board
Suspension Attachment:	13 points, M10 threaded hardware; 35mm OmniMount pole mount socket
Finish:	Textured paint, black
Grille:	Powder coated, 1.2 mm perforated steel, with acoustically transparent black cloth backing
Input Connector:	1 × NL4 Neutrik Speakon®
Dimensions (H × W × D):	600 × 360 × 382 mm
Net Weight:	20 kg

¹ Full space (4π) conditions

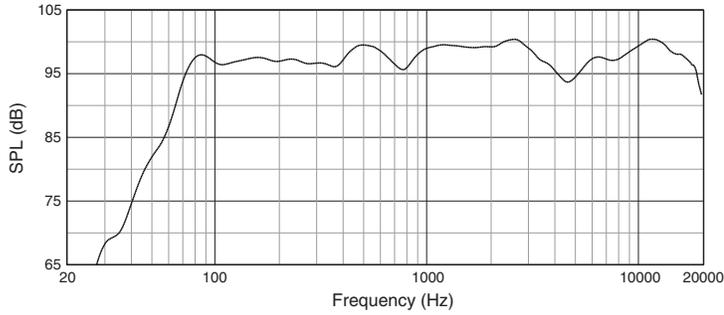
² Calculated maximum SPL based on rated power handling

³ IEC standard, pink noise with 6 dB crest factor for 2 hours

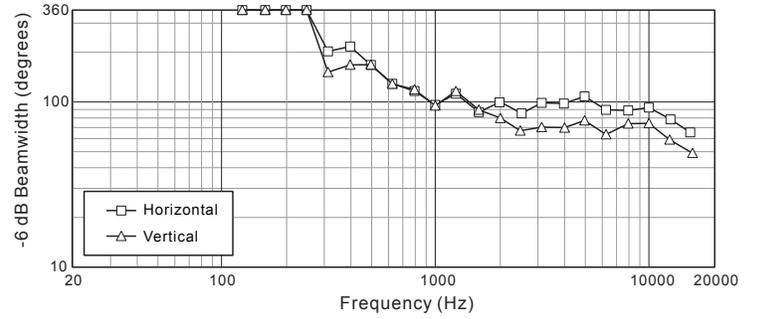
JBL continually engages in research related to product improvement. Some materials, production methods and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current JBL product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise stated.

► KPS2 12-Inch 2-Way Full-Range Loudspeaker System

Frequency Response:

