



Service Manual

KI300 Series Full Range Loudspeaker System

- KI310
- KI310G
- KI312
- KI312G





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Ki310

10 Inch Full Range Loudspeaker System

Professional Series

Key Features:

- ▶ High-performance 10" woofer features a sophisticated cone design with rubber surround for long-life, high reliability, and unsurpassed low-frequency reproduction
- ▶ Dual 1" Aluminum dome neodymium tweeters
- ▶ Enclosure is constructed of MDF (Medium Density Fiberboard) with vinyl laminated finish
- ▶ High-strength ABS (Acrylonitrile Butadiene Styrene) waveguide provides even and smooth frequency response
- ▶ Precision engineered crossover for optimal power response and performance in the critical mid-range region
- ▶ Built-in protection circuit engineered specifically to protect the tweeters without interfering with the overall performance



Applications:

- ▶ For Karaoke sound reinforcement

The Ki310 is a premium full-range speaker designed especially for Karaoke market.

The Ki310 uses a 10" woofer and two 1" aluminum dome tweeters. The 10" woofer features a non-pressed long fiber pulp cone and pure nitrile butadiene rubber surround providing necessary stiffness and high reliability and capacity to withstand the tremendous accelerating force from the motor. An anodized aluminum voice coil former provides extra cooling for greater long-term power handling. The two 1" aluminum dome tweeters provide warm, clear and crystal high frequency and wide, even coverage of listening area.

The whole system can withstand 250 watts power capacity. High-strength ABS waveguide provides even and smooth frequency response as well as protection for the tweeters.

The enclosure is constructed of durable MDF wood with vinyl laminated finish and fitted with nickel-plated binding post for reliable connectivity. Two high-strength M10 x 40 attachment points guarantee the stability of suspension. The three-piece ABS grille provides excellent component protection. The cloth covered center grille adds a distinctive design element to the overall elegant appearance of the loudspeaker.

Specifications:

System:

System Type:	10", 2-way, bass-reflex
Frequency Range (-10 dB) ¹ :	52 Hz - 20 KHz
Frequency Response (±3 dB) ¹ :	70 Hz - 18 KHz
Sensitivity (1w/1m) ¹ :	90 dB
Nominal Impedance:	8 Ohms
Maximum SPL ² :	114 dB (120 dB peak)
Power Rating ³ : (Continuous/Program/Peak)	250 W / 500 W / 1000 W
Coverage Pattern:	120° x 100° (H x V)

Physical:

Dimensions (H x W x D):	290 mm x 525 mm x 320 mm 11.4 in x 20.7 in x 12.6 in
Net Weight:	11.5 Kg/PC (25.6 lbs/PC)
LF Driver:	1 x 10" WF
HF Driver:	2 x 1" Aluminum dome tweeter
Input Connectors:	Binding post
Enclosure Construction:	Vinyl covered 15 mm MDF

¹ Full space (4π) conditions

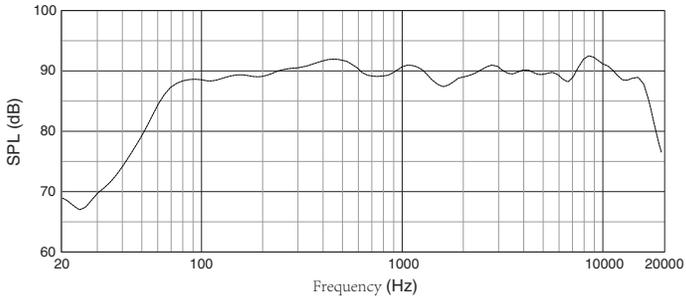
² Calculated maximum SPL based on rated power handling

³ IEC pink noise with 6 dB crest factor, in frequency range for 100 hours

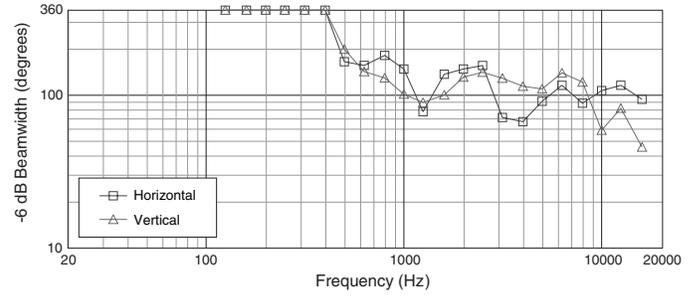
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► Ki310 10 Inch Full Range Loudspeaker System

Frequency Response:

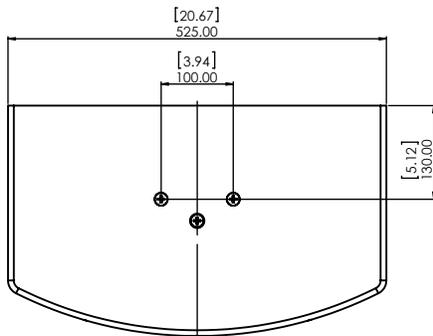


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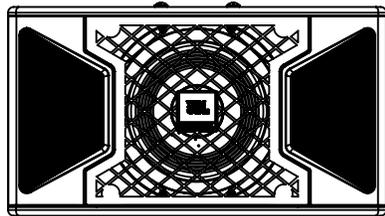


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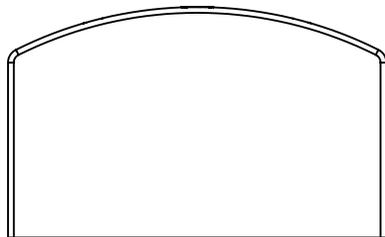
Dimensions in mm (inch)



