



# Service Manual

## KPS1

10" Two-Way Full Range Speaker





# Table of Contents

---

Datasheets and Specifications

Exploded View Diagrams

Network Assembly Diagrams

Bill of Materials





# KPS1

## 10-Inch 2-Way Full-Range Loudspeaker System

### Professional Series

### Key Features:

- ▶ Specially designed 10" 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
- ▶ 70° × 100° (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

KPS1 is a 10" two-way full range speaker system designed for sound reinforcement at karaoke lounges and nightclubs.

The two-way system uses a 10" (254 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 70° × 100° (H × V) horn ensures smooth and even coverage across the entire space.

KPS1 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) <sup>1</sup> :	50 Hz - 20 kHz
Frequency Response (±3 dB) <sup>1</sup> :	85 Hz - 19 kHz
Coverage Pattern:	70° × 100° (H × V)
System Power Rating <sup>3</sup> :	300 W / 600 W / 1200 W (continuous/program / peak)
Maximum SPL (1 m) <sup>2</sup> :	120 dB continuous average (126 dB peak)
System Sensitivity <sup>1</sup> :	95 dB
Nominal Impedance:	8 Ohms

#### Transducer:

LF Driver:	1 × 10" (254 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):	537 × 300 × 340 mm
Net Weight:	15.6 kg

<sup>1</sup> Full space (4π) conditions

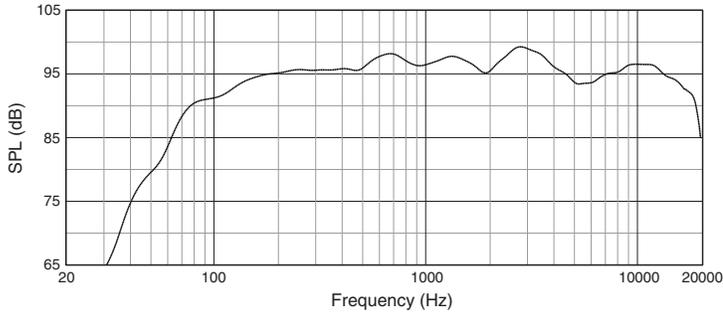
<sup>2</sup> Calculated maximum SPL based on rated power handling

<sup>3</sup> IEC standard, pink noise with 6 dB crest factor for 2 hours

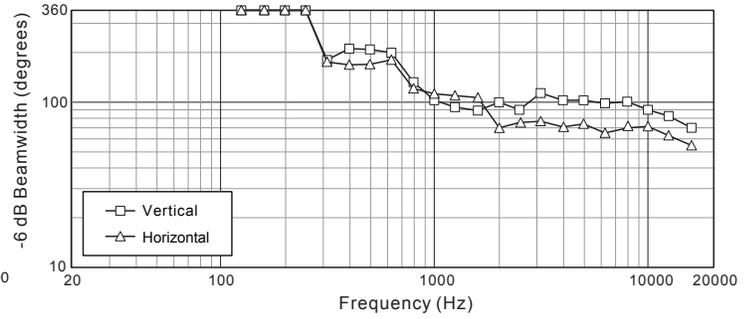
JBL continually engages in research related to product improvement. Some materials, production methods and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current JBL product may differ in some respect from its published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