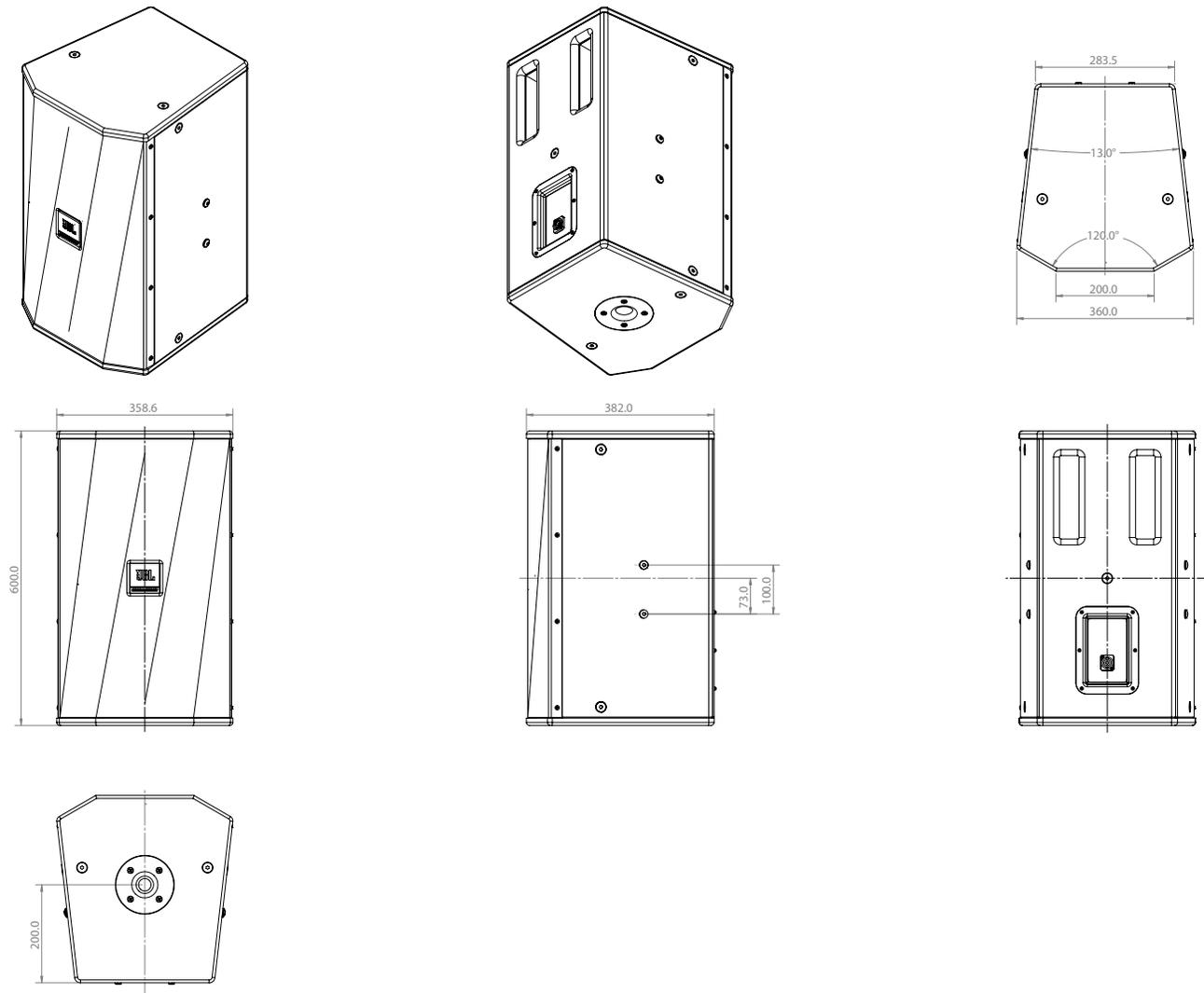


Beamwidth:



