



PROFESSIONAL
by **HARMAN**

Service Manual

VPX728S

Dual 18" High-Power Subwoofer



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VPX728S

Dual 18" High-Power Subwoofer

Professional Series

Key Features:

- ▶ Dual 18" JBL 2044H woofer for extended low frequency output
- ▶ Large vent port for reduced distortion
- ▶ Enclosure constructed of premium plywood and finished in black DuraFlex™ coating
- ▶ Heavy-duty 16-gauge protective screen backed steel grille
- ▶ Vertical orientation for convenient ground stacking

Applications:

- ▶ Sound reinforcement for live music and speech or pre-recorded applications
- ▶ For use with full-range satellite speakers

VPX728S is an dual 18" high power subwoofer system designed for live music, speech and pre-recorded applications and for use with full-range satellite speakers.

VPX728S uses two 18" (457mm) JBL 2044H woofers in a front vented enclosure to reproduce low bands with extended frequency response and low distortion, and to stand continuous power up to 1000Watts. When placed in a standing position, a full range speaker can be stacked on its top without the need for an additional pole.

The subwoofer system offers compatibility with a variety of cabling schemes. A pair of Neutrik® Speakon® NL-4 connectors are provided and are shipped with pins +1/-1 connected to the woofer. To meet different cabling requirements, the woofer can also be re-configured to work through pins +2/-2.

VPX728S provides two handles for easy transit and set-up. Its enclosure is made from premium plywood, finished in rugged DuraFlex™ coating and braced to maximize low frequency performance. The CNC-machined 16-gauge steel grille is backed with acoustically transparent fabrics to provide additional driver protection and give a very professional appearance.



Specifications:

Frequency Range (-10 dB):	35 Hz - 250 Hz
Frequency Response (±3 dB):	40 Hz - 250 Hz
Input Connection Modes:	Internally configurable, +1/-1 or +2/-2
Recommended Crossover:	80 - 120 Hz, 24 - 48 dB/octave
Power Rating:	1000 W/2000 W/4000 W, 2 hrs ¹
(Continuous/Program/Peak)	800 W/1600 W/3200 W, 100 hrs ¹
Maximum SPL:	133 dB continuous (139 dB peak) ²
Sensitivity (1w@1m):	97 dB SPL; 103 dB SPL ²
LF Driver:	2 × 18" (457 mm) JBL 2044H woofer
Nominal Impedance:	4 Ohms
Enclosure:	Rectangular, 18 mm, plywood
Finish:	Black DuraFlex™ finish
Grille:	Powder coated, black, 16-gauge perforated steel with acoustically transparent black screen backing
Input Connectors:	2 × Neutrik® Speakon® NL-4
Dimensions (H × W × D):	1080 mm × 533 mm × 700 mm (42.5 in × 21.0 in × 27.6 in)
Net Weight:	54.16 Kg (119.4 lbs)

¹ 40 Hz to 400 Hz pink noise with 6 dB crest factor for specified period

² Calculated on half space condition

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.

JBL Professional Engineering	Engineering Standard Engineering Design Specification	Date Effective: 03/06/2018 Date Revised:	Number 1000323749 Rev B Page 1
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Model: VPX728S

Description: 2x18" subwoofer

ACOUSTICAL AND ELECTRICAL SPECIFICATIONS

Frequency Range (-10dB).....35Hz to 200Hz
(see attached curve, page2)

System Input Type.....Neutrik connector NL4MP

Rated System Input Impedance.....8 Ω

System Power Handling..... See ETS #1000323754

Sensitivity (2.83V@1m).....97dB

PHYSICAL SPECIFICATIONS

Enclosure Volume.....299.0L

Net Enclosure Volume.....290.0L

Maximum External Dimensions.....1095mm(H) x 535mm(W) x 700mm(D)

Weight (ea.).....55.0 kgs

SYSTEM COMPONENTS

Low Frequency Transducer.....352938-003D (EDS #1932)