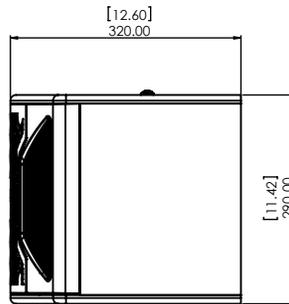
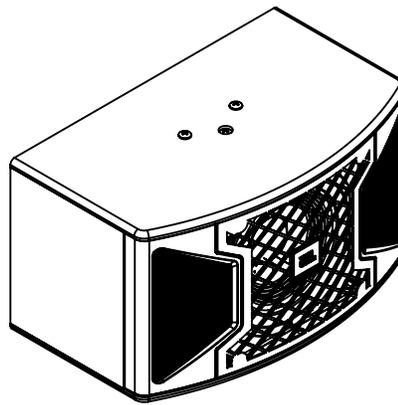
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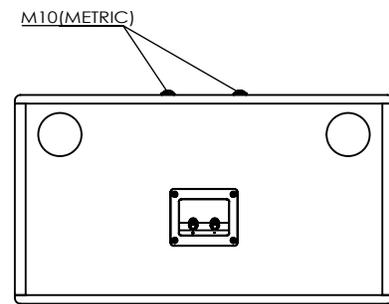
FRONT



BOTTOM



SIDE



BACK



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SSKi310
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Ki312

12 Inch Full Range Loudspeaker System

Professional Series

Key Features:

- ▶ High-performance 12" woofer features a sophisticated cone design with rubber surround for long-life, high reliability, and unsurpassed low-frequency reproduction
- ▶ Dual 1" Aluminum dome neodymium tweeters
- ▶ Enclosure is constructed of MDF (Medium Density Fiberboard) with vinyl laminated finish
- ▶ High-strength ABS (Acrylonitrile Butadiene Styrene) wave guide provides even and smooth frequency response
- ▶ Precision engineered crossover for optimal power response and performance in the critical mid-range region
- ▶ Built-in protection circuit engineered specifically to protect the tweeters without interfering with the overall performance



Applications:

- ▶ For Karaoke sound reinforcement

The Ki312 is a premium full-range speaker designed especially for Karaoke market.

The Ki312 uses a 12" woofer and two 1" aluminum dome tweeters. The 12" woofer features a non-pressed long fiber pulp cone and pure nitrile butadiene rubber surround providing necessary stiffness and high reliability and capacity to withstand the tremendous accelerating force from the motor. An anodized aluminum voice coil former provides extra cooling for greater long-term power handling. The two 1" aluminum dome tweeters provide warm, clear and crystal high frequency and wide, even coverage of listening area.

The whole system can withstand 300 watts power capacity. High-strength ABS waveguide provides even and smooth frequency response as well as protection for the tweeters.

The enclosure is constructed of durable MDF wood with vinyl laminated finish and fitted with nickel-plated binding post for reliable connectivity. Two high-strength M10 x 40 attachment points guarantee the stability of suspension. The three-piece ABS grille provides excellent component protection. The cloth covered center grille adds a distinctive design element to the overall elegant appearance of the loudspeaker.

Specifications:

System:

System Type:	12", 2-way, bass-reflex
Frequency Range (-10 dB) ¹ :	48 Hz - 20 KHz
Frequency Response (±3 dB) ¹ :	65 Hz - 18 KHz
Sensitivity (1w/1m) ¹ :	92 dB
Nominal Impedance:	8 Ohms
Maximum SPL ² :	117 dB (123 dB peak)
Power Rating ³ : (Continuous/Program/Peak)	300 W / 600 W / 1200 W
Coverage Pattern:	120° x 100° (H x V)

Physical:

Dimensions (H x W x D):	344 mm x 595 mm x 360 mm 13.5 in x 23.4 in x 14.2 in
Net Weight:	16.2 Kg/PC (35.7 lbs/PC)
LF Driver:	1 x 12" WF
HF Driver:	2 x 1" Aluminum dome tweeter
Input Connectors:	Binding post
Enclosure Construction:	Vinyl covered 18 mm MDF

¹ Full space (4π) conditions

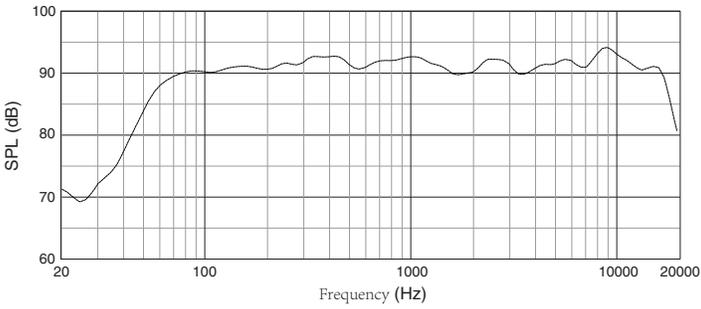
² Calculated maximum SPL based on rated power handling

³ IEC pink noise with 6 dB crest factor, in frequency range for 100 hours

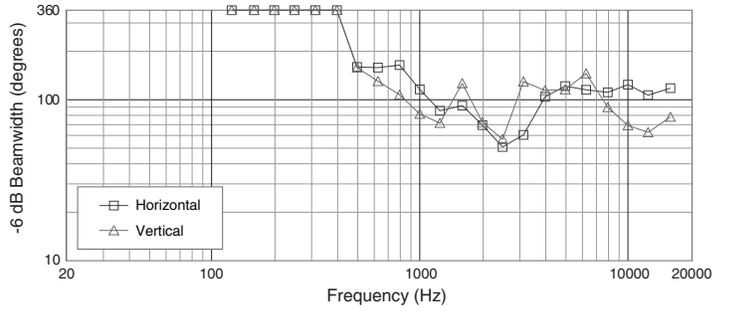
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▶ Ki312 12 Inch Full Range Loudspeaker System