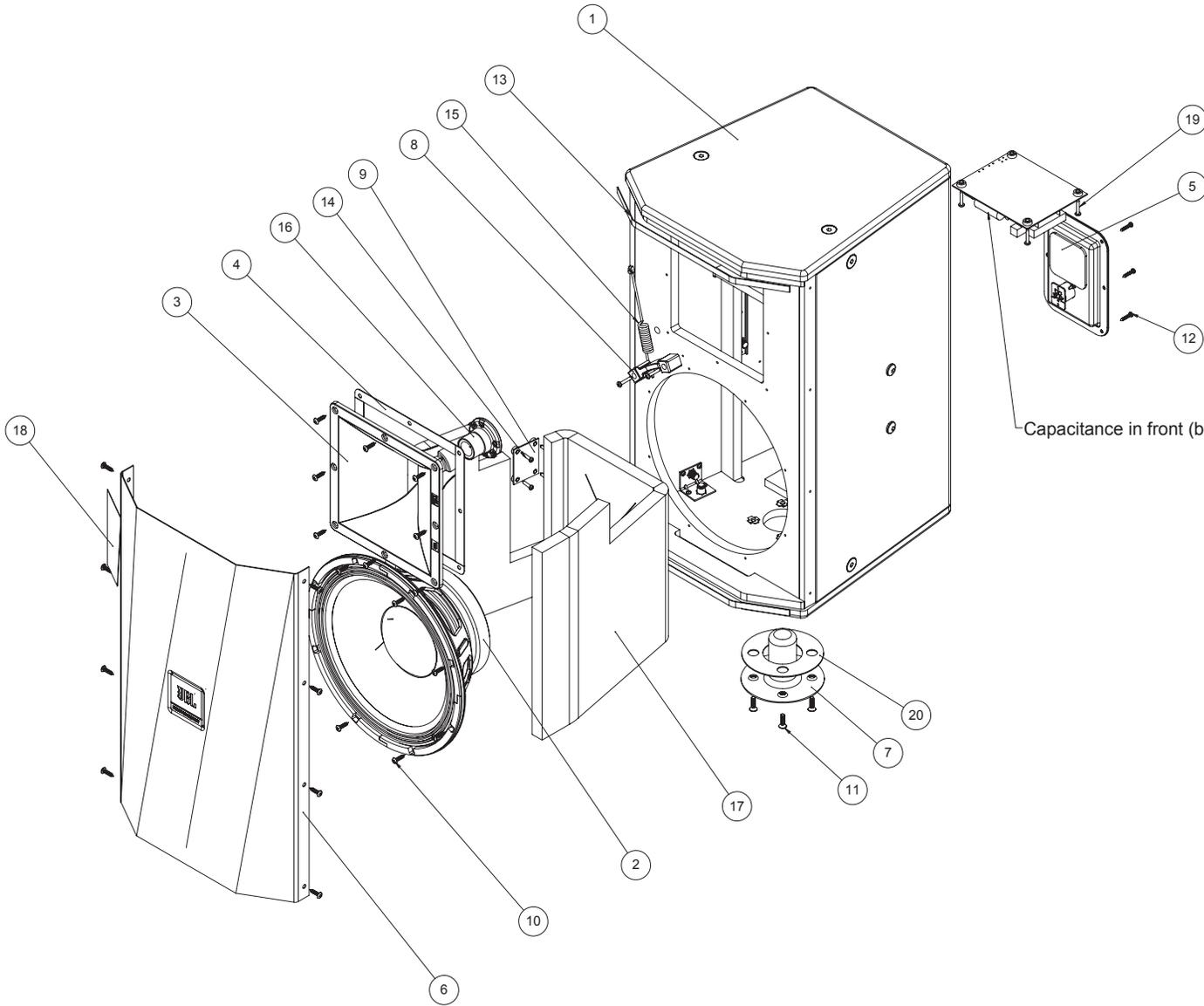
Dimensions:

Dimensions in mm

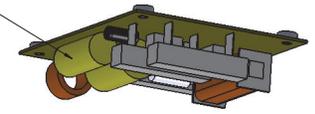


Exploded View Diagrams

REVISION HISTORY				ZONE	BY
DATE	REV.	PREV. PART	DESCRIPTION		
1/17/2018	A2		CHANGE "DISPLAY PCB ASY" AND "SPKRSYS NETWORK ASY" INSTALLATION POSITION AND SCREWS; CHANGE CABLE; CHANGE EVA GASKET; CHANGE WADDING; CHANGE POLE		Govin
3/24/2018	B1		CHANGE THE POP STICKER LOCATION		Govin



Capacitance in front (baffle)

