

# **Service Manual**

**Model: AMX-100/ AMX-100FX**



[www.altoproaudio.com](http://www.altoproaudio.com)

**Version: 1.1**

# **CONTENTS**

**1. Specification**

**2. Block Diagram**

**3. Schematic Diagram**

**4. Printed Circuit Board**

**5. Wiring Diagram**

~~**6. Test Procedure**~~

**7. Electrical Parts List**

**8. Exploded Views & Mechanical Parts List**

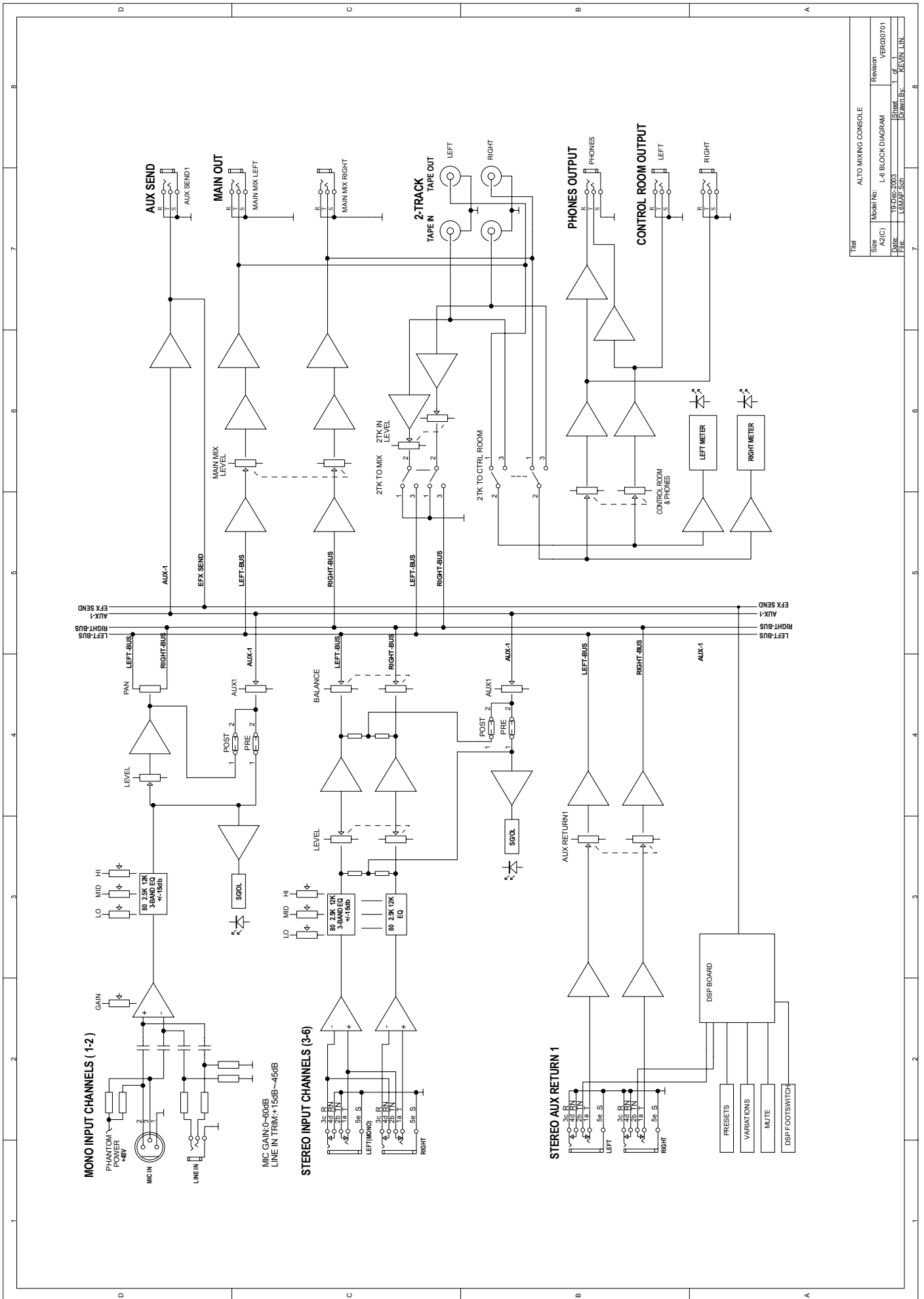
**9. Notes**

## 1. Specification

<b>Mono input channels</b>		
	Microphone input	electronically balanced, discrete input configuration
	Frequency response	10Hz to 55kHz, +/- 3dB
	Distortion (THD & N)	0.005% at +4dBu, 1kHz
	Gain range	0dB to 44dB (MIC)
	SNR (Signal to Noise Ratio)	115dB
	Line input	electronically balanced
	Frequency response	10Hz to 55kHz, +/- 3dB
	Distortion (THD & N)	0.005% at +4dBu, 1kHz
	Sensitivity range	+15dBu to - 30dBu
<b>Stereo input channels</b>		
	Line input	Unbalanced
	Frequency response	10Hz to 55kHz, +/- 3dB
	Distortion (THD & N)	0.005% at +4dBu, 1kHz
<b>Impedances</b>		
	Microphone input	1.4kOhm
	Channel Insert return	2.5kOhm
	All other inputs	10kOhm or greater
	Tape out	1kOhm
	All other output	120Ohm
<b>Equalization</b>		
	Hi shelving	+/- 15dB @12kHz
	Mid bell	+/- 12dB @2.5kHz
	Low shelving	+/- 15dB @80Hz
	Low Cut filter	75Hz, 18dB/oct.
<b>DSP Section (For AMX-100FX Model)</b>		
	A/D and D/A converters	24 bit
	DSP resolution	24 bit
	Type of effects	Hall, Room, Vocal & Plate REVERBS Mono & Stereo DELAY (max DELAY TIME 650ms) Chorus, Flanger & Reverb MODULATIONS REVERB+DELAY, REVERB+CHORUS, REVERB+FLANGER combinations
	Presets	256
	Controls	16-position PRESET Selector 16-position VARIATION selector PEAK LED MUTE SWITCH with LED indicator
<b>Main Mix Section</b>		
	Noise (Bus noise)	Fader 0 dB, channels muted: - 100dBr (ref.:+4dBu) Fader 0dB, all input channels assigned and set to UNITY gain: - 90dBr (ref.:+4dBu)
	Max output	+22dBu unbalanced, 1/4" jacks
	AUX Returns gain range	-∞ to +15dB
	AUX Sends max out	+22dBu

<b>Power supply (AC/AC Adaptor)</b>		
	Main voltage	USA/Canada 100 - 120V~, 60Hz
		Europe 210 - 240V~, 50Hz
		U.K./Australia 240V~, 50Hz
	Power Consumption	11 watts (for AMX-100 model)
		15 watts (for AMX-100FX model)
<b>Physical</b>		
	Dimension (W×D×H)	270mm×310mm×35/45mm
		(7.79"×8.95"×1.01"/1.30")
	Net weight	3.0Kg (6.61lb)
	Shipping weight	3.6Kg (7.94lb)

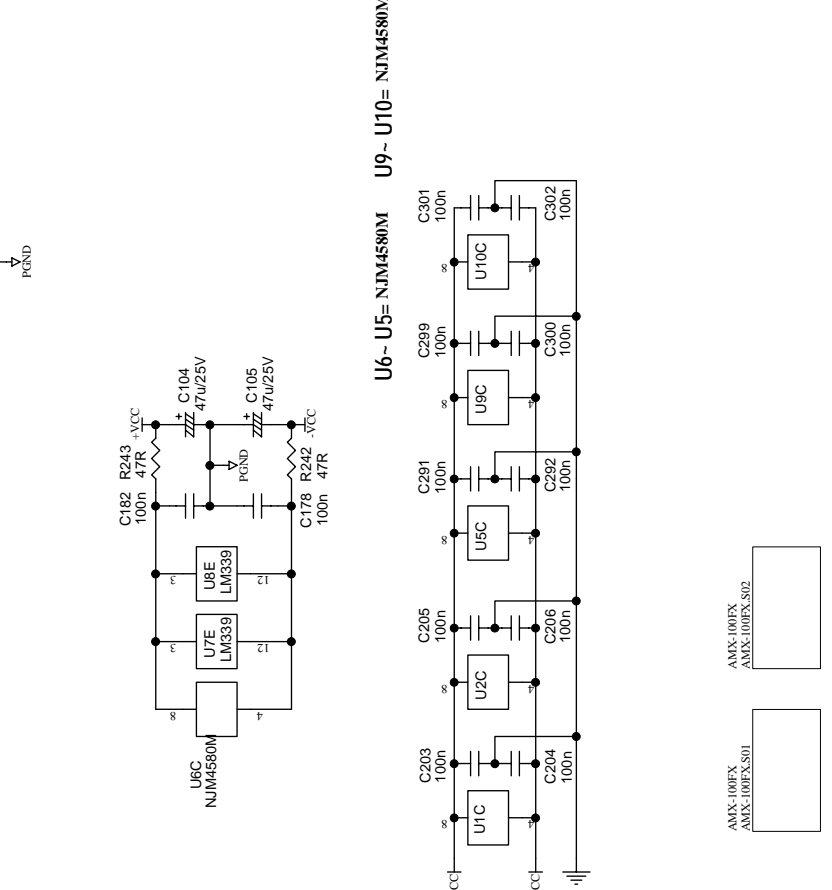
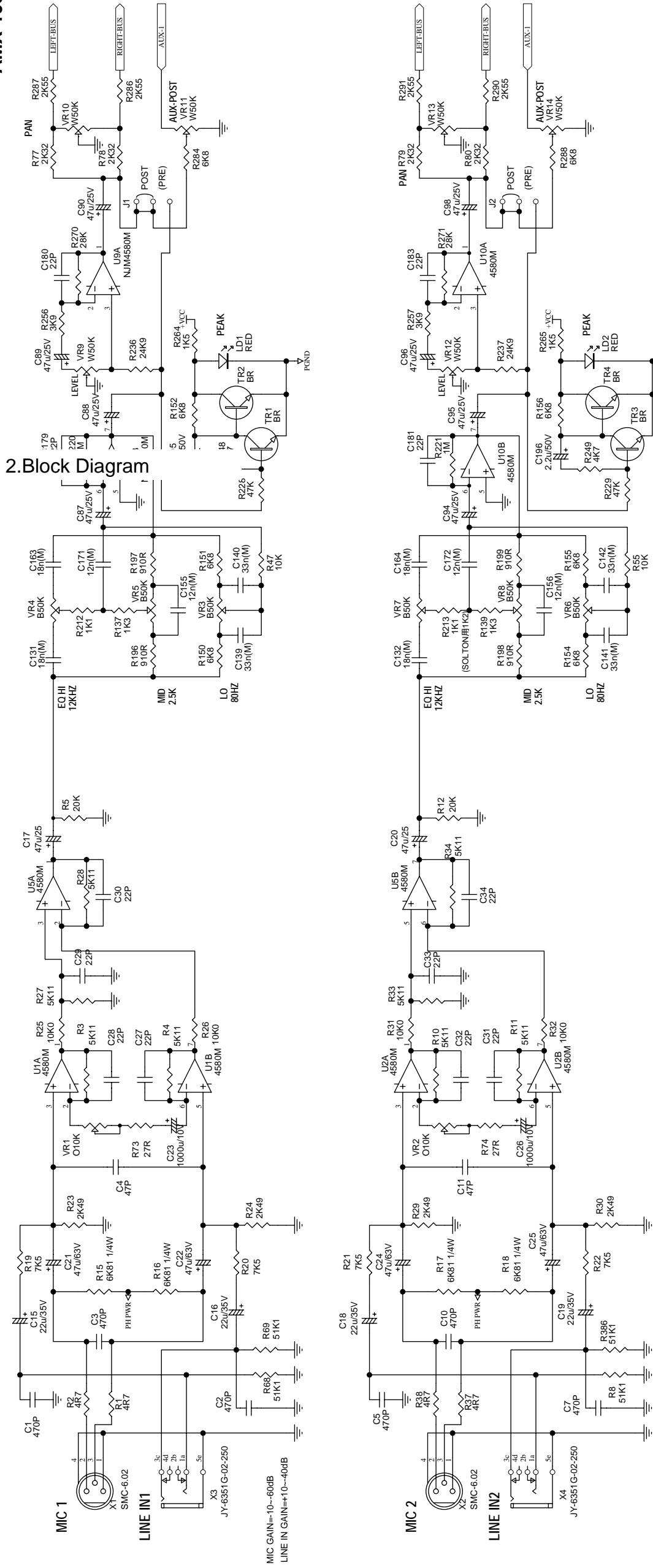
# 2. Block Diagram