Frequency Response:

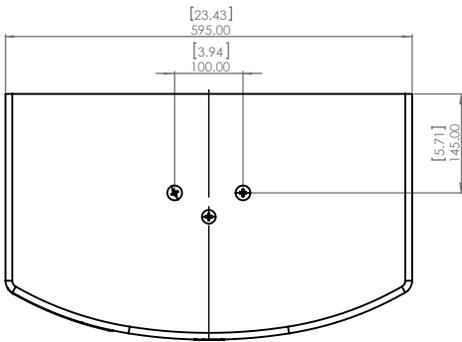


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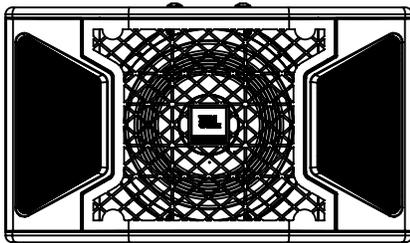
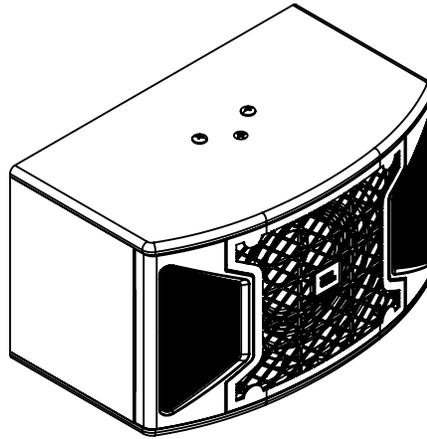


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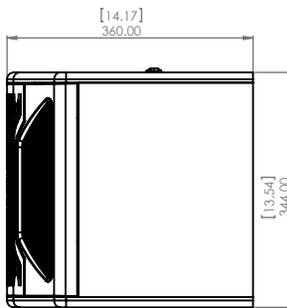
Dimensions in mm (inch)



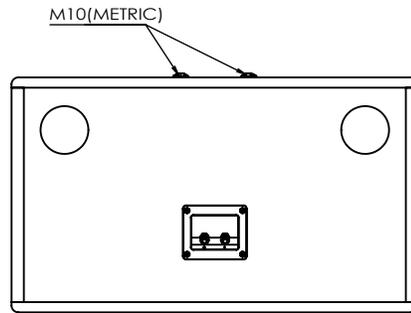
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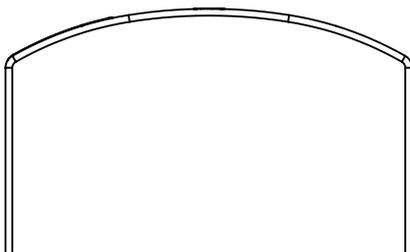
FRONT