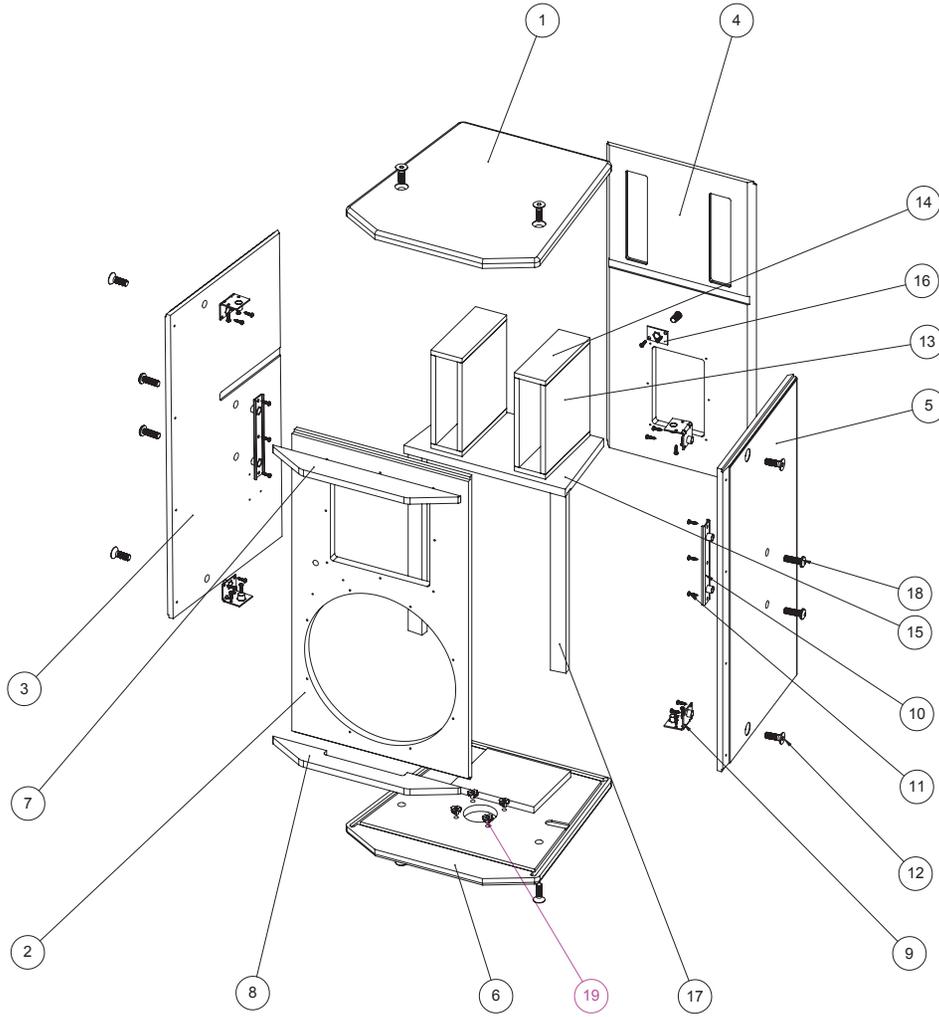


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	5092463-00	ENCL.ASY,KPS2	1
2	5050730	AUD.LS.KP2012 WOOF	1
3	5041677	SPKRSYS_HORN,KP4000	1
4	5042142	GASKET,EVA,HORN,KP4000	4
5	5092681-00	SPKRSYS_NERWORKS ASY,KPS2	1
6	5092692-00	MECHASY_GRL ASY,KPS2	1
7	5096965-00	HDW_POLE,PEEN-EL.COM M1551	1
8	5090351-00	HDW_BUMP,KP052	1
9	5089063-00	SPKRSYS_ELEC_NETWORK-DSPL,KI500	1
10	883-31410-20	SCR_ST5*20 PH TRUSS DACRO	24
11	816-11510-20	HDWR_FSTNR,SCR,M6*20 PH FLAT EDB	4
12	882-41410-21	SCR_ST4X20,PAN PH,DACRO	6
13	5047603	GASKET,EVA,KP4000 STANDOFF	2
14	883-41110-12	SCR,8 X 3/4,PAN,PH,PB,BLK ZINC,LCS	4
15	5093924-00	CBL_WA,2COND,SPRING,LENGTHEN,KP050	1
16	342423-002D	M/I,2414H(CHINA)	1
17	5096867-00	SPKRSYS_PDNG,WADDING,KPS2	1
18	5095741-00	LBL_PRNT,POP STICKER,KPS2	1
19	883-41110-16	SCR,8 X 1,PAN,PH,PB,BLK ZINC,LCS	6
20	5096966-00	MISC,GASKET,M1551 POLE	1