## ► KPS1 10-Inch 2-Way Full-Range Loudspeaker System

### Frequency Response:

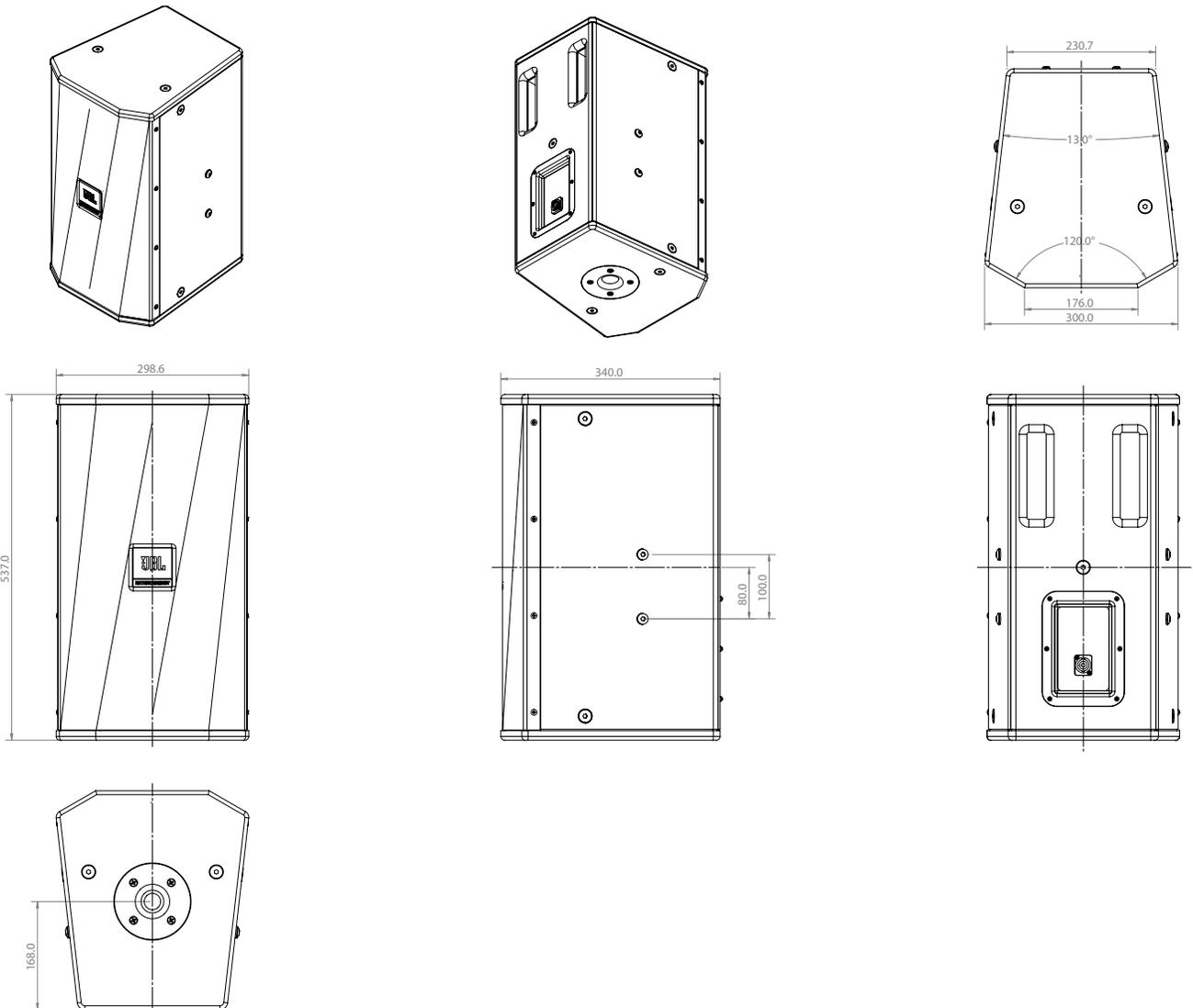


### Beamwidth:



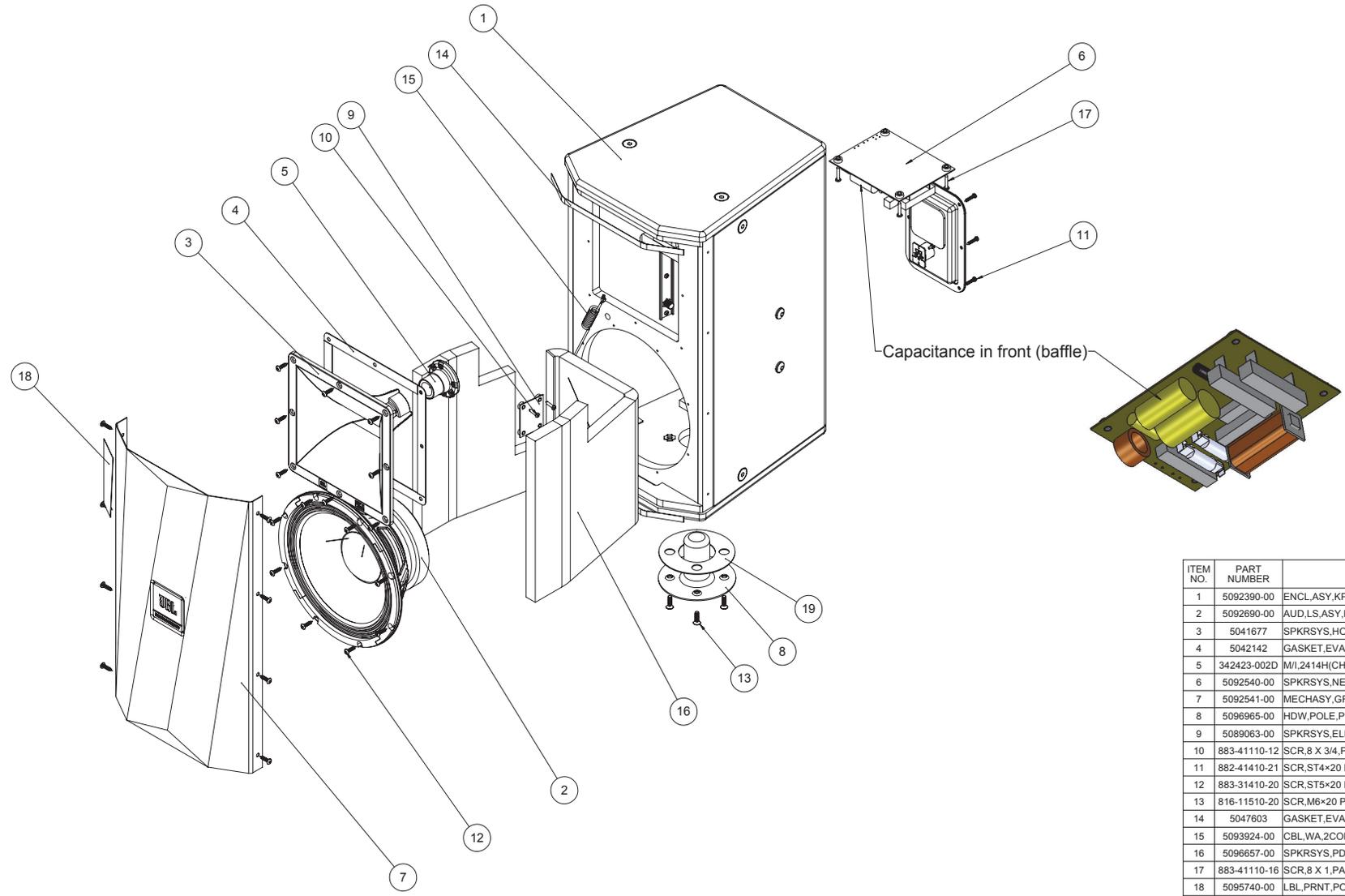
### Dimensions:

Dimensions in mm



# Exploded View Diagrams

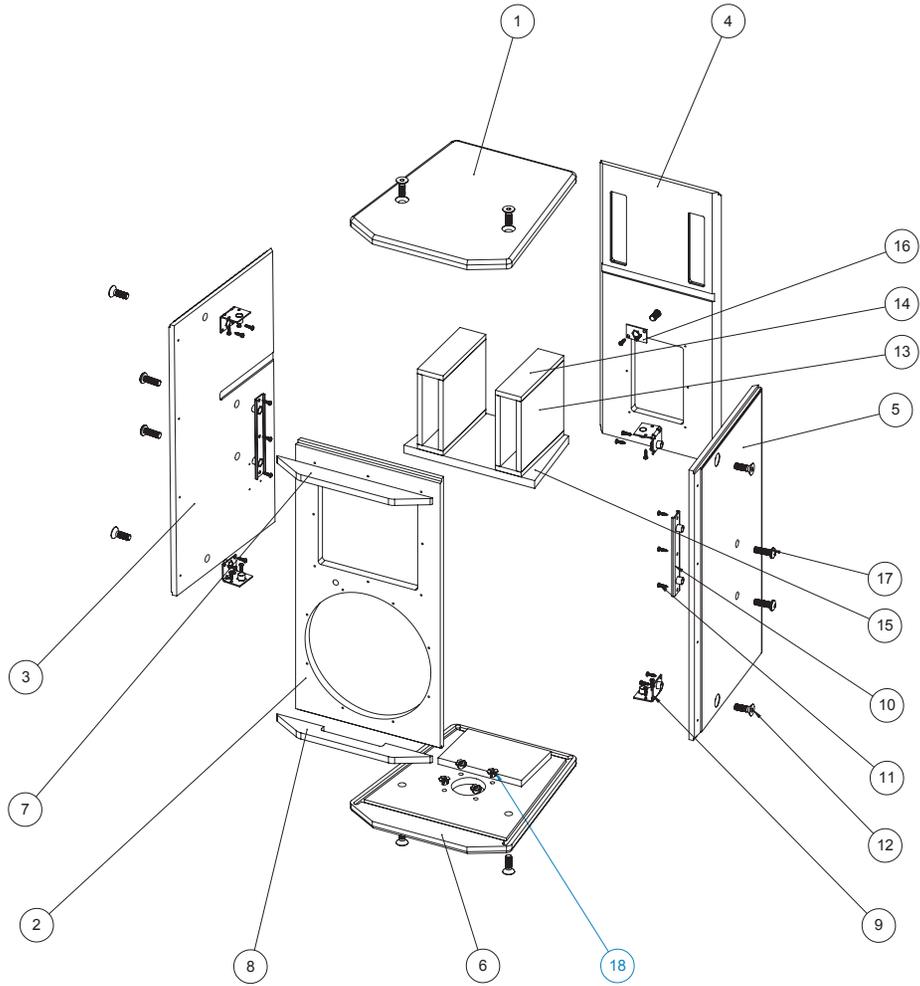
DATE		REV.	PREV. PART	DESCRIPTION	ZONE	BY
1/10/2018		A2		CHANGE DISPLAY PCB ASY AND SPKRSYS NETWORK ASY INSTALLATION POSITION AND SCREWS; CHANGE CABLE; CHANGE WOOFERS; CHANGE EVA GASKET; CHANGE WADDING; CHANGE POLE		Govin
3/26/2018		B1		CHANGE POP STICKER LOCATION		Govin