SIDE



BACK



BOTTOM

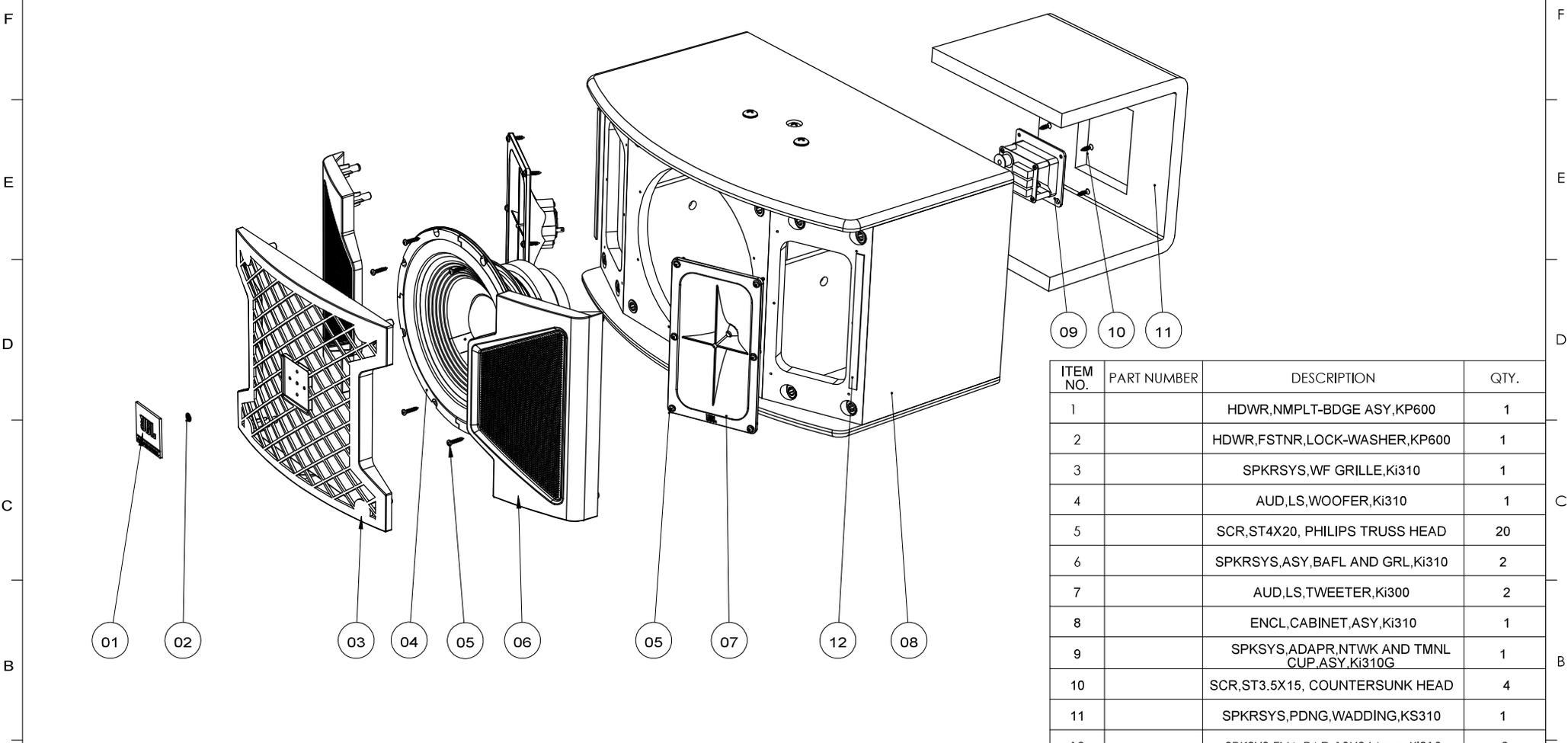


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0 1 2 3 4 5 6 7 8 9

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



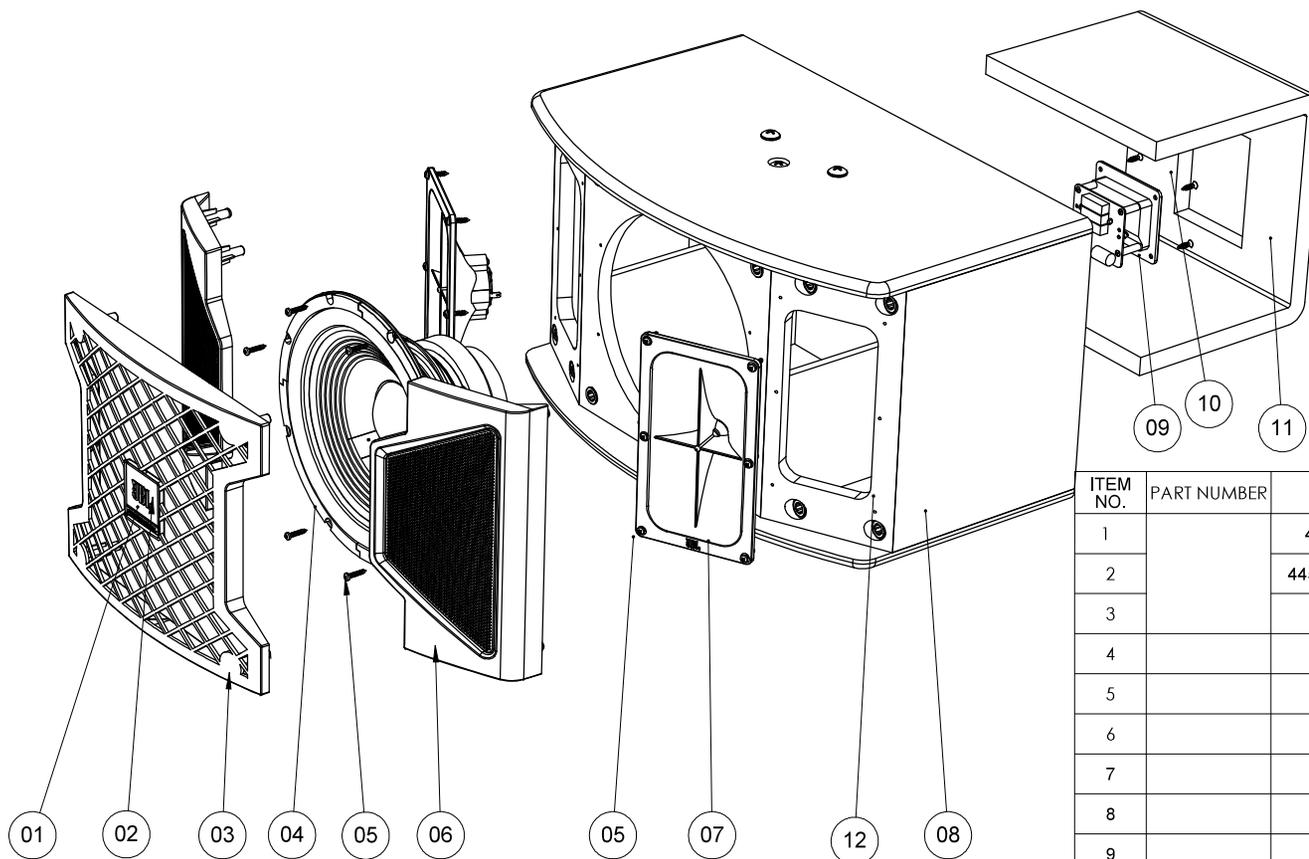
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1		HDWR,NMPLT-BDGE ASY,KP600	1
2		HDWR,FSTNR,LOCK-WASHER,KP600	1
3		SPKRSYS,WF GRILLE,KI310	1
4		AUD,LS,WOOFER,KI310	1
5		SCR,ST4X20, PHILIPS TRUSS HEAD	20
6		SPKRSYS,ASY,BAFL AND GRL,KI310	2
7		AUD,LS,TWEETER,KI300	2
8		ENCL,CABINET,ASY,KI310	1
9		SPKSYS,ADAPR,NTWK AND TMNL CUP,ASY,KI310G	1
10		SCR,ST3.5X15, COUNTERSUNK HEAD	4
11		SPKRSYS,PDNG,WADDING,KS310	1
12		SPKSYS,EVA PAD,10X264mm,KI310	2