ROHS/REACH <small>DECLARATION OF COMPLIANCE</small>		<small>DECLARATION OF COMPLIANCE</small>			
<small>DECLARATION OF COMPLIANCE</small>		<small>DECLARATION OF COMPLIANCE</small>		SPKRSYS.ASY,KPS2	
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REVISION HISTORY				DATE	REV.	PREVIOUS PART NO.	DESCRIPTION	EDHE	BY
4/29/2017	A2		CHANGE DESIGN; CHANGE MATERIAL						Gowin
3/14/2017	A3		RELEASE FOR DV						Gowin
1/21/2018	A4		ADD SCREWS (882-41416-16); ADD 2-2MM DECORATION SLOT; ADD 1x6 1-NUT						Gowin

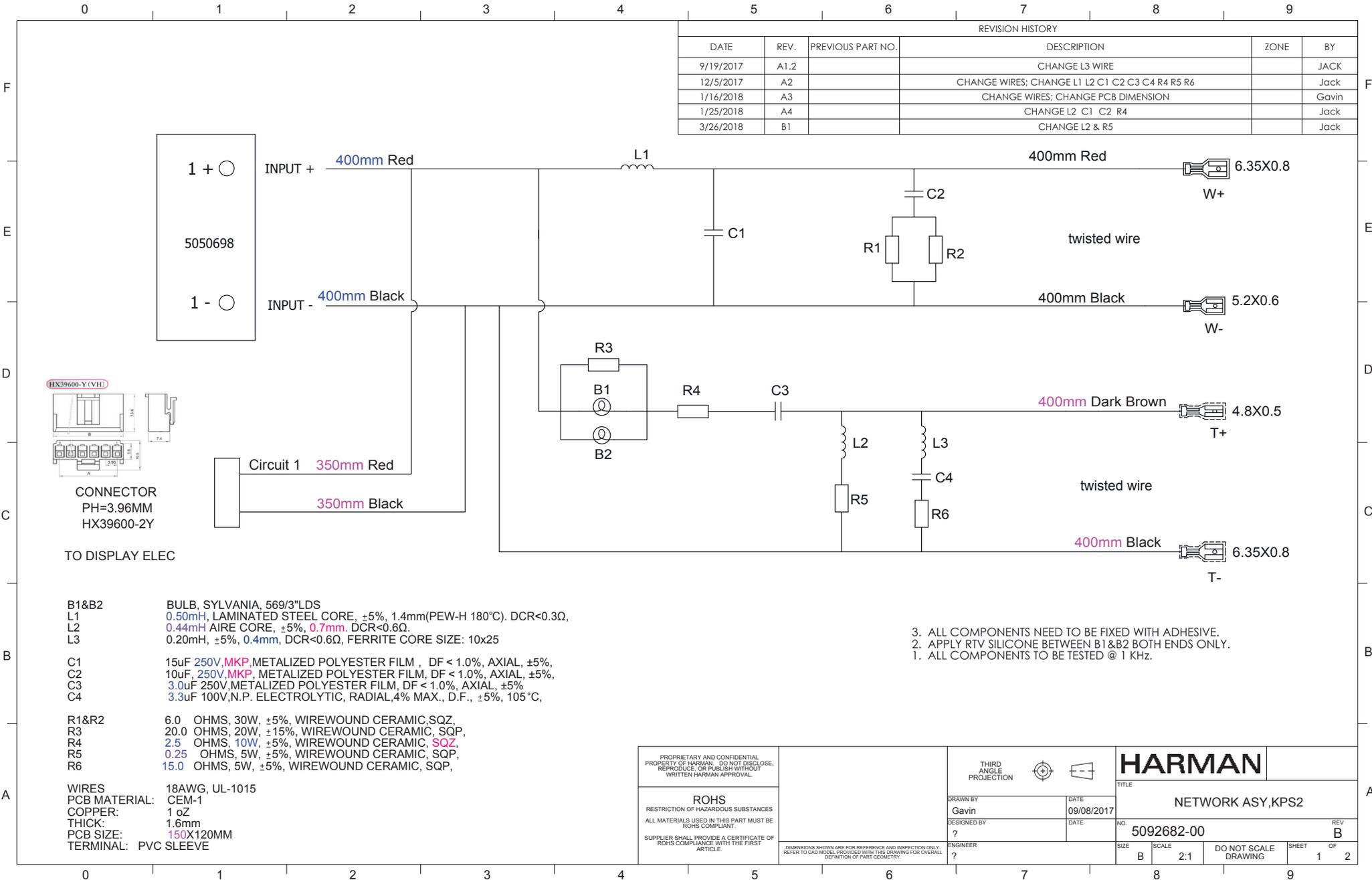


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	5092464-00	ENCL_PNL_TOP,KPS2	1
2	5092465-00	ENCL_PNL_BAFFLE,KPS2	1
3	5092466-00	ENCL_PNL_SIDE_LEFT,KPS2	1
4	5092467-00	ENCL_PNL_REAR,KPS2	1
5	5092468-00	ENCL_PNL_SIDE_RIGHT,KPS2	1
6	5092469-00	ENCL_PNL_BOTTOM,KPS2	1
7	5092470-00	ENCL_STANDOFF_TOP,KPS2	1
8	5092471-00	ENCL_STANDOFF_BOT,KPS2	1
9	445955-001	HDWR_BRKT_90DEGREE ASY,KP600	4
10	445228-001	100mm Bracket	2