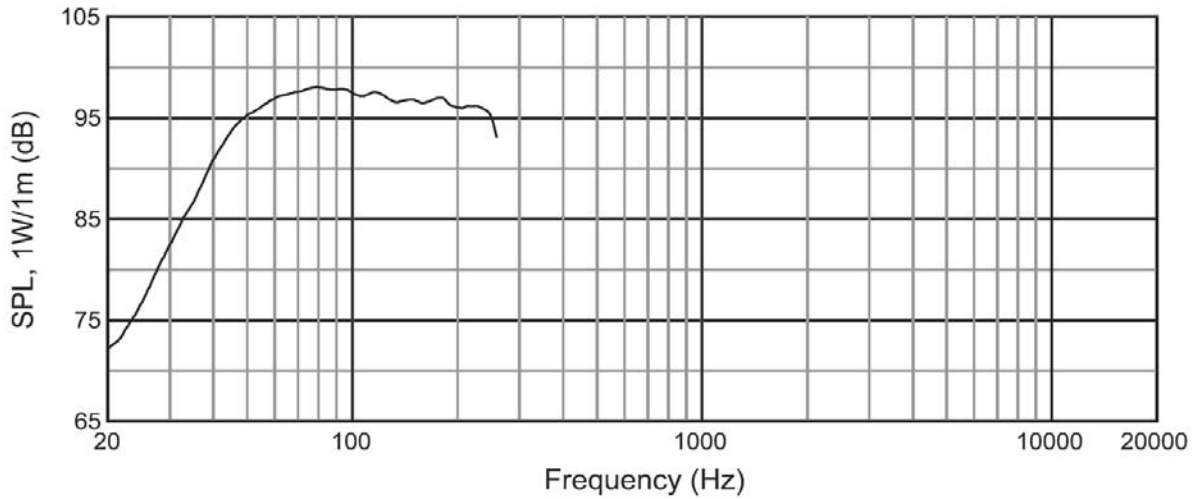
Design Engineer: Jason Wu

JBL Professional Engineering	Engineering Standard Engineering Design Specification	Date Effective: 03/06/2018 Date Revised:	Number 1000323749 Rev B Page 2
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On-Axis Bandpass Summation

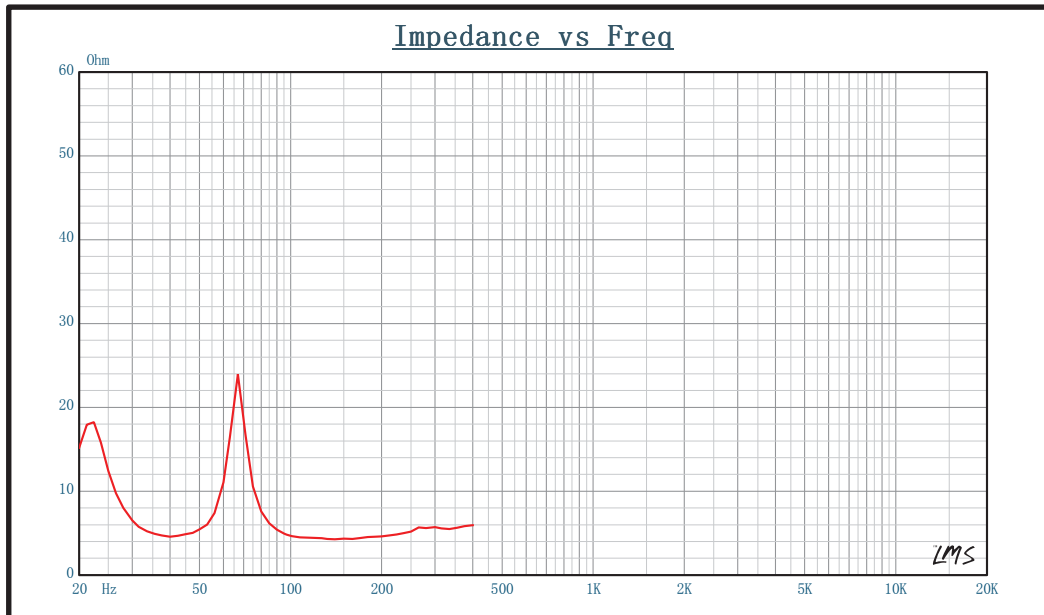
System measured in 2.83V@1m with Soundcheck