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			<small>DRAWN BY</small> PZ <small>DESIGNED BY</small>	<small>DATE</small> 3/23/2015 <small>DATE</small>	<small>TITLE</small> SPKSYS,EXPLODED,KI310
<small>DIMENSIONS SHOWN ARE FOR REFERENCE AND INSPECTION ONLY. REFER TO CAD MODEL PROVIDED WITH THIS DRAWING FOR OVERALL DEFINITION OF PART GEOMETRY.</small>		<small>ENGINEER</small>	<small>NO.</small>	<small>REV</small> A	
		<small>SIZE</small> A3	<small>SCALE</small> 1:4	<small>DO NOT SCALE DRAWING</small>	<small>SHEET</small> 1 <small>OF</small> 1

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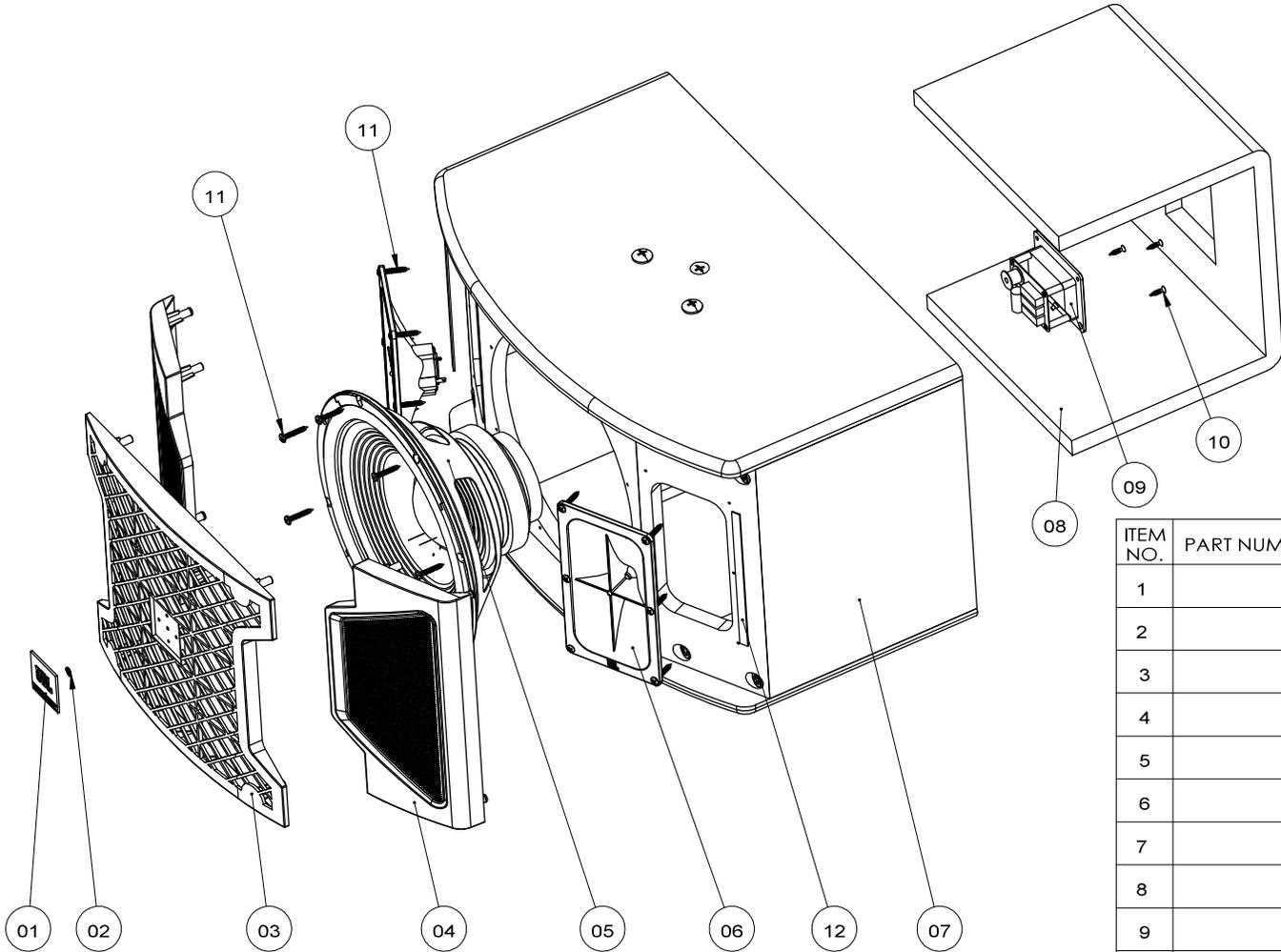
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2		445922-001,HDWR,FSTNR,LOCK-WASHER,KP600	1
3		5056348,SPKRSYS,WF GRILLE,Ki310	1
4		AUD,LS,WOOFER,Ki310	1
5		SCR,ST4X20, PHILIPS TRUSS HEAD	20
6		SPKRSYS,ASY,BAFL AND GRL,Ki310G	2
7		AUD,LS,TWEETER,Ki300	2
8		ENCL,CABINET,ASY,Ki310G	1
9		ADAPR,NTWK AND TMNL CUP,ASY,Ki310G	1
10		SCR,ST3.5X15, COUNTERSUNK HEAD	4
11		SPKRSYS,PDNG,WADDING,KS310	1
12		SPKSYS,EVA PAD,10X264mm,Ki310	2