11	882-41410-15	SCR_ST4x15 PH,PAN, BLK ZINC	24
12	818-13710-30	SCR_M10x30,FLAT, HED, DACROMET	9
13	5092472-00	ENCL_PNL_PORT_LONG,KPS2	4
14	5092473-00	ENCL_PNL_PORT_SHORT,KPS2	4
15	5092474-00	ENCL_PNL_CENTER,KPS2	1
16	445956-001	HDWR_BRKT_SINGLE POINT ASY,KP600	1
17	5092475-00	ENCL_STIF_SIDE,KPS2	2
18	5061435	SCR_M10x30,TRUSS,HEX,DACROMET	4
19	5041458	FSTNR,NUT,T-NUT,M6,HOOK PRONG	4

ROHS RESTRICTION OF HAZARDOUS SUBSTANCES ALL DIMENSIONS ARE IN MILLIMETERS ALL DIMENSIONS APPLY BEFORE FINISH UNLESS OTHERWISE SPECIFIED BY NOTE OR DIMENSION LINE		TOLERANCES UNLESS OTHERWISE SPECIFIED X ±0.30 mm ALL DIMENSIONS ARE IN MILLIMETERS ALL DIMENSIONS APPLY BEFORE FINISH UNLESS OTHERWISE SPECIFIED BY NOTE OR DIMENSION LINE		HARMAN ENCL.ASY.KPS2 DATE: 5/4/2017 DRAWN BY: Gowin CHECKED BY: 7 DATE: 4/28/2017 SCALE: 1:10 SHEET 1 OF 14	
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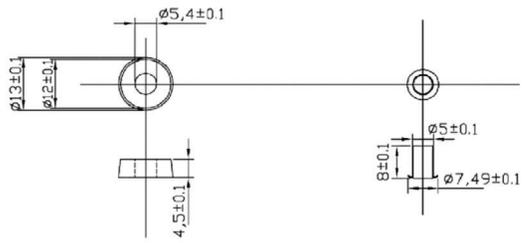
Network Assembly Diagrams