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	5092390-00	ENCL,ASY,KPS1	1
2	5092690-00	AUD,LS,ASY,KPS1 WOOF	1
3	5041677	SPKRSYS,HORN,KP4000	1
4	5042142	GASKET,EVA,HORN,KP4000	4
5	342423-002D	M/I,2414H(CHINA)	1
6	5092540-00	SPKRSYS,NERWORKS ASY,KPS1	1
7	5092541-00	MECHASY,GRL ASY,KPS1	1
8	5096965-00	HDW,POLE,PEEN-ELCOM M1551	1
9	5089063-00	SPKRSYS,ELEC,DSPL,KP050	1
10	883-41110-12	SCR,8 X 3/4,PAN,PH,PB,BLK ZINC,LCS	4
11	882-41410-21	SCR,ST4x20 PH, PAN, EDB	6
12	883-31410-20	SCR,ST5x20 PH TRUSS DACRO	24
13	816-11510-20	SCR,M6x20 PH FLAT EDB	4
14	5047603	GASKET,EVA,KP4000 STANDOFF	2
15	5093924-00	CBL,WA,2COND,SPRING,LENGTHEN,KP050	1
16	5096657-00	SPKRSYS,PDNG,WADDING, KPS1	1
17	883-41110-16	SCR,8 X 1,PAN,PH,PB,BLK ZINC,LCS	4
18	5095740-00	LBL,PRNT,POP STICKER,KPS1	1
19	5096966-00	MISC,GASKET,M1551 POLE	1

**ROHS/REACH**  
 COMPLIANT WITH THE EU ROHS AND REACH REGULATIONS.  
 FOR MORE INFORMATION, VISIT: [www.harman.com/rohs](http://www.harman.com/rohs)