20Hz-110Hz measured in Near field, 110Hz-250Hz measured in Far field



System Impedance

System measured in 2.83V with Soundcheck

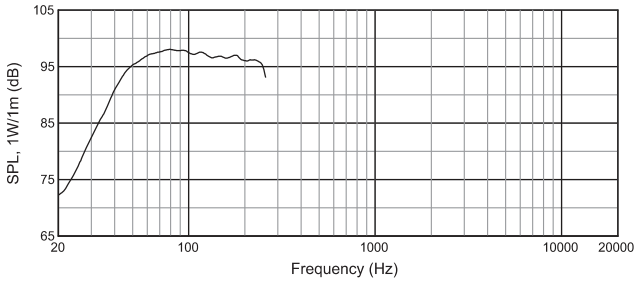


Revision History

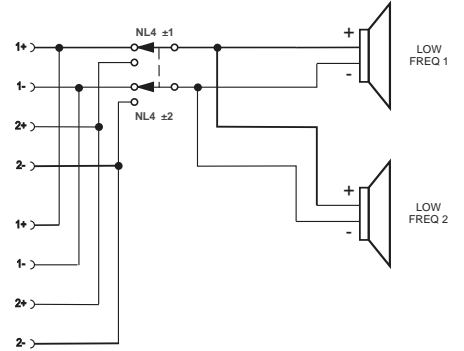
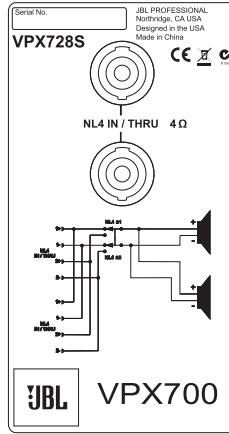
Revision	Release Action	Date	Rev Initials
A		01/18/2018	Jason Wu
B		03/06/2018	Jason wu

▶ VPX728S Dual 18" High-Power Subwoofer

Frequency Response:

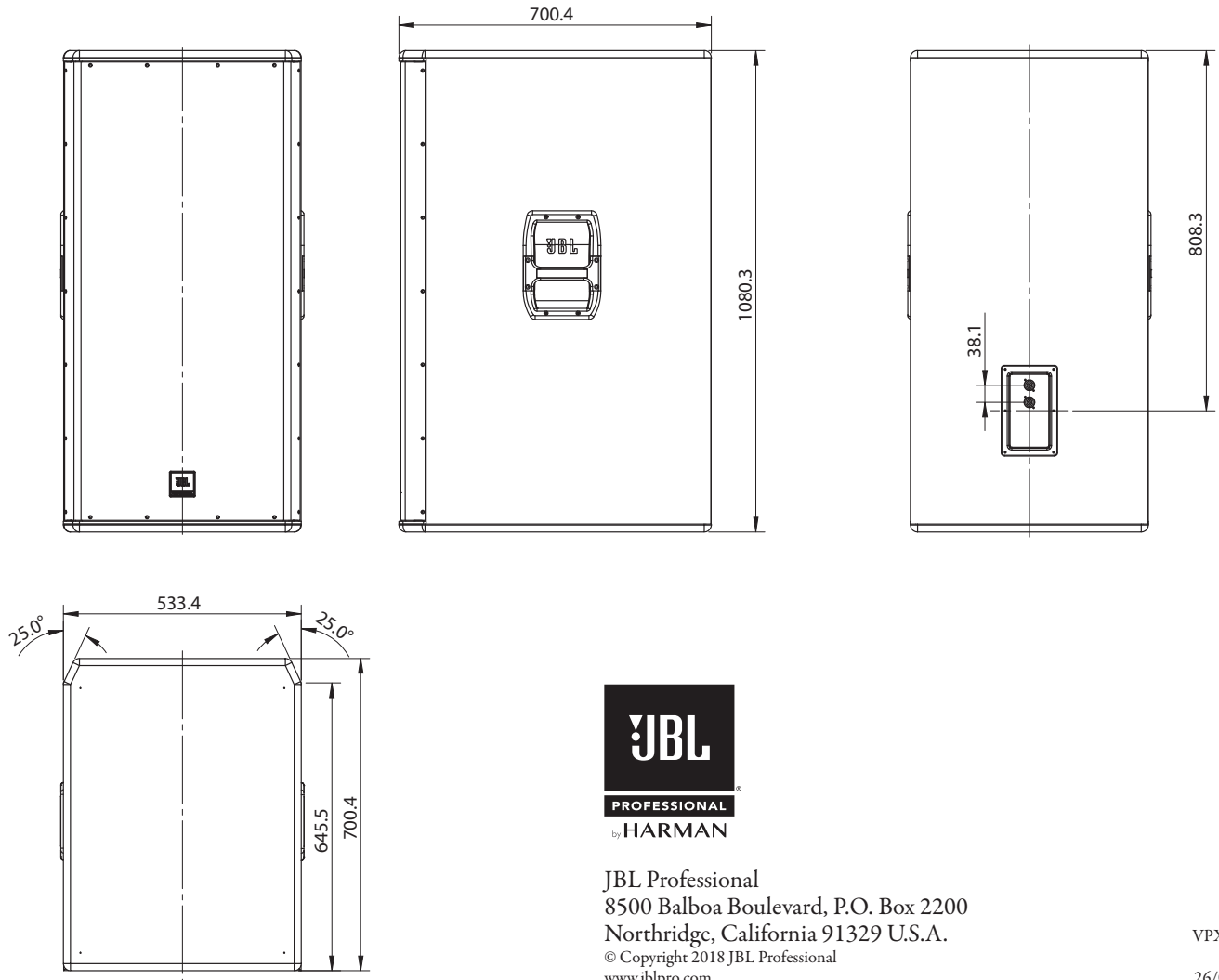


Block Diagram:



Dimensions:

Dimensions in mm



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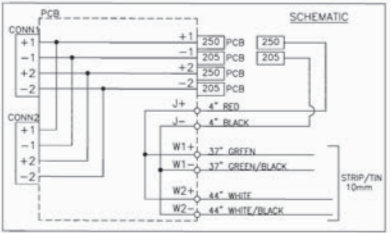
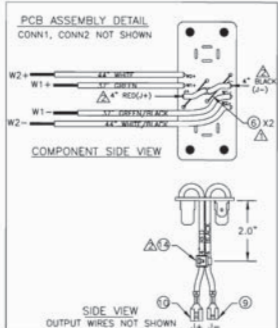
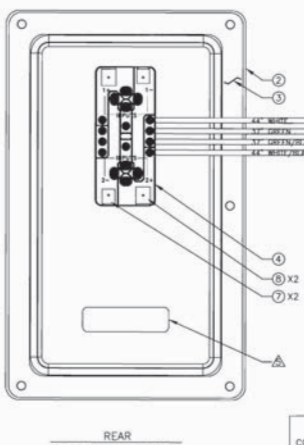
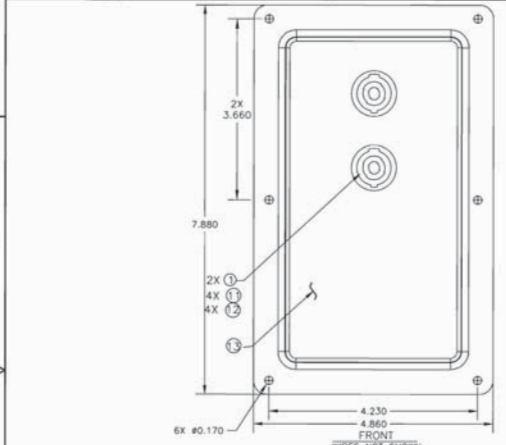
VPX728S
 SZ
 26/01/18

PART NO	DESCRIPTION	DESCRIPTION
364970-001	INPUT CUP, MRX528S (HADM)	091-00627A
364970-002	INPUT CUP, MRX528S (CHINA)	091-01060A

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ALL MATERIAL SPECIFIED ON THIS DRAWING SHALL COMPLY WITH EUROPEAN DIRECTIVE 2002/95/EC (RoHS)