# 3.Schematic Diagram

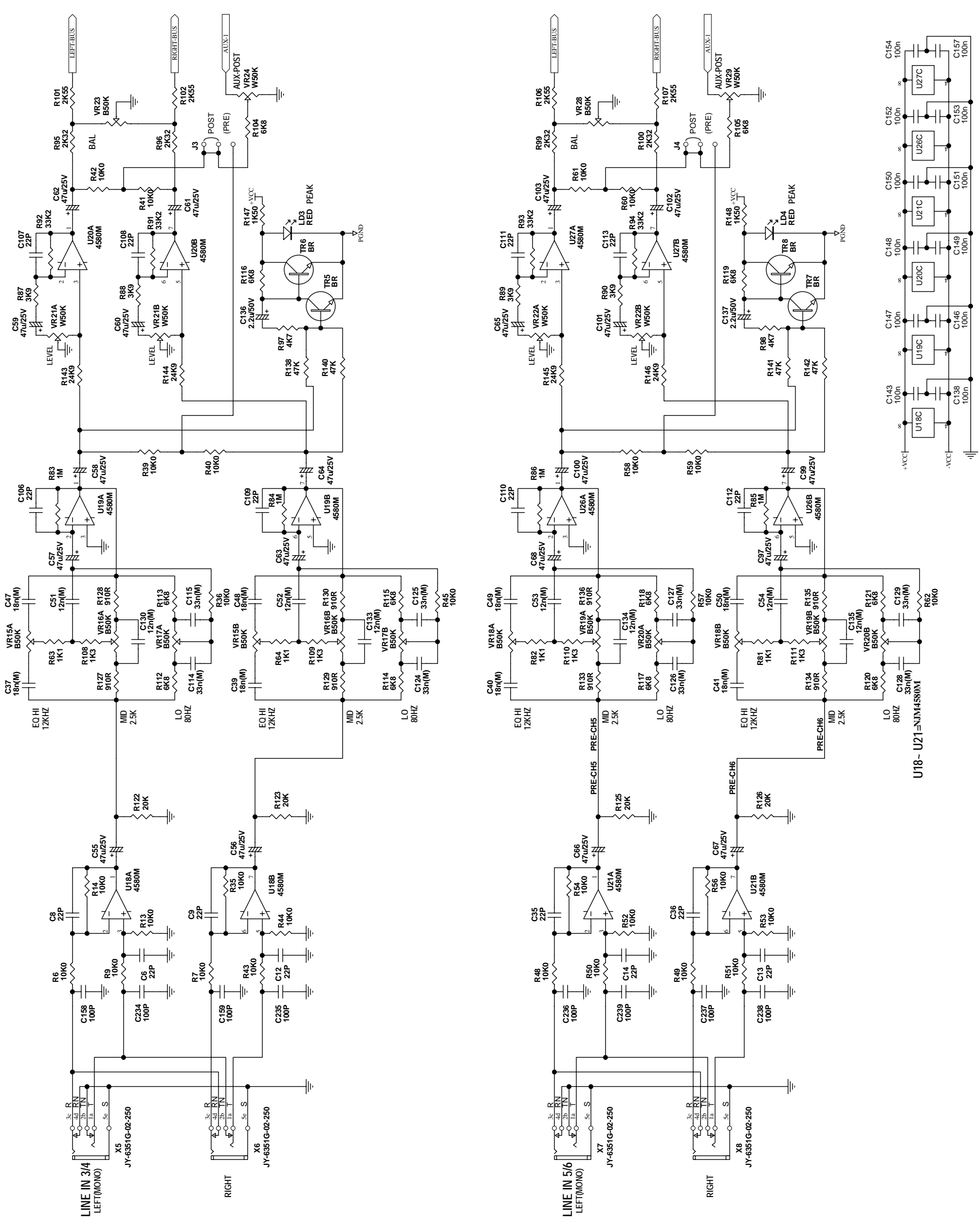
## AMX-100FX (1/3)

### 2.Block Diagram



Title	INPUT MONO CH (CH1-CH2)		
Size	A2	Model No.	AMX-100FX
Date	14-Sep-2004	Sheet	1 of 3
File	AMX-100FX.Sch	Drawn By	KEVIN LIN
Revision	VER040914		

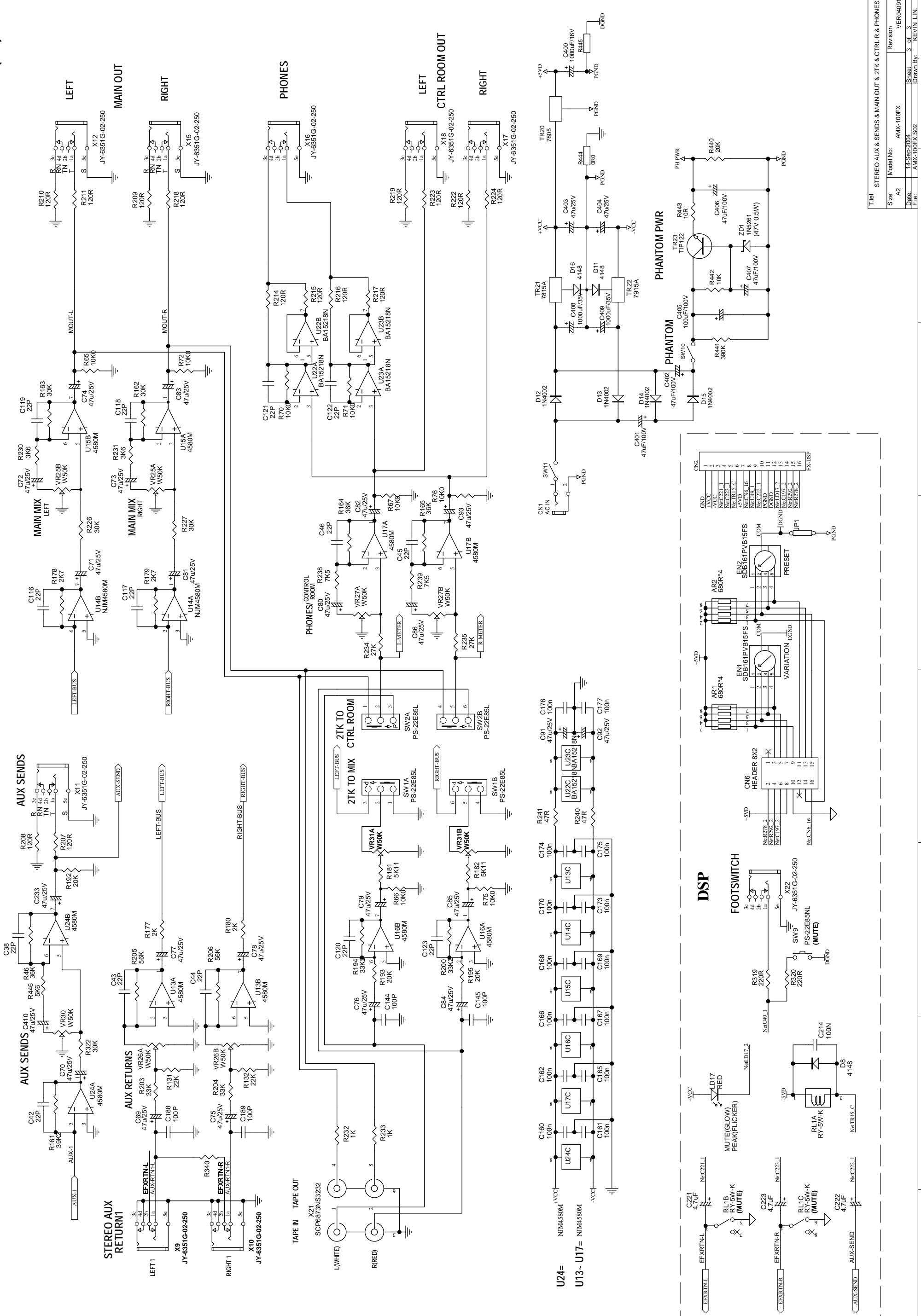
# AMX-100FX (2/3)