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			TITLE SPKSYS,EXPLODED,Ki310G	DATE 3/23/2015
DIMENSIONS SHOWN ARE FOR REFERENCE AND INSPECTION ONLY. REFER TO CAD MODEL PROVIDED WITH THIS DRAWING FOR OVERALL DEFINITION OF PART GEOMETRY.	DRAWN BY PZ	DESIGNED BY DATE	NO.	SIZE A3
ENGINEER	SCALE 1:4	DO NOT SCALE DRAWING	SHEET 1 OF 1	8

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DATE	REV.	PREVIOUS PART NO.	DESCRIPTION			

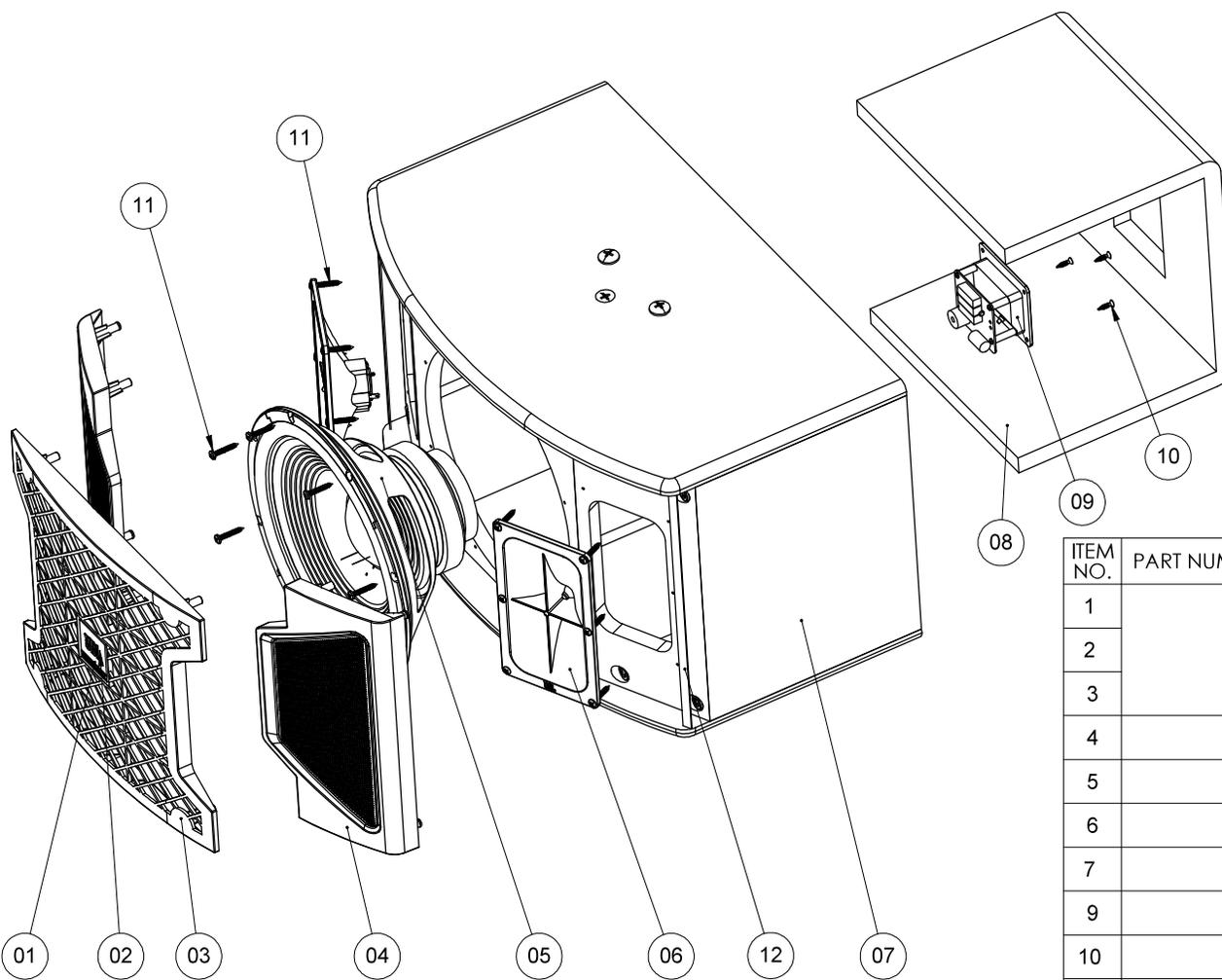


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1		HDWR,NMPLT-BDGE ASY,KP600	1
2		FSTNR,LOCK-WASHER,KP600	1
3		SPKRSYS,GRL, FOR WF,Ki312	1
4		SPKRSYS,ASY,BAFL AND GRL,Ki312	2
5		AUD,LS,WOOFER,Ki312	1
6		AUD,LS,ASY,TWEETER,Ki300	2
7		ENCL,CABINET,ASY,Ki312	1
8		SPKRSYS, PDNG, WADDING, KS312	1
9		NTWK AND TMNL CUP,ASY,Ki312	1
10		FSTNR,MSCR,COUNTERSUNK,ST3.5X15	4
11		FSTNR,MSCR,PH TRUSS,BLK,ST4X20	20
12		SPKSYS,EVA PAD,10X312mm,Ki312	2

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			<small>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.</small>	<small>DATE</small> 3/24/2015 <small>DATE</small>

REVISION HISTORY

DATE	REV.	PREVIOUS PART NO.	DESCRIPTION	ZONE	BY



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2		445922-001,FSTNR,LOCK-WASHER,KP600	1
3		5056428, SPKRSYS,GRL, FOR WF,Ki312	1
4		SPKRSYS,ASY,BAFL AND GRL,Ki312G	2
5		AUD,LS,WOOFER,Ki312	1
6		AUD,LS,ASY,TWEETER,Ki300	2
7		ENCL,CABINET,ASY,Ki312G	1
9		NTWK AND TMNL CUP,ASY,Ki312G	1
10		FSTNR,MSCR,COUNTERSUNK,ST3.5X15	4
11		FSTNR,MSCR,PH TRUSS,BLK,ST4X20	20
12		SPKSYS,EVA PAD,10X312mm,Ki312	2

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ROHS
RESTRICTION OF HAZARDOUS SUBSTANCES
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SUPPLIER SHALL PROVIDE A CERTIFICATE OF ROHS COMPLIANCE WITH THE FIRST ARTICLE.