REV	DATE	BY	CHK	APPV
35192	A		FL	
40052	B		FL	
00343	C		FL	AP 9/27/11



ITEM	REF	DESCRIPTION
1	CONN1,2	CONNECTOR, NEUTRIK, NL6MP, BLACK
2	T/C	TERMINAL CUP, MRX, CONN#2
3	GASKET	GASKET, T/C, WRX1
4	PCB	PC BOARD, MATERIAL: CEM-1, 2 oz, SIZE: 1.20" x 2.80"
5	WIRE	WIRE, T6AWG, UL-1015
6	JMPR1,2	BLISS WIRE, 16 AWG
7	205 PCB	TAB, 0.205 X 0.020, M. EYE, 90°, TBS
8	250 PCB	TAB, 0.250 X 0.032, M. EYE, 90°, TBS
9	205	FASTON, FEMALE, 0.205 X 0.020, TINNED BRASS
10	250	FASTON, FEMALE, 0.250 X 0.032, TINNED BRASS
11	SCR	SCREW, 4-40 X 1/2", PPH, BLACK
12	NUT	NUT, HEX, NYLOC, 4-40, BLACK
13	LABEL	LABEL, JBL
14	C/T	CABLE TIE, 3.25"

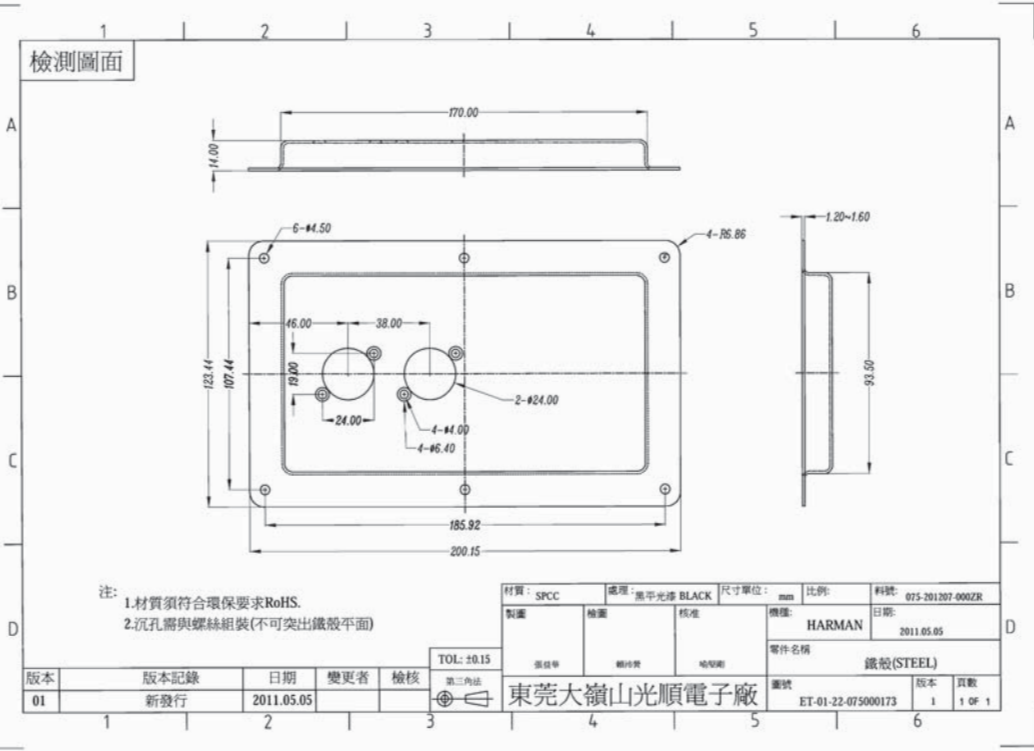
- 1. CUSTOMER P/N IS 364970-001.
- 2. IDENTIFY CUSTOMER P/N WITH PAPER LABEL.
- 3. T/C ASSEMBLY MUST BE ROHS COMPLIANT.
- 4. SHIP WITH FASTONS (ITEMS #9 AND #10) CONNECTED TO "-1" AND "+1" PCB TABS.
- 5. J+ AND J- WIRES INSERT THRU SLOT TO THE SOLDER SIDE OF PCB AND SECURE WITH CABLE TIE.
- 6. SEE PCB ASSEMBLY DETAIL.
- 7. SOLDER JMPR1, JMPR2 IN POSITIONS SHOWN ON PCB ASSEMBLY DETAIL.