U18 ~ U21 = NIM4580M

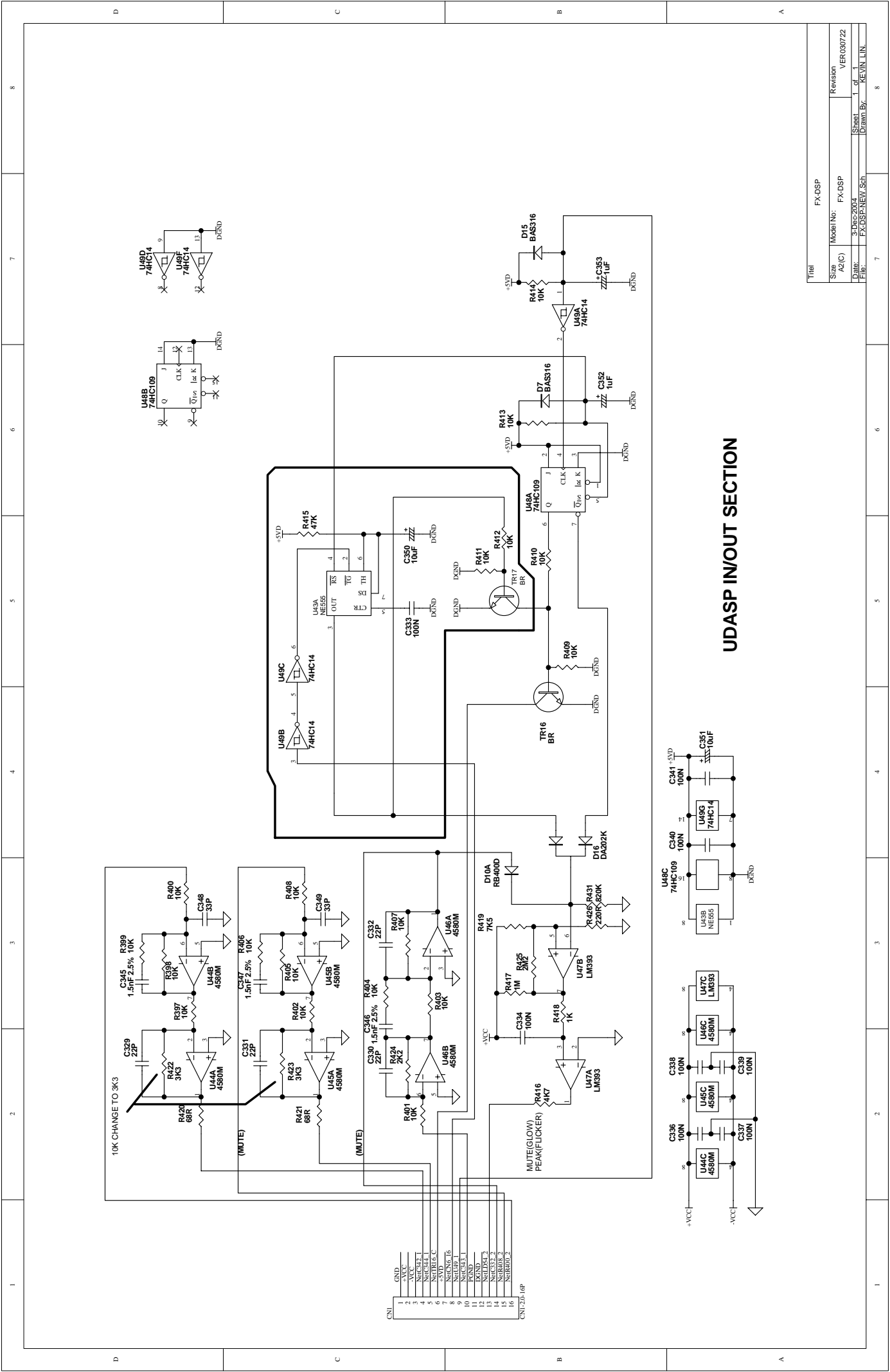
Title: INPUT STEREO (CH3/4-CH5/6)			
Size: A2	Model No: AMX-100FX	Revision: VER040914	
Date: 14-SEP-2004	Sheet: 2 of 3	Drawn By: KEVIN LIN	
File: AMX-100FX.S01			

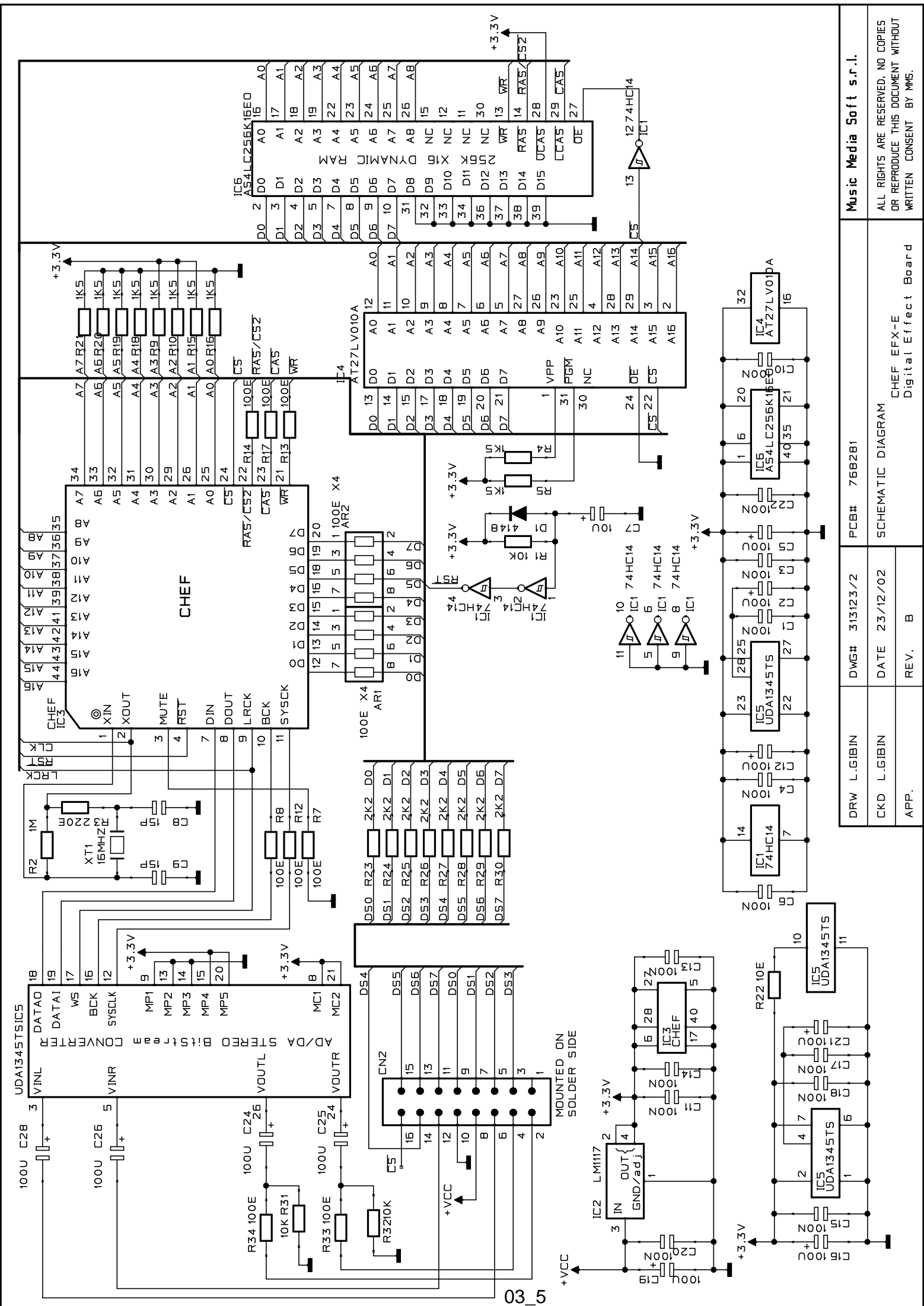
# AMX-100FX (3/3)



Model No.	AMX-100FX
Revision	VER040914
Date	14SEP2004
Sheet	3 of 3
Drawn By	KEVIN LIN