TOLERANCES UNLESS OTHERWISE SPECIFIED:
All Dimensions: ± Angular: 2.5°
ALL DIMENSIONS ARE IN MILLIMETERS
ALL DIMENSIONS APPLY AFTER FINISH.

DIMENSIONS SHOWN ARE FOR REFERENCE AND INSPECTION ONLY. REFER TO CAD MODEL PROVIDED WITH THIS DRAWING FOR OVERALL DEFINITION OF PART GEOMETRY.

THIRD ANGLE PROJECTION

DRAWN BY: PZ
DESIGNED BY: []
ENGINEER: []

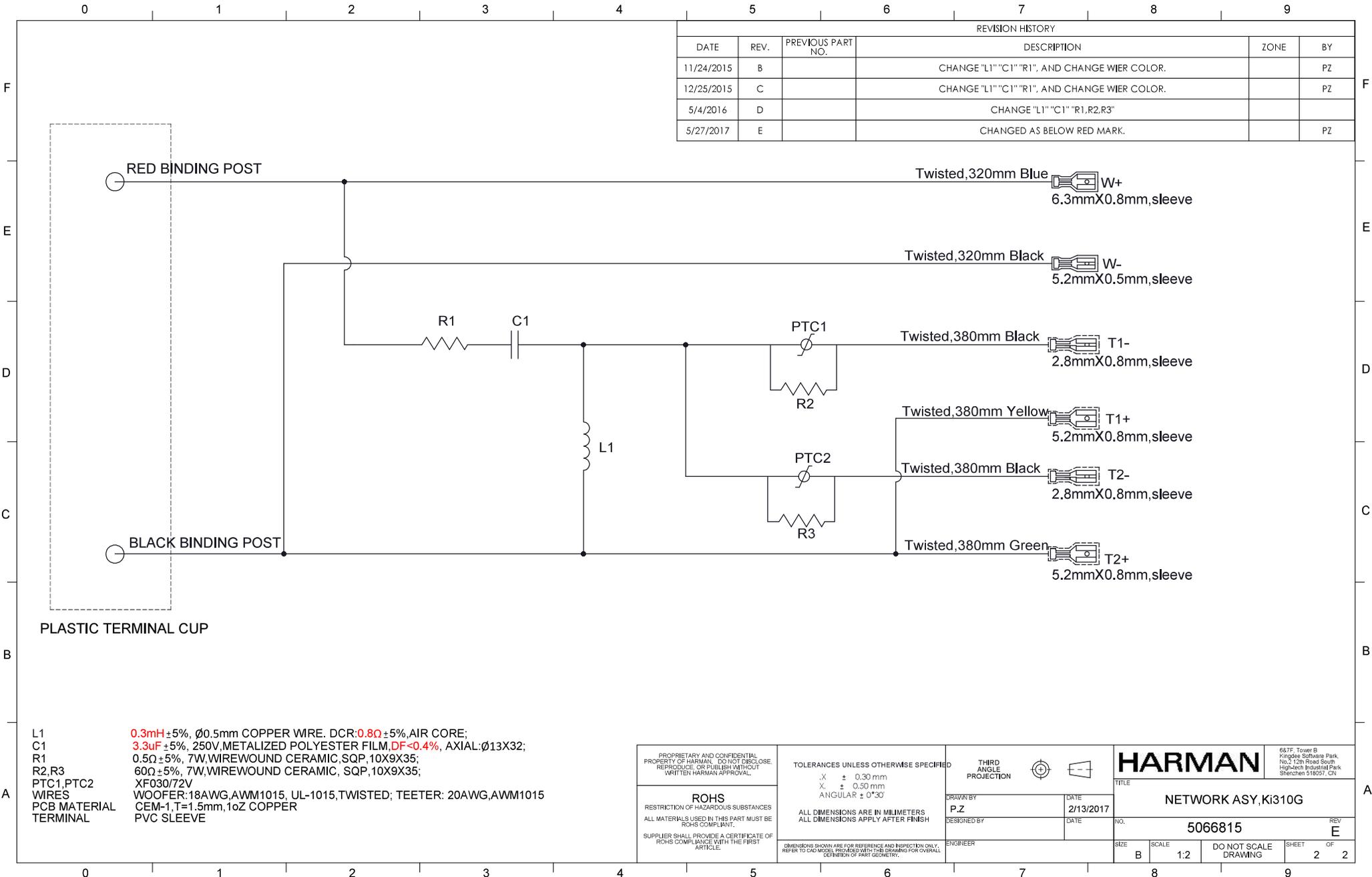
DATE: 3/24/2015

HARMAN
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Kingston Software Park,
No. 2, 10th Floor South
High-Tech Industrial Park,
Shenzhen 518057, CHN