**HARMAN**  
 SPKRSYS,ASY,KPS1  
 DATE: 1/3/2018  
 SCALE: 1:1  
 SHEET: 1 OF 2

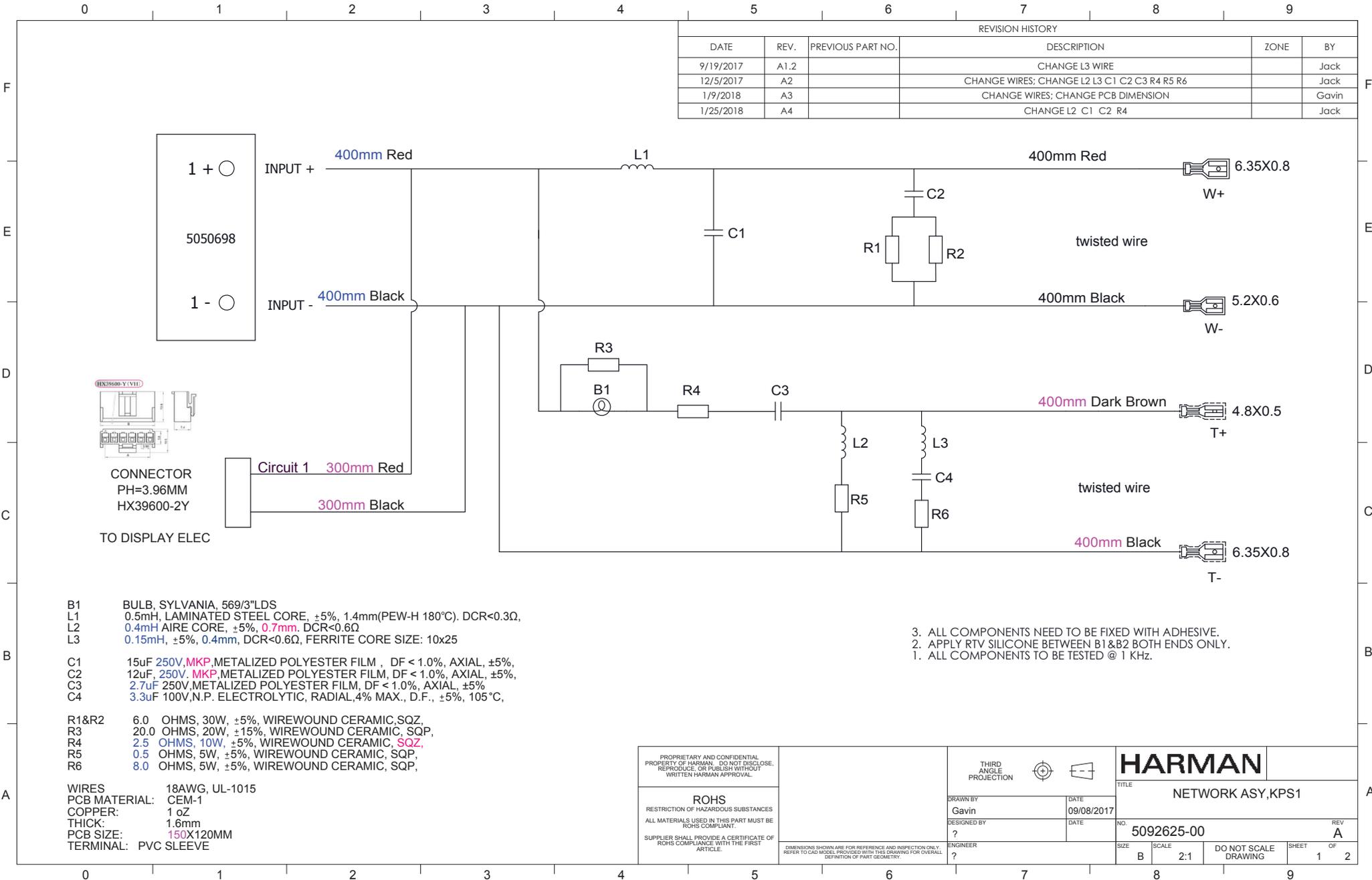


REVISION HISTORY				DATE	REV.	PREVIOUS PART NO.	DESCRIPTION	ENGINE	BY
				4/28/2017	A2		CHANGE DESIGN - CHANGE MATERIAL		Gwin
				5/31/2017	A3		RELEASE FOR DV		Gwin
				11/21/2018	A4		ADD SCREWS (882-41410-15); ADD 2-MMM DECORATION SLOT; ADD M6 T-NUT		Gwin

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	5092391-00	ENCL.PNL.TOP,KPS1	1
2	5092392-00	ENCL.PNL.BAFFLE,KPS1	1
3	5092393-00	ENCL.PNL.SIDE.LEFT,KPS1	1
4	5092394-00	ENCL.PNL.REAR,KPS1	1
5	5092395-00	ENCL.PNL.SIDE.RIGHT,KPS1	1
6	5092396-00	ENCL.PNL.BOTTOM,KPS1	1
7	5092397-00	ENCL.STANDOFF.TOP,KPS1	1
8	5092398-00	ENCL.STANDOFF.BOT,KPS1	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	5092399-00	ENCL.PNL.PORT.LONG,KPS1	4
14	5092400-00	ENCL.PNL.PORT.SHORT,KPS1	4
15	5092401-00	ENCL.PNL.CENTER,KPS1	1
16	445956-001	HDWR,BRKT,SINGLE POINT ASY,KP600	1
17	5061435	SCR,M10x30,TRUSS.HEX, DACROMET	4
18	5041458	FSTNR,NUT,T-NUT,M6,HOOK PRONG	4