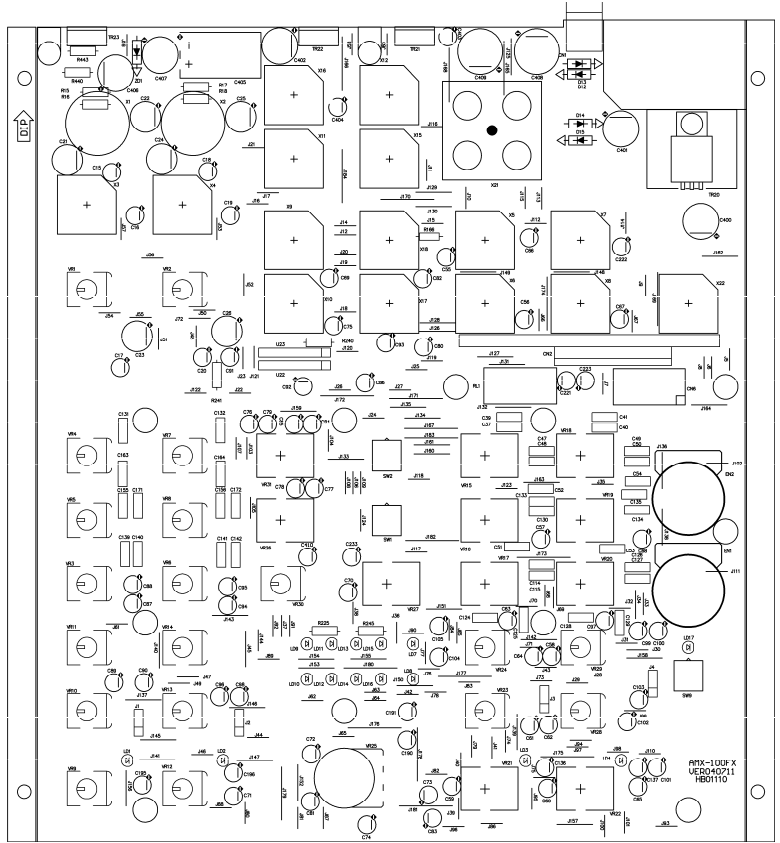




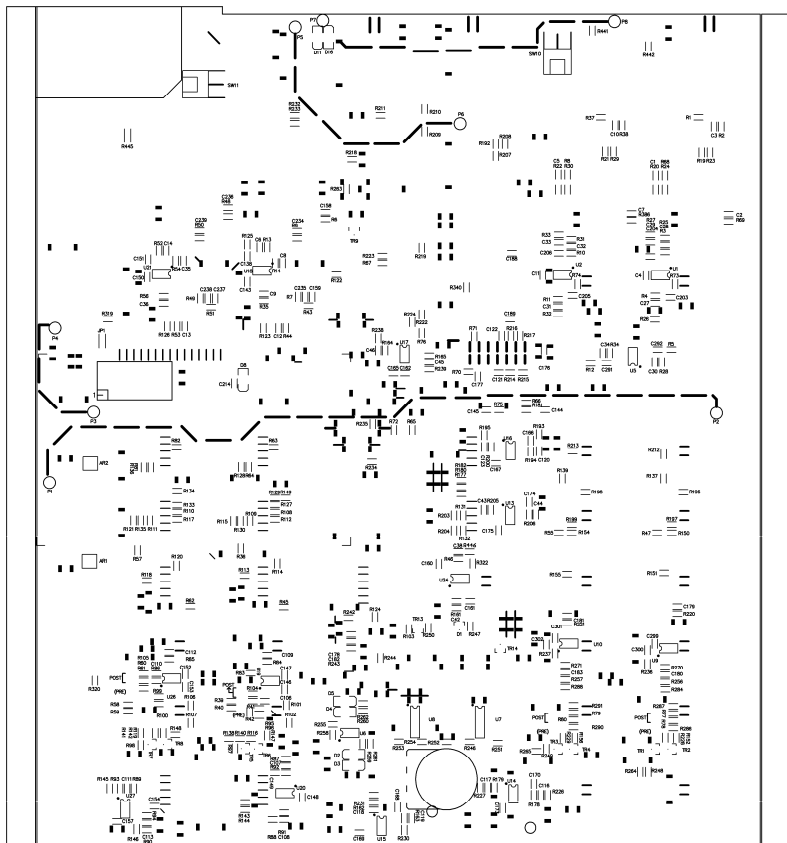
03\_5

DRW L.GIBIN	DWG# 313123/2	PCB# 768281	<b>Music Media Soft s.r.l.</b>
CKD L.GIBIN	DATE 23/12/02	REV. B	ALL RIGHTS ARE RESERVED, NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY MMS.
APP.			CHEF EF-E Digital Effect Board