NOTES: (UNLESS OTHERWISE SPECIFIED)

UNCONTROLLED COPY

REV	PART NO.	DATE	DESCRIPTION	REVISIONS/PART
35192	364970	10/24/07	RELEASE FOR PRODUCTION	JBL Professional
40052			RELEASE -002	A Harman International Company
00343			REMOVE SUPPLIER CALLOUTS, ADD PAGE 2	Northridge, California 91326, U.S.A.
TOLERANCES UNLESS OTHERWISE SPECIFIED: DIMENSIONS IN INCHES DECIMAL: ± 0.015 INCH FRACTIONAL: ± 1/32 INCH ANGLES: ± 30°				INPUT CUP (HADM) D 364970 C SHEET 1 OF 1

檢測圖面



注：
 1. 材質須符合環保要求RoHS.
 2. 沉孔需與螺絲組裝(不可突出鐵殼平面)

材質: SPCC	處理: 黑平光漆 BLACK	尺寸單位: mm	比例:	料號: 075-201207-0002R
製圖:	檢圖:	核准:	標識: HARMAN	日期: 2011.05.05
張啟華	賴詩雅	喻翠蘭	零件名稱: 鐵殼(STEEL)	
TOL: ±0.15			圖號: ET-01-22-075000173	版本: 1
東莞大嶺山光順電子廠			圖號: ET-01-22-075000173	頁數: 1 OF 1

版本	版本記錄	日期	變更者	檢核
01	新發行	2011.05.05		

P/N VPX728S	Description S/M, VPX728S	Qty.	Unit
352938-003D	M/I, 2044H (CHINA)	2	each
29074A	PRIMER,BOSTIK-1007A	0.7	gram
317-30003-00	SPIDER, 2258H	1	each
323892-002	TERMINAL, DUAL	1	each
331-50000-00	BACKPLATE, PPC, 2023H 2033H	1	each
337513-001	MESH, WIRE	1	each
352859-001	ADH, MOYEN 3087	4	Milliliter
353219-001	ACTIVATOR, LOCTITE 7091, VARIOUS	1	Milliliter
362228-001	TINSEL LEAD, 140MM	2	each
440906-001	ADHESIVE, LOCTITE E120	3.5	Milliliter
443603-001	CONE ASSEMBLY, 2043 & 2044	1	each
351950-002	02043H SURROUND & CONE	1	each
58605	EYELET,GS 3-3	2	each
71396	ADH,AIRFLEX,400	0.001	ounce
CONSUMABLES	ADHESIVES/PAINTS/CHEMICALS/LABELS/ETCALL	0.32	Piece
5006634	GLUE, LOCTITE 326	2	gram
5006637	CYBERBOND APOLLO BLAST 6001	8	each
5006638	DEFOAMER, SURFYNOL DF-37	0.001	gram
5012084	SERIAL NUMBER LABEL BLANK	1	each
5024020	SC97, 1MM SOLDER WIRE C512 CORE (CHINA)	3	gram
5029570	LABEL, 2044H (CHINA)	1	each
59548-03	MAGNET, 3.250ID (2VC)7.500OD 0.750THK C5	1	each
63627	ADH,C.A.,SICO-MET	2.5	gram
68719	GASKET, TERMINAL FOR 362-10007-01	1	each
71133-03	D/DOME, WATERPROOFED	1	each
71636-23	SHIM, 2251J	0.05	Piece
71848-03	GASKET, 18", SELF ADH, 2043	4	each
72266	ADH,SICOMET,5181	2	gram
72608	T/P PLD 3.120ID(3VC)7.000OD 0.500THK 6ST	1	each
72725-14	VOICE COIL, 2044H	1	each
330209-001	MOLD RELEASE311 DRY FILM VYDAX	0.01	pieces
55818-151	SUPPORT PAPER, VOICE COIL, 2044G	1	each
60885	WIRE, 26 AWG .0159H	45	gram
63083-17	TUBE, VOICE COIL, 2043	1	each
71226	TAPE, KAPTON .375 WIDTH .002THK PRESS SE	2	Inch
72980-0099	FRAME,18.250OD 7.010ID4.650C/SPDDIST6STK	1	each
73618	LBL,POLARITY	1	each
74822	LBL, DTC	1	each
72471	RIBBON,XFR,THRM,4.5"x1181	0.2	Meter
75225	LABEL, BLANK	1	each
CONSUMABLES	ADHESIVES/PAINTS/CHEMICALS/LABELS/ETCALL	3.759	Piece
353445-001	FOOT, SRX	4	each
361209-003	CABINET ASSY, MRX528S	1	each
361249-001	PORT PANEL, MRX528S	2	each
361250-001	WRAP ASSY, MRX528S	1	each
361251-003	PANEL, TOP, MRX528S	1	each
361251-004	MRX518S,MRX528S,BTM PNL	1	each
361252-001	BAFFLE, MRX528S	1	each
361329-002	MRX518S,528S,GRILLE STDOF	2	each