<b>ROHS</b> RESTRICTION OF HAZARDOUS SUBSTANCES ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED		TOLERANCES UNLESS OTHERWISE SPECIFIED X ±0.30 mm ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED		<b>HARMAN</b> ENCL.ASY.KPS1	
DATE	REV.	DATE	REV.	DATE	REV.
5/4/2017	A2	5/4/2017	A2	5/4/2017	A2
5/31/2017	A3	5/31/2017	A3	5/31/2017	A3
11/21/2018	A4	11/21/2018	A4	11/21/2018	A4

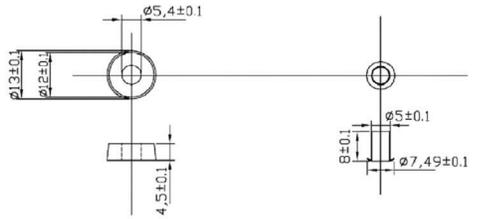
# Network Assembly Diagrams



REVISION HISTORY

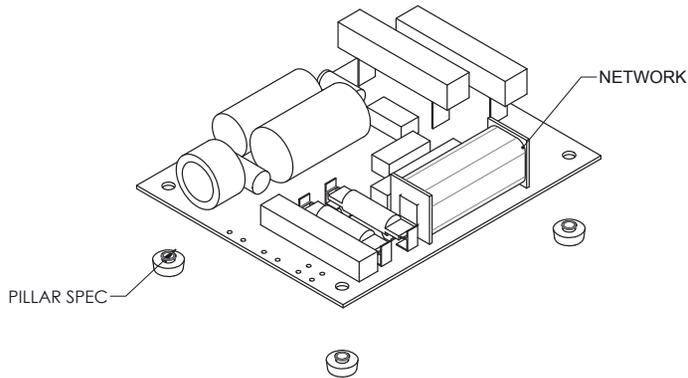
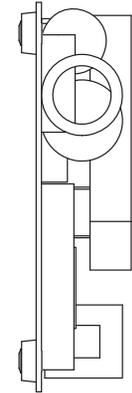
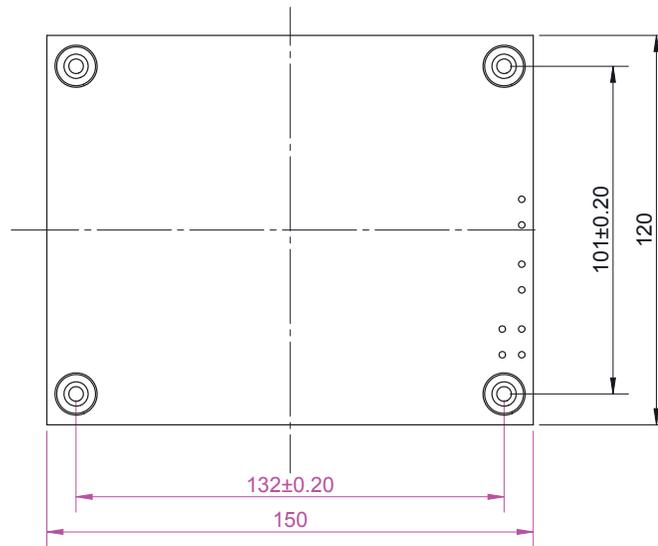
DATE	REV.	PREVIOUS PART NO.	DESCRIPTION	ZONE	BY

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.		TOLERANCES UNLESS OTHERWISE SPECIFIED X ± 0.30 mm Y ± 0.50 mm ANGULAR ± 0°30'		THIRD ANGLE PROJECTION		<b>HARMAN</b>	
<b>ROHS</b> RESTRICTION OF HAZARDOUS SUBSTANCES ALL MATERIALS USED IN THIS PART MUST BE ROHS COMPLIANT.		ALL DIMENSIONS ARE IN MILLIMETERS ALL DIMENSIONS APPLY AFTER FINISH		DRAWN BY Gavin		DATE 09/08/2017	
SUPPLIER SHALL PROVIDE A CERTIFICATE OF ROHS COMPLIANCE WITH THE FIRST ARTICLE.		DIMENSIONS SHOWN ARE FOR REFERENCE AND INSPECTION ONLY. REFER TO CAD MODEL PROVIDED WITH THIS DRAWING FOR OVERALL DEFINITION OF PART GEOMETRY.		DESIGNED BY ?		DATE 1/14/2011	
ENGINEER ?		NO. 5092625-00		REV A		TITLE NETWORK ASY, KPS1	
SIZE B		SCALE 1:2		DO NOT SCALE DRAWING		SHEET 2 OF 2	

## Bill of Materials - KPS1

---

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