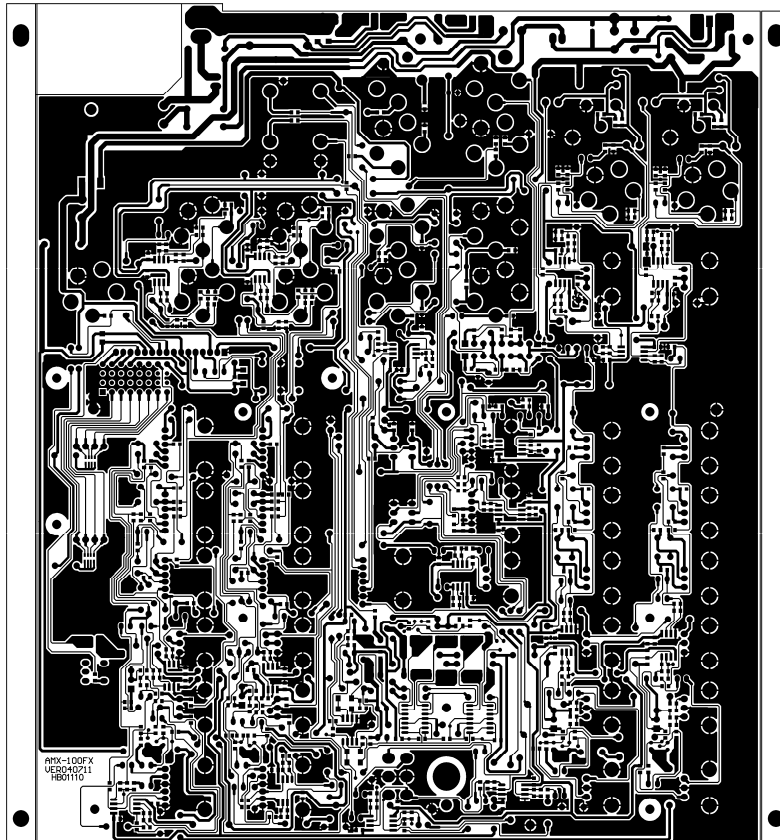
# 4. Printed Circuit Board



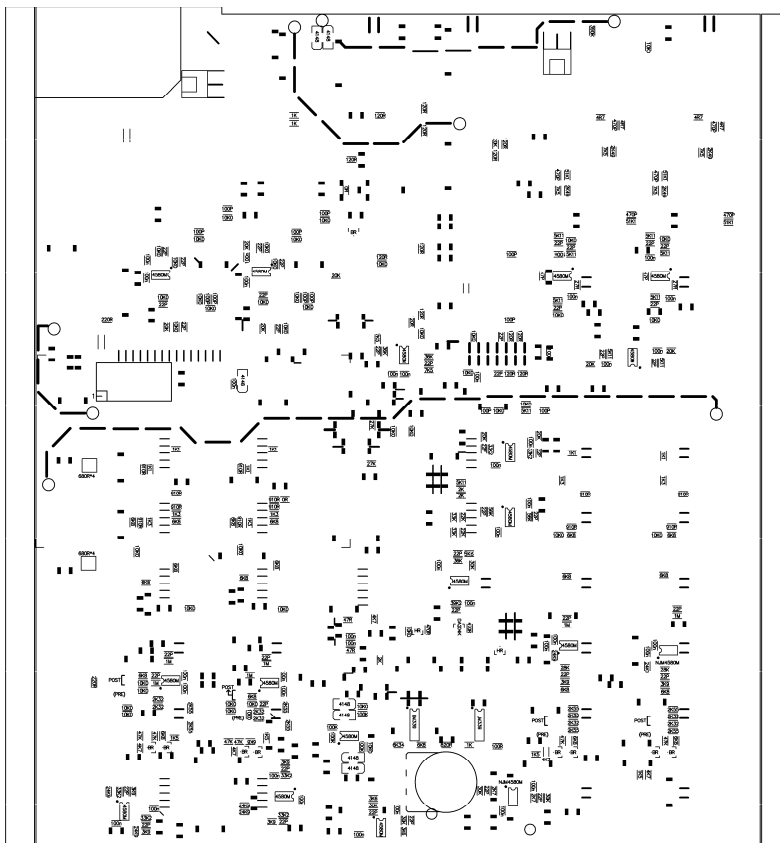
PCB : AMX-100FX Top Overlay



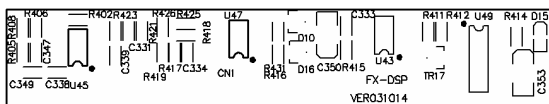
PCB : AMX-100FX Bottom Overlay



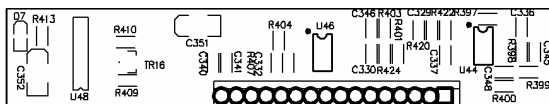
PCB : AMX-100FX Bottom Layer



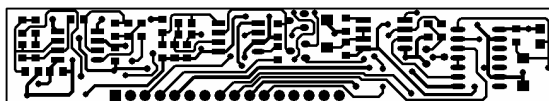
PCB : AMX-100FX Top Overlay



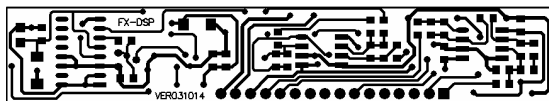
PCB : FX-DSP Top Overlay



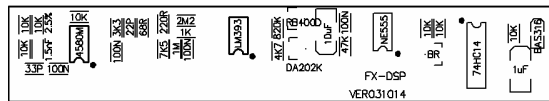
PCB : FX-DSP Bottom Overlay



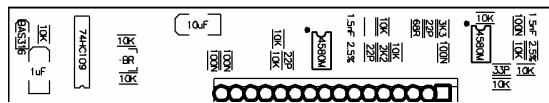
PCB : FX-DSP Top Layer



PCB : AMX-100FX Bottom Layer

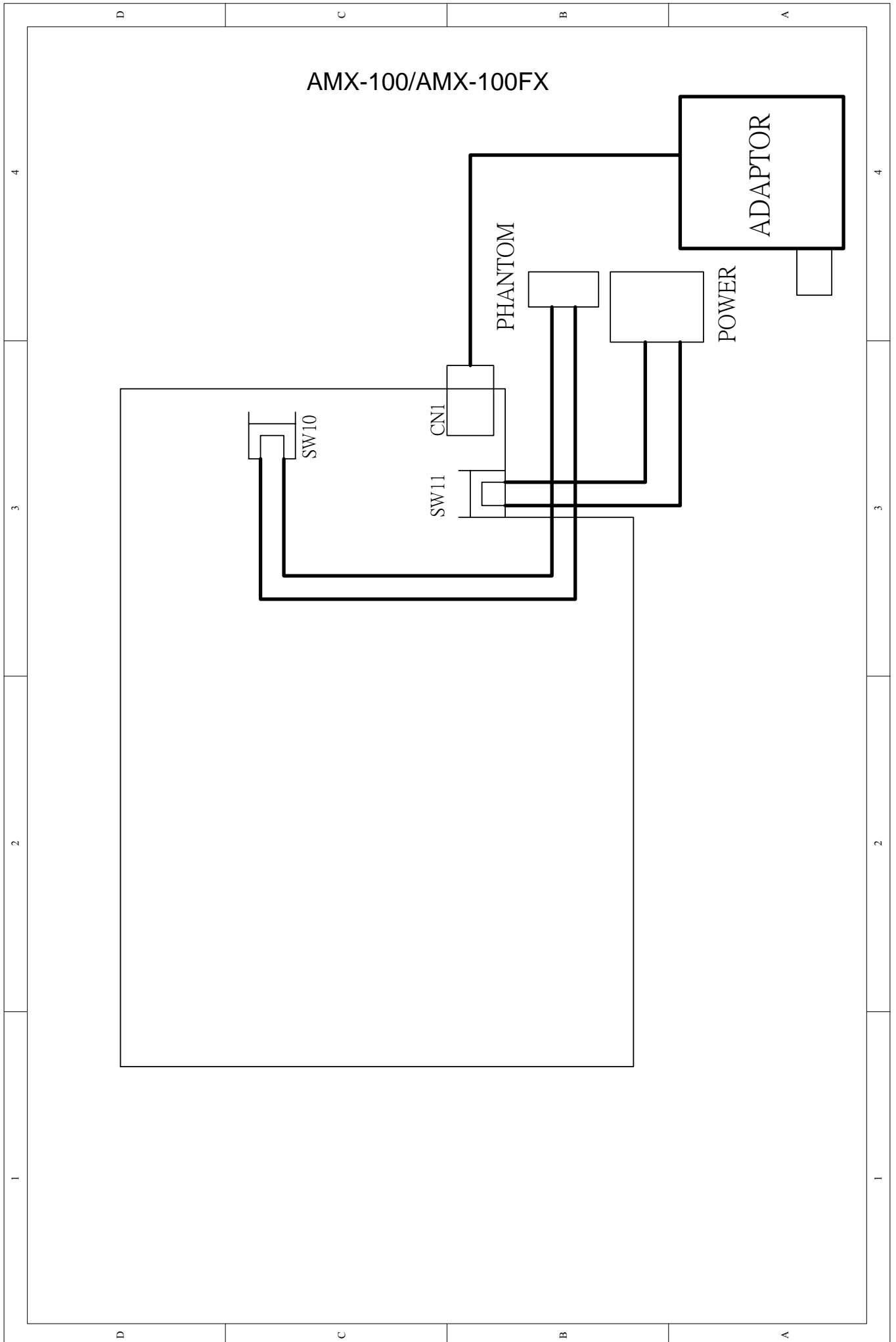


PCB : FX-DSP Top Overlay



PCB : FX-DSP Bottom Overlay

# 5. Wiring Diagram



# 7.Electrical Parts List

SEKAKU ELECTRON INDUSTRY (H.K.) CO.,LTD

Multi-Level BOM Structure Listing

Report No.: IEB0\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 1 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX UNIT: PCS  
 AMX-100FX\_ALTO\_230V Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate	@:Phantom Layer
					Attrition	Rate
0001-----	MA04527 panel			PCS	1.0000	2003/12/17
	AMX-100FX_ALTO				1	N
					0.00	%
0001-----	MA04528 panel			PCS	1.0000	2003/10/20
	AMX-100FX				1	N
					0.00	%
0001-----	MA04529 panel			PCS	1.0000	2003/10/20
	AMX-100FX_V1.9				1	N
					0.00	%
0001-----	MJ00061 Zn-plated board			PCS	1.0000	2003/10/20
	1*2135*1220 20.45kg			KG	30	N
					0.00	%
0002-----	ME00113 iron pillar			PCS	8.0000	2004/05/31
	M3*13.8*0.5PH_V1.1				1	N
					0.00	%
0002-----	MB03080 rear board			PCS	1.0000	2003/12/17
	AMX-120				1	N
					0.00	%
0001-----	MB03081 bottom board			PCS	1.0000	2003/10/20
	AMX-120 1.0t*208*245.5*43				1	N
					0.00	%
0001-----	MJ00058 iron board			PCS	1.0000	2003/10/20
	1*2135*1220 20.45kg			KG	35	N
					0.00	%
0003-----	HI00026 power switch			PCS	1.0000	2003/12/17
	RA12KKAT0F 2P				1	N
					0.00	%
0004-----	HI00171 power switch			PCS	1.0000	2003/12/17
	R612KKAT0F1				1	N
					0.00	%
0005-----	MG00261 copper pillar			PCS	3.0000	2004/01/10
	M3*8.5*0.5PH				1	N
					0.00	%
0006-----	NI01863 key			PCS	3.0000	2003/12/17
	5.5*W10*7.5				1	N
					0.00	%
0007-----	NI02083 knob			PCS	12.0000	2003/12/17
	10.5*18mm				1	N
					0.00	%
0008-----	NI02633 knob			PCS	6.0000	2003/12/17
	10.5*18				1	N
					0.00	%
0009-----	NI02714 knob			PCS	2.0000	2003/12/17
	10*13.5mm				1	N
					0.00	%
0010-----	NI02817 knob			PCS	2.0000	2003/12/17
	10.5*18mm				1	N
					0.00	%
0011-----	NI00826 knob			PCS	4.0000	2003/12/17
	12*18mm double color				1	N
					0.00	%
0012-----	NI02837 knob			PCS	1.0000	2003/12/17
	35*11mm 534C				1	N
					0.00	%
0013-----	NI02386 konb			PCS	2.0000	2003/12/17
	14*13mm				1	N
					0.00	%
0014-----	MG00041 screw			PCS	20.0000	2004/01/10
	M3*6				1	N
					0.00	%
0015-----	MG00061 screw			PCS	5.0000	2003/12/17
	M3*10				1	N
					0.00	%
0016-----	ME00060 nut			PCS	15.0000	2003/12/17
	JY-6351G-02-250				1	N
					0.00	%

Multi-Level BOM Structure Listing

Report No.: IEB0\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 2 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX UNIT: PCS  
 AMX-100FX\_ALTO\_230V Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate	@:Phantom Layer Attrition Rate
0017-----	MF00061 washer			PCS	15.0000 1	2003/12/17 N
0018-----	JY-6351G-02-250 TG00040 adaptor			PCS	0.00 1	% 2003/12/17 N
0019-----	230V/50Hz_AC18V/1000mA_EI-48 @NI00252 sleeve			PCS	0.00 4.0000	% 2003/12/17 N
0001-----	4*20mm NI00248 sleeve			M	0.00 20.0000	% 2002/06/04 N
0020-----	4*1000mm NI00498 foot cushion			PCS	0.00 4.0000	% 2003/12/17 N
0021-----	12.7*7*6mm(SF-005) NA00122 PE bag			PCS KG	2.0000 1	2004/10/21 N
0022-----	0.04t*350*230mm HJ00006 desiccant			PCS	0.00 1.0000	% 2003/12/17 N
0023-----	30g MG00166 screw			PCS	0.00 1.0000	% 2003/12/24 N
0024-----	M3*10 NF00061 assurance card			PCS	0.00 1.0000	% 2003/12/24 N
0025-----	ALTO NE05004 label			PCS	0.00 4.0000	% 2003/12/24 N
0001-----	ALTO NH00334 cone paper			M	0.00 1.0000	% 2004/11/29 N
0026-----	0.040*1m HA01388 row-wire connector wiring			PCS	0.00 1.0000	% 2003/12/24 N
0027-----	2P 100 HA01442 row-wire connector wiring			PCS	0.00 1.0000	% 2003/12/24 N
0028-----	2P 200 NF01655 instruction			PCS	0.00 1.0000	% 2003/12/24 N
0001-----	AMX-100/100FX_ALTO_V1.1 NH00149 paper			張 令	0.00 2.0000	% 2003/12/25 Y
0029-----	889*640mm NB02749 colour box			PCS	0.00 1.0000	% 2003/12/24 N
0030-----	AMX-100FX_ALTO NE12190 label			PCS	0.00 4.0000	% 2003/12/24 N
0001-----	AMX-100FX NH00012 bond paper			M	0.00 1.0000	% 2003/12/09 N
0002-----	0.04*1M NI00014 membrane			M	0.00 1.0000	% 2003/12/09 N
0031-----	0.035*1M NI03063 handle			PCS	0.00 1.0000	% 2004/02/16 N
0001-----	AMX-100;100FX;120_V1.0 NI02834 handle			PCS	0.00 1.0000	% 2004/02/14 N
0032-----	208*33*26mm AMX-120 black NB02887 barrier			PCS	0.00 1.0000	% 2004/03/25 N
	AMX-100;120_V1.0				0.00	%