361330-001	STANDOFF, MID GRILLE, MRX528S	1	each
361331-001	STIFFENER ASSY, MRX528S	1	each
361437-001	MRX518S,528S,STIFFENER	2	each
361437-002	MRX518S,528S,STIFFENER	2	each
362721-001	BONDO 494 DYNALITE FILLER	0.08	gallon, US
364102-001	TAPE,3M,3"x50,GRY,3903	6	Meter
5013163	NAIL F30 30mm LONG	16	each
5058298	BASECOAT, BLACK CHEMTHANE 7030	1.282	gallon, US
5058299	TOPCOAT, BLACK CHEMTHANE 1400	0.113	gallon, US
61861	T-NUT,10-32	24	each
70206	ADH,JOWAT-110-60,BROWN	0.033	gallon, US
71261	ADHESIVE,URETHANE	0.24	gallon, US
CONSUMABLES	ADHESIVES/PAINTS/CHEMICALS/LABELS/ETCALL	44.706	Piece
362049-004	GASKET, MRX528S, 525	1	each
362297-001	FILLER, MRX528S/MRX518S	2	each
363125-001	GASKET, HANDLE MRX	2	each
49790P	MICROFOAM 1/32X18X20	8	each
5019069	BARCODE BLANK LABEL CHINA 4SN	2	each
5054599	ADHESIVE STICKER,STRIP-CALK,BLACK,φ3MM×10M	1.1	Meter
5081576	SPKSYS, GRILLE, ASY,MRX728S	1	each
445921-001	HDWR,SPRING,KP600	1	each
445922-001	HDWR,FSTNR,LOCK-WASHER,KP600	1	each
5081551	HDW, BDGE, FROFESSIONAL,MRX700	1	each
5081591	SPKSYS, GRL, MRX728S	1	each
5094450-00	SPKSYS, HANDLE, ASY, VPX700	2	each
362328-001	HANDLE ASSY, MRX	1	each
5095121-00	LAB, HANDLE, PMMA, VPX700	1	each
5094474-00	INPUT, TERMINAL CUP, ASY,VPX728S	1	each
5081555	TERMINAL CUP, MRX715	1	each
5094476-00	LAB, PRODUCT LABEL, VPX728	1	each
5094477-00	LAB, POP STICKER, VPX728S	1	each
5094478-00	SHPMAT, CARTON, VPX728S	1	each
5094479-00	SPEC SHEET,VPX728S	1	each
5096423-00	SHPMAT,OUTR FLR,VPX718S	2	each
60578	GASKET 2240H	8	each
65012	TAPE,PKG,3"X3000LINF	2	Meter
72471	RIBBON,XFR,THRM,4.5"x1181	4	Inch
804-01110-16	SCR,10-32 X 1,FIL,PH,BLK	16	each
804-11110-16	SCR,10-32 X 1,FLT,PH,BLK ZINC,LCS	8	each
882-41110-12	SCR,6X3/4",PAN,PH,PB,BLK	6	each
882-51110-12	SCR, 6 X 3/4,OV,PH,PTCL,BLK ZC,LCS	22	each
884-11110-12	SCR,10 X 3/4,FLT,PH,PB,BLK ZINC,LCS	8	each
884-41110-12	SCR,10 X 3/4,PAN,PH,PB,BLK ZINC,LCS	4	each
905901-012	SCR,MOD,TRUSS, PHIL,#8x.75,BLK	1	each
CONSUMABLES	ADHESIVES/PAINTS/CHEMICALS/LABELS/ETCALL	0.655	Piece