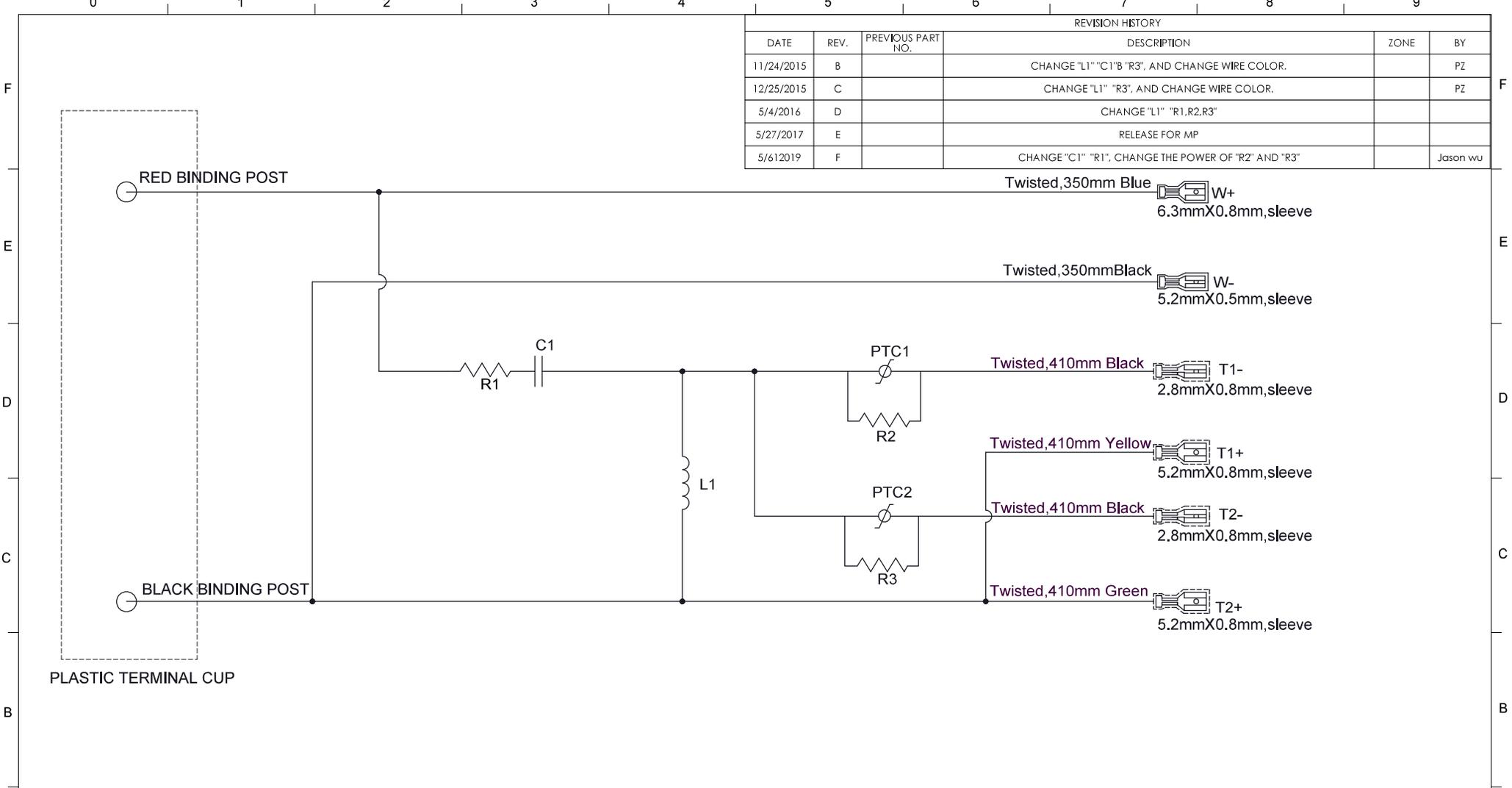
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NO. [] REV. A

SIZE: A3 SCALE: 1:5 DO NOT SCALE DRAWING SHEET 1 OF 1



REVISION HISTORY					
DATE	REV.	PREVIOUS PART NO.	DESCRIPTION	ZONE	BY
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12/25/2015	C		CHANGE "L1" "R3", AND CHANGE WIRE COLOR.		PZ
5/4/2016	D		CHANGE "L1" "R1,R2,R3"		
5/27/2017	E		RELEASE FOR MP		
5/612019	F		CHANGE "C1" "R1", CHANGE THE POWER OF "R2" AND "R3"		Jason wu



L1 0.35mH±5%, ∅0.5mm COPPER WIRE, DCR:0.68Ω±5%, AIR CORE;
 C1 3.0uF±5%, 250V,METALIZED POLYESTER FILM, DF<0.4%, AXIAL,∅13X32;
 R1 0.25 Ω±5%, 15W,WIREWOUND CERAMIC, SQP;
 R2,R3 60 Ω±5%, 15W,WIREWOUND CERAMIC, SQP;

PTC1,PTC2 XF030/72V
 WIRES WOOFER:18AWG,AWM1015, UL-1015,TWISTED; TEETER: 20AWG,AWM1015
 PCB MATERIAL CEM-1,T=1.5mm,1oz COPPER
 TERMINAL PVC SLEEVE

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	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.	ALL DIMENSIONS ARE IN MILLIMETERS ALL DIMENSIONS APPLY AFTER FINISH			TITLE NETWORK ASY,KI312G NO. 5066817 REV F		
DRAWN BY Jason wu DESIGNED BY ENGINEER		DATE 5/6/2019 DATE DATE		SIZE B	SCALE 1:2	DO NOT SCALE DRAWING	SHEET 1 OF 2

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