Multi-Level BOM Structure Listing

Report No.: IEBO\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 3 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate @:Phantom Layer	Attrition Rate
0033-----	NB02888 barrier AMX-100;120_V1.0			PCS	1.0000 1	2004/03/25 N
0034-----	NB02748 box AMX-100;100FX;120			PCS	0.00 8	% N
0035-----	HK00838 PC board P-AMX-100FX-DIP			PCS	1.0000 1	2003/12/24 N
0001-----	HA00013 wire 200mm black L3R3			PCS	0.00 1	% N
0002-----	HA00050 wire 65mm black L5R5			PCS	1.0000 1	2004/01/10 N
0003-----	CB00042 electrolytic capacitor 47uF/63V 105 LZ 8*11mm C21,C22,C24,C25			PCS	4.0000 1	2003/12/24 N
0004-----	CB00052 electrolytic capacitor 100uF/100V 13*21mm C405			PCS	1.0000 1	2003/12/24 N
0005-----	CB00074 electrolytic capacitor 1000uF/10V 8*11mm C23,C26			PCS	2.0000 1	2003/12/24 N
0006-----	CB00070 electrolytic capacitor 1000uF/16V 10*16mm C400			PCS	1.0000 1	2003/12/24 N
0007-----	CB00073 electrolytic capacitor 1000uF/35V 13*20mm C408,C409			PCS	2.0000 1	2003/12/24 N
0008-----	HC00183 DC power jack KJ-36-S 3.5 CN1			PCS	1.0000 1	2003/12/24 N
0009-----	HC00473 row pin header(double) 2.45mm 180° 2*8P B25-2*8BG1(B)H=5mm CN6			PCS	1.0000 1	2003/12/24 N
0010-----	HI00195 rotary encode SDB161PVB15.5F-1-4-16-16PC EN1,EN2			PCS	2.0000 1	2003/12/24 N
0011-----	SA00052 L.E.D high intensity 3m/m round(green)long foot 26 LD8,LD9,LD10,LD11,LD12			PCS	5.0000 1	2003/12/24 N
0012-----	SA00053 L.E.D high intensity 3m/m round(red)long foot 26mm LD1,LD2,LD3,LD4,LD7,LD15,LD16,LD17			PCS	8.0000 1	2003/12/24 N

Multi-Level BOM Structure Listing

Report No.: IEBO\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 4 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate	@:Phantom Layer Attrition Rate
0013-----	SA00054 L.E.D high intensity 3m/m round(yellow)long foot 26 LD13,LD14			PCS	2.0000 1 0.00 %	2003/12/24 N
0014-----	NI01782 LED spacer support LEDS-11 11mm LD1,LD2,LD3,LD4,LD7,LD8,LD9,LD10,LD11,LD12,LD13,LD14, LD15,LD16,LD17			PCS	15.0000 1 0.00 %	2003/12/24 N
0015-----	HI00161 relay RY-5W-K,5V RL1			PCS	1.0000 1 0.00 %	2003/12/24 N
0016-----	HC00065 row-wire header(male) 2P 2.5mm 90° SW10,SW11			PCS	2.0000 1 0.00 %	2003/12/24 N
0017-----	HI00238 push-button switch 2 stage 6P PS-9226A(NON-LOCK) SW9			PCS	1.0000 1 0.00 %	2003/12/24 N
0018-----	HI00236 push-button switch 2-stage 6P PS-9226A(SELF-LOCK) SW1,SW2			PCS	2.0000 1 0.00 %	2003/12/24 N
0019-----	SD00074 integrated circuit L7805CV(TO-220)(ST) TR20			PCS	1.0000 1 0.00 %	2003/12/24 N
0020-----	SD00077 integrated circuit L7815CV(TO-220)(ST) TR21			PCS	1.0000 1 0.00 %	2003/12/24 N
0021-----	SD00079 integrated circuit L7915CV(TO-220)(ST) TR22			PCS	1.0000 1 0.00 %	2003/12/24 N
0022-----	SB00043 transistor TIP122(ST) TR23			PCS	1.0000 1 0.00 %	2003/12/24 N
0023-----	SD00007 integrated circuit BA15218N (M5218L substitute) U22,U23			PCS	2.0000 1 0.00 %	2003/12/24 N
0024-----	RC00356 potentiometer Z10K RD09F1130042-10KZ(SAS1);30F VR1,VR2			PCS	2.0000 1 0.00 %	2004/06/12 N

Multi-Level BOM Structure Listing

Report No.: IEB0\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 5 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate	@:Phantom Layer Attrition Rate
0025-----	RC00358 potentiometer B50K -RD09F113A223-50K2BT(SAS1);30F-C VR3,VR4,VR5,VR6,VR7,VR8,VR23,VR28			PCS	8.0000 1 0.00 %	2004/06/12 N
0026-----	RC00360 potentiometer B50K RD12L12CA23A-50K3BT*2(SAS1);30F-C VR15,VR16,VR17,VR18,VR19,VR20			PCS	6.0000 1 0.00 %	2004/06/12 N
0027-----	RC00359 potentiometer W50K RD09F113A224-50K4BT(SAS1);30F-C VR9,VR10,VR11,VR12,VR13,VR14,VR24,VR29,VR30			PCS	9.0000 1 0.00 %	2004/06/12 N
0028-----	RC00361 potentiometer W50K RD12L12CA60B-50K4BT*2(SAS1);30F-C VR21,VR22,VR26,VR27,VR31			PCS	5.0000 1 0.00 %	2004/06/12 N
0029-----	RC00369 potentiometer(A10K-41 stage) W50K RV16A01-30-25F-W50K-3F97 VR25			PCS	1.0000 1 0.00 %	2003/12/24 N
0030-----	HC00125 MIC jack JY-6351G-02-250 X3,X4,X5,X6,X7,X8,X9,X10,X11,X12,X15,X16,X17,X18,X22			PCS	15.0000 1 0.00 %	2003/12/24 N
0031-----	HC00126 XLR MIC jack JY-5042-030G female plug 180° X1,X2			PCS	2.0000 1 0.00 %	2003/12/24 N
0032-----	HC00403 RCA jack SCP6873NS3232T2 4P X21			PCS	1.0000 1 0.00 %	2003/12/24 N
0033-----	HK00842 PC board P-AMX-100FX-AI			PCS	1.0000 1 0.00 %	2003/12/24 N
0001-----	HA01920 jumper wire 6mm J5,J6,J7,J8,J9,J10,J11,J12,J14,J15,J16,J17,J18,J19, J20,J21,J22,J23,J24,J25,J26,J27,J28,J29,J30,J31,J32, J33,J35,J36,J37,J38,J39,J40,J41,J42,J43,J44,J45,J46, J47,J48,J49,J50,J51,J52,J53,J54,J55,J56,J57,J58,J59, J60,J61,J62,J63,J64,J65,J66,J67,J68,J69,J70,J71,J72, J73,J74,J75,J76,J77,J78,J79,J80,J81,J82,J83,J84,J85, J86,J87,J88,J89,J90,J91,J92,J93,J94,J95,J96,J97,J98, J99,J100,J101,J102,J103,J104,J105,J106,J107,J108,J109, J110,J111,J112,J113,J114,J115,J116,J117,J118,J119, J120,J121,J122,J123,J124			PCS	118.0000 1 0.00 %	2004/05/07 N
0001-----	HA02249 wire 0.6			M	0.0160 430	2002/09/19 N
0002-----	HA01925 jumper wire 10mm J125,J126,J127,J128,J129,J130,J131,J132,J133,J134,			PCS	40.0000 1 0.00 %	2003/12/17 N

Multi-Level BOM Structure Listing

Report No.: IEBO\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 6 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate @:Phantom Layer	Attrition Rate
	J135, J136, J137, J138, J139, J140, J141, J142, J143, J144, J145, J146, J147, J148, J149, J150, J151, J152, J153, J154, J155, J156, J157, J158, J159, J160, J161, J162, J163, J164					
0001-----	HA02249 wire 0.6			M KG	0.0200 1 0.00 %	2004/08/05 N
0003-----	HA01930 jumper wire 15mm			PCS	19.0000 1 0.00 %	2003/12/17 N
	J166, J167, J168, J169, J170, J171, J172, J173, J174, J175, J176, J177, J178, J179, J180, J181, J182, J183, J184					
0001-----	HA02249 wire 0.6			M KG	0.0250 1 0.00 %	2004/08/05 N
0004-----	HK00840 PC board P-AMX-100FX-SMD			PCS	1.0000 1 0.00 %	2003/12/17 N
0001-----	HB01110 PCB AMX-100FX_VER040711			PCS	1.0000 1 0.00 %	2003/12/17 N
0002-----	RE00011 resistor 680 *4 ±5% 8P 0603 AR1, AR2			PCS	2.0000 1 0.00 %	2003/12/17 N
0003-----	CI00051 SMD ceramic capacitor 0603 22PF/50V NPO ±5%			PCS	42.0000 1 0.00 %	2003/12/17 N
	C6, C8, C9, C12, C13, C14, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C38, C42, C43, C44, C45, C46, C106, C107, C108, C109, C110, C111, C112, C113, C116, C117, C118, C119, C120, C121, C122, C123, C179, C180, C181, C183					
0004-----	CI00055 SMD ceramic capacitor 0603 47PF/50V NPO ±5% C4, C11			PCS	2.0000 1 0.00 %	2003/12/17 N
0005-----	CI00059 SMD ceramic capacitor 0603 100PF/50V NPO ±5% C144, C145, C158, C159, C188, C189, C234, C235, C236, C237, C238, C239			PCS	12.0000 1 0.00 %	2003/12/17 N
0006-----	CI00063 SMD ceramic capacitor 0603 470PF/50V NPO ±5 % C1, C2, C3, C5, C7, C10			PCS	6.0000 1 0.00 %	2003/12/17 N
0007-----	CI00075 SMD ceramic capacitor 0603 0.1uF/50V Y5V +80, -20% C138, C143, C146, C147, C148, C149, C150, C151, C152, C153, C154, C157, C160, C161, C162, C165, C166, C167, C168, C169, C170, C173, C174, C175, C176, C177, C178, C182, C203, C204, C205, C206, C214, C291, C292, C299, C300, C301, C302			PCS	39.0000 1 0.00 %	2003/12/17 N
0008-----	SE00008 SMD rectifier diode DA204K/T-146 D1			PCS	1.0000 1 0.00 %	2003/12/17 N