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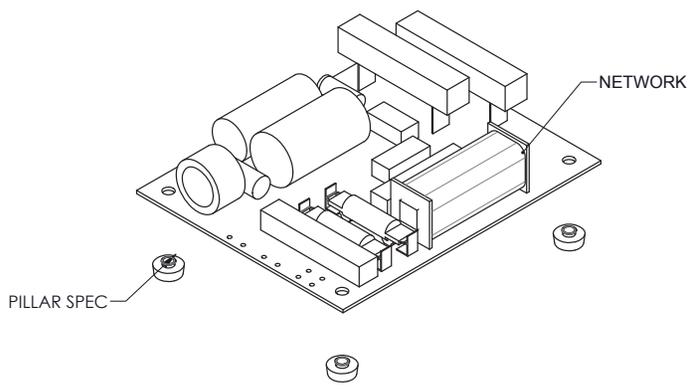
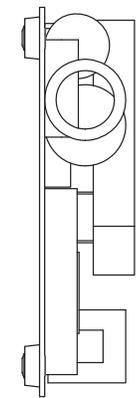
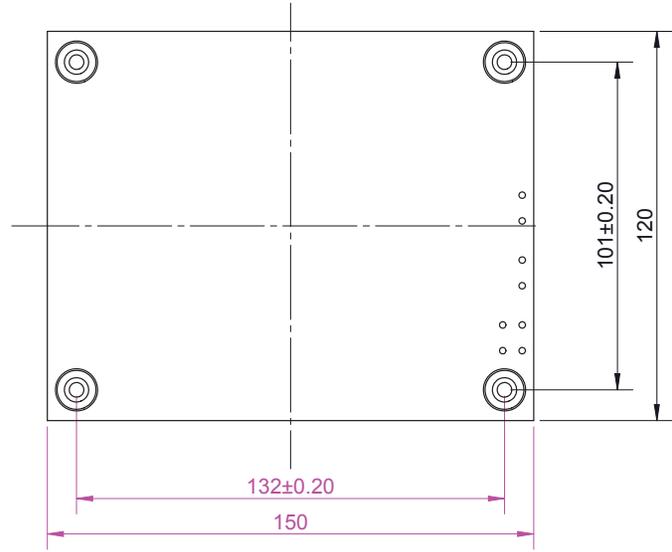
REVISION HISTORY				ZONE	BY
DATE	REV.	PREVIOUS PART NO.	DESCRIPTION		

SPACE PILLAR



FOOT WASHER:
Φ13×Φ5.4×4.5H
MATERIAL: TRANSPARENT PC

RIVET:
Φ5×8H
MATERIAL: COPPER



PROPRIETARY AND CONFIDENTIAL PROPERTY OF HARMAN. DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT WRITTEN HARMAN APPROVAL. ROHS RESTRICTION OF HAZARDOUS SUBSTANCES ALL MATERIALS USED IN THIS PART MUST BE ROHS COMPLIANT. SUPPLIER SHALL PROVIDE A CERTIFICATE OF ROHS COMPLIANCE WITH THE FIRST ARTICLE.	TOLERANCES UNLESS OTHERWISE SPECIFIED .X ± 0.30 mm X. ± 0.50 mm ANGULAR ± 0°30' ALL DIMENSIONS ARE IN MILLIMETERS ALL DIMENSIONS APPLY AFTER FINISH <small>DIMENSIONS SHOWN ARE FOR REFERENCE AND INSPECTION ONLY. REFER TO CAD MODEL PROVIDED WITH THIS DRAWING FOR OVERALL DEFINITION OF PART GEOMETRY.</small>	THIRD ANGLE PROJECTION 	HARMAN	
			TITLE: NETWORK ASY, KPS2	
DRAWN BY: Gavin	DATE: 09/08/2017	NO. 5092682-00		REV B
DESIGNED BY: ?	DATE: 1/14/2011	SIZE B	SCALE 1:2	DO NOT SCALE DRAWING
ENGINEER: ?				SHEET 2 OF 2

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Note: Refer to the corresponding Service Bill of Materials (SBOM file) to order Harman stocked parts.