Multi-Level BOM Structure Listing

Report No.: IEB0\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 7 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate	@:Phantom Layer Attrition Rate
0009-----	SE00011 SMD rectifier diode RLS4148 0.5A (LL-34) D2,D3,D4,D5,D8,D11,D16			PCS	7.0000 1 0.00 %	2003/12/17 N
0010-----	RD00059 SMD fixed resistor 1/10W 0.0 ±5% 0603 R149,R263			PCS	2.0000 1 0.00 %	2003/12/17 N
0011-----	RD00355 SMD fixed resistor 1/10W 4.7 ±5% 0603 R1,R2,R37,R38			PCS	4.0000 1 0.00 %	2003/12/17 N
0012-----	RD00265 SMD fixed resistor 1/10W 27 ±5% 0603 R73,R74			PCS	2.0000 1 0.00 %	2003/12/17 N
0013-----	RD00065 SMD fixed resistor 1/10W 47 ±5% 0603 R242,R243			PCS	2.0000 1 0.00 %	2003/12/17 N
0014-----	RD00068 SMD fixed resistor 1/10W 100 ±5% 0603 R251			PCS	1.0000 1 0.00 %	2003/12/17 N
0015-----	RD00069 SMD fixed resistor 1/10W 120 ±5% 0603 R207,R208,R209,R210,R211,R214,R215,R216,R217,R218, R219,R222,R223,R224			PCS	14.0000 1 0.00 %	2003/12/17 N
0016-----	RD00073 SMD fixed resistor 1/10W 220 ±5% 0603 R319,R320			PCS	2.0000 1 0.00 %	2003/12/17 N
0017-----	RD00078 SMD fixed resistor 1/10W 470 ±5% 0603 R247,R250			PCS	2.0000 1 0.00 %	2003/12/17 N
0018-----	RD00082 SMD fixed resistor 1/10W 820 ±5% 0603 R252			PCS	1.0000 1 0.00 %	2003/12/17 N
0019-----	RD00349 SMD fixed resistor 1/10W 910 ±5% 0603 R127,R128,R129,R130,R133,R134,R135,R136,R196,R197, R198,R199			PCS	12.0000 1 0.00 %	2003/12/17 N
0020-----	RD00083 SMD fixed resistor 1/10W 1.0K ±5% 0603 R232,R233,R246			PCS	3.0000 1 0.00 %	2003/12/17 N

Multi-Level BOM Structure Listing

Report No.: IEBO\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 8 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate	@:Phantom Layer
					Attrition Rate	Rate
0021-----	RD00350 SMD fixed resistor 1/10W 1.1K ±5% 0603 R63,R64,R81,R82,R212,R213			PCS	6.0000 1 0.00 %	2003/12/17 N
0022-----	RD00351 SMD fixed resistor 1/10W 1.3K ±5% 0603 R108,R109,R110,R111,R137,R139			PCS	6.0000 1 0.00 %	2003/12/17 N
0023-----	RD00085 SMD fixed resistor 1/10W 1.5K ±5% 0603 R147,R148,R264,R265			PCS	4.0000 1 0.00 %	2003/12/17 N
0024-----	RD00087 SMD fixed resistor 1/10W 2.0K ±5% 0603 R244,R177,R180			PCS	3.0000 1 0.00 %	2003/12/17 N
0025-----	RD00352 SMD fixed resistor 1/10W 3.6K ±5% 0603 R230,R231			PCS	2.0000 1 0.00 %	2003/12/17 N
0026-----	RD00092 SMD fixed resistor 1/10W 3.9K ±5% 0603 R87,R88,R89,R90,R256,R257			PCS	6.0000 1 0.00 %	2003/12/17 N
0027-----	RD00093 SMD fixed resistor 1/10W 4.7K ±5% 0603 R97,R98,R124,R248,R249			PCS	5.0000 1 0.00 %	2003/12/17 N
0028-----	RD00097 SMD fixed resistor 1/10W 6.8K ±5% 0603 R104,R105,R112,R113,R114,R115,R116,R117,R118,R119, R120,R121,R150,R151,R152,R154,R155,R156,R254,R284,R288			PCS	21.0000 1 0.00 %	2003/12/17 N
0029-----	RD00098 SMD fixed resistor 1/10W 7.5K ±5% 0603 R19,R20,R21,R22,R238,R239			PCS	6.0000 1 0.00 %	2003/12/17 N
0030-----	RD00108 SMD fixed resistor 1/10W 33K ±5% 0603 R203,R204			PCS	2.0000 1 0.00 %	2003/12/17 N
0031-----	RD00306 SMD fixed resistor 1/10W 20K ±5% 0603 R5,R12,R122,R123,R125,R126,R192,R193,R195			PCS	9.0000 1 0.00 %	2003/12/17 N
0032-----	RD00105 SMD fixed resistor 1/10W 22K ±5% 0603 R131,R132			PCS	2.0000 1 0.00 %	2004/04/30 N

Multi-Level BOM Structure Listing

Report No.: IEB0\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 9 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate	@:Phantom Layer Attrition Rate
0033-----	RD00106 SMD fixed resistor 1/10W 27K ±5% 0603 R234, R235			PCS	2.0000 1 0.00 %	2003/12/17 N
0034-----	RD00107 SMD fixed resistor 1/10W 30K ±5% 0603 R226, R227, R162, R163, R322			PCS	5.0000 1 0.00 %	2004/09/13 N
0035-----	RD00353 SMD fixed resistor 1/10W 36K ±5% 0603 R46, R164, R165			PCS	3.0000 1 0.00 %	2003/12/17 N
0036-----	RD00111 SMD fixed resistor 1/10W 47K ±5% 0603 R138, R140, R141, R142, R228, R229			PCS	6.0000 1 0.00 %	2003/12/17 N
0037-----	RD00112 SMD fixed resistor 1/10W 56K ±5% 0603 R205, R206			PCS	2.0000 1 0.00 %	2003/12/17 N
0038-----	RD00116 SMD fixed resistor 1/10W 100K ±5% 0603 R255, R258, R259, R260			PCS	4.0000 1 0.00 %	2003/12/17 N
0039-----	RD00345 SMD fixed resistor 1/10W 390K ±5% 0603 R441			PCS	1.0000 1 0.00 %	2003/12/17 N
0040-----	RD00125 SMD fixed resistor 1/10W 1.0M ±5% 0603 R83, R84, R85, R86, R220, R221			PCS	6.0000 1 0.00 %	2003/12/17 N
0041-----	RD00210 SMD precise resistor 1/10W 5.11K ±1% 0603 R3, R4, R10, R11, R27, R28, R33, R34, R181, R182			PCS	10.0000 1 0.00 %	2003/12/17 N
0042-----	RD00089 SMD fixed resistor 1/10W 2.7K ±5% 0603 R178, R179			PCS	2.0000 1 0.00 %	2003/12/24 N
0043-----	RD00287 SMD precise resistor 1/10W 6.34K ±1% 0603 R253			PCS	1.0000 1 0.00 %	2003/12/24 N
0044-----	RD00214 SMD precise resistor 1/10W 10.0K ±1% 0603 R6, R7, R9, R13, R14, R25, R26, R31, R32, R35, R36, R39, R40, R41, R42, R43, R44, R45, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R65, R66, R67, R70, R71, R72, R75, R76, R103, R261, R262, R442			PCS	46.0000 1 0.00 %	2003/12/24 N

Multi-Level BOM Structure Listing

Report No.: IEB0\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 10 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate	@:Phantom Layer Attrition Rate
0045-----	RD00469 SMD precise resistor 1/10W 2.32K ±1% 0603 R77, R78, R79, R80, R95, R96, R99, R100			PCS	8.0000 1 0.00 %	2003/12/24 N
0046-----	RD00204 SMD precise resistor 1/10W 2.49K ±1% 0603 R23, R24, R29, R30			PCS	4.0000 1 0.00 %	2003/12/24 N
0047-----	RD00470 SMD precise resistor 1/10W 2.55K ±1% 0603 R101, R102, R106, R107, R286, R287, R290, R291			PCS	8.0000 1 0.00 %	2003/12/24 N
0048-----	RD00294 SMD precise resistor 1/10W 24.9K ±1% 0603 R143, R144, R145, R146, R236, R237			PCS	6.0000 1 0.00 %	2003/12/24 N
0049-----	RD00370 SMD precise resistor 1/10W 33.2K ±1% 0603 R91, R92, R93, R94, R194, R200			PCS	6.0000 1 0.00 %	2003/12/24 N
0050-----	RD00317 SMD precise resistor 1/10W 39.2K ±1% 0603 R161			PCS	1.0000 1 0.00 %	2003/12/24 N
0051-----	RD00371 SMD precise resistor 1/10W 51.1K ±1% 0603 R8, R68, R69, R386			PCS	4.0000 1 0.00 %	2003/12/24 N
0052-----	SF00010 SMD transistor 2SC2412K(SOT-23)/(R) TR1, TR2, TR3, TR4, TR5, TR6, TR7, TR8, TR9			PCS	9.0000 1 0.00 %	2004/04/21 N
0053-----	SF00004 SMD transistor 2SA1036K(SOT-23)/(R) TR13, TR14			PCS	2.0000 1 0.00 %	2003/12/24 N
0054-----	SG00032 SMD integrated circuit LM339DR/(TI) U7, U8			PCS	2.0000 1 0.00 %	2003/12/24 N
0055-----	SG00122 SMD integrated circuit NJM4580M-TE3 U1, U2, U5, U6, U9, U10, U13, U14, U15, U16, U17, U18, U19, U20, U21, U24, U26, U27			PCS	18.0000 1 0.00 %	2003/12/24 N
0056-----	RD00302 SMD precise resistor 1/10W 28.0K ±1% 0603 R270, R271			PCS	2.0000 1 0.00 %	2003/12/24 N



Multi-Level BOM Structure Listing

Report No.: IEBO\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 11 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate	@:Phantom Layer
					Attrition	Rate
0057-----	RD00095 SMD fixed resistor 1/10W 5.6K ±5% 0603 R446			PCS	1.0000 1 0.00 %	2004/09/14
0005-----	HA01922 jumper wire 8mm J34			PCS	1.0000 1 0.00 %	2004/05/07
0001-----	HA02249 wire 0.6			M KG	0.0180 1 0.00 %	2004/08/05 N
0006-----	CB00239 electrolytic capacitor 2.2uF/50V 5*11mm C136,C137,C195,C196			PCS	4.0000 1 0.00 %	2004/08/30
0007-----	CB00240 electrolytic capacitor 4.7uF/100V 5*11mm C221,C222,C223			PCS	3.0000 1 0.00 %	2004/08/30
0008-----	CB00242 electrolytic capacitor 22uF/35V 5*11mm C15,C16,C18,C19			PCS	4.0000 1 0.00 %	2004/08/30
0009-----	CB00194 electrolytic capacitor 47uF/25V 5*11mm C17,C20,C55,C56,C57,C58,C59,C60,C61,C62,C63,C64,C65, C66,C67,C68,C69,C70,C71,C72,C73,C74,C75,C76,C77,C78, C79,C80,C81,C82,C83,C84,C85,C86,C87,C88,C89,C90,C91, C92,C93,C94,C95,C96,C97,C98,C99,C100,C101,C102,C103, C104,C105,C190,C191,C233,C403,C404,C410			PCS	59.0000 1 0.00 %	2004/09/13
0010-----	CB00254 electrolytic capacitor 47uF/100V 10*12mm 5mm C401,C402,C406,C407			PCS	4.0000 1 0.00 %	2004/08/30
0011-----	CF00138 metal-film capacitor MSC 0.012uF/63V ±5% CASE01 C51,C52,C53,C54,C130,C133,C134,C135,C155,C156,C171, C172			PCS	12.0000 1 0.00 %	2004/08/30
0012-----	CF00136 metal-film capacitor MSC 0.018uF/63V 5% CASE01 C37,C39,C40,C41,C47,C48,C49,C50,C131,C132,C163,C164			PCS	12.0000 1 0.00 %	2004/08/30
0013-----	CF00137 metal-film capacitor MSC 0.033uF/63V 5% CASE01 C114,C115,C124,C125,C126,C127,C128,C129,C139,C140, C141,C142			PCS	12.0000 1 0.00 %	2004/08/30
0014-----	SA00094 rectifier diode 1N4002/100V D12,D13,D14,D15			PCS	4.0000 1 0.00 %	2004/08/30

Multi-Level BOM Structure Listing

Report No.: IEBO\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 12 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate	@:Phantom Layer Attrition Rate
0015-----	RA01258 fixed resistor 1/4W 10 R443			PCS	1.0000 1 0.00 %	2004/08/30
0016-----	RA01260 fixed resistor 1/4W 120 R225,R245			PCS	2.0000 1 0.00 %	2004/08/30
0017-----	RA01115 fixed resistor 1/4W 20K R440			PCS	1.0000 1 0.00 %	2004/08/30
0018-----	RA01259 fixed resistor 1/4W 47 R240,R241			PCS	2.0000 1 0.00 %	2004/08/30
0019-----	RA01262 precise resistor 1/4W 6.81K R15,R16,R17,R18			PCS	4.0000 1 0.00 %	2004/08/30
0020-----	SA00127 zener diode 1/2W 47V 1N5261 ZD1			PCS	1.0000 1 0.00 %	2004/08/30
0021-----	RA01081 fixed resistor 1/4W 22K R166			PCS	1.0000 1 0.00 %	2004/08/30
0034-----	MI01953 heat sink AMX-100FX 1.5t*24*21*20.5mm			PCS	1.0000 1 0.00 %	2004/01/31
0001-----	MJ00092 AL board 1.5*2000*1000 8.16kg			PCS KG	1.0000 1410 0.00 %	2003/12/17 N
0035-----	MI01906 heat sink AMX-120_V1.2			PCS	1.0000 1 0.00 %	2004/01/31
0001-----	MJ00055 AL board 2*2000*1000 10.88kg			PCS KG	1.0000 546 0.00 %	2003/10/20 N
0036-----	NI02249 insulate bean TW-1 (TO-220)			PCS	4.0000 1 0.00 %	2004/04/30
0037-----	NC00005 silicone insulator TO-220 square type			PCS	1.0000 1 0.00 %	2004/01/31
0038-----	ME00015 nut 3m/m			PCS	4.0000 1 0.00 %	2004/04/30
0039-----	MF00037 washer 3* 5*1t			PCS	4.0000 1 0.00 %	2004/04/30
0040-----	ME00052 nut 7			PCS	1.0000 1 0.00 %	2004/01/31

Multi-Level BOM Structure Listing

Report No.: IEBO\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 13 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate	@:Phantom Layer Attrition Rate
0041-----	MF00060 washer 7* 12*0.5t			PCS	1.0000 1 0.00 %	2004/01/31
0042-----	HA00373 wire 90mm black L5R5			PCS	1.0000 1 0.00 %	2004/03/16
0043-----	MG00166 screw M3*10			PCS	4.0000 1 0.00 %	2004/08/26
0044-----	HA02201 wire 35mm 黑 L5R12 P3-P4			PCS	1.0000 1 0.00 %	2004/09/16
0036-----	HK00832 PC board P-FX-DSP-DIP			PCS	1.0000 1 0.00 %	2003/12/24 N
0001-----	HC00697 row pin (single)#5100 2.0 90° 16P(gold-pated)2.5/9.5mm 2mm CN1			PCS	1.0000 1 0.00 %	2004/10/14 N
0002-----	HK00833 PC board P-FX-DSP-SMD			PCS	1.0000 1 0.00 %	2003/12/16 N
0001-----	HB01109 PCB FX-DSP(1*10)_VER031014			PCS	1.0000 1 0.00 %	2003/12/16 N
0002-----	CI00051 SMD ceramic capacitor 0603 22PF/50V NPO ±5% C329,C330,C331,C332			PCS	4.0000 1 0.00 %	2003/12/16 N
0003-----	CI00053 SMD ceramic capacitor 0603 33PF/50V NPO ±5% C348,C349			PCS	2.0000 1 0.00 %	2003/12/16 N
0004-----	CI00129 SMD ceramic capacitor 0603 0.0015uF/-50V X7R ±10% C345,C346,C347			PCS	3.0000 1 0.00 %	2003/12/16 N
0005-----	CI00075 SMD ceramic capacitor 0603 0.1uF/50V Y5V +80,-20% C333,C334,C336,C337,C338,C339,C340,C341			PCS	8.0000 1 0.00 %	2003/12/16 N
0006-----	CL00002 SMD tantalum capacitor 1.0uF/16V case A C352,C353			PCS	2.0000 1 0.00 %	2003/12/16 N
0007-----	CL00006 SMD tantalum capacitor 10uF/16V case B2 C350,C351			PCS	2.0000 1 0.00 %	2003/12/16 N
0008-----	RD00068 SMD fixed resistor 1/10W 100 ±5% 0603 R420,R421			PCS	2.0000 1 0.00 %	2003/12/16 N

Multi-Level BOM Structure Listing

Report No.: IEBO\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 14 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal Usage Rate	Effective Date @:Phantom Layer Attrition Rate
0009-----	RD00073 SMD fixed resistor 1/10W 220 ±5% 0603 R426			PCS	1.0000 1 0.00 %	2003/12/16 N
0010-----	RD00083 SMD fixed resistor 1/10W 1.0K ±5% 0603 R418			PCS	1.0000 1 0.00 %	2003/12/16 N
0011-----	RD00088 SMD fixed resistor 1/10W 2.2K ±5% 0603 R424			PCS	1.0000 1 0.00 %	2003/12/16 N
0012-----	RD00091 SMD fixed resistor 1/10W 3.3K ±5% 0603 R422,R423			PCS	2.0000 1 0.00 %	2003/12/16 N
0013-----	RD00093 SMD fixed resistor 1/10W 4.7K ±5% 0603 R416			PCS	1.0000 1 0.00 %	2003/12/16 N
0014-----	RD00098 SMD fixed resistor 1/10W 7.5K ±5% 0603 R419			PCS	1.0000 1 0.00 %	2003/12/16 N
0015-----	RD00101 SMD fixed resistor 1/10W 10K ±5% 0603 R397, R398, R399, R400, R401, R402, R403, R404, R405, R406, R407, R408, R409, R410, R411, R412, R413, R414			PCS	18.0000 1 0.00 %	2003/12/16 N
0016-----	RD00111 SMD fixed resistor 1/10W 47K ±5% 0603 R415			PCS	1.0000 1 0.00 %	2003/12/16 N
0017-----	RD00124 SMD fixed resistor 1/10W 820K ±5% 0603 R431			PCS	1.0000 1 0.00 %	2003/12/16 N
0018-----	RD00125 SMD fixed resistor 1/10W 1.0M ±5% 0603 R417			PCS	1.0000 1 0.00 %	2003/12/16 N
0019-----	RD00126 SMD fixed resistor 1/10W 2.2M ±5% 0603 R425			PCS	1.0000 1 0.00 %	2003/12/16 N
0020-----	SG00122 SMD integrated circuit NJM4580M-TE3 U44,U45,U46			PCS	3.0000 1 0.00 %	2003/12/16 N

Multi-Level BOM Structure Listing

Report No.: IEBO\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 15 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate	@:Phantom Layer
					Attrition	Rate
0021-----	SG00094 SMD integrated circuit NE555DT/(ST) U43			PCS	1.0000 1 0.00 %	2003/12/16 N
0022-----	SG00005 SMD integrated circuit BA10393F7(FOHM) U47			PCS	1.0000 1 0.00 %	2003/12/16 N
0023-----	SG00068 SMD integrated circuit 74HC14DT U49			PCS	1.0000 1 0.00 %	2003/12/16 N
0024-----	SG00164 SMD integrated circuit 74HC109D U48			PCS	1.0000 1 0.00 %	2003/12/16 N
0025-----	SE00028 diode BAS316,115 D7,D15			PCS	2.0000 1 0.00 %	2003/12/16 N
0026-----	SE00009 SMD rectifier diode DAN202K/T-146 D16			PCS	1.0000 1 0.00 %	2003/12/16 N
0027-----	SE00007 SMD rectifier diode RB400D(D3A) D10			PCS	1.0000 1 0.00 %	2003/12/16 N
0028-----	SF00010 SMD transistor 2SC2412K(SOT-23)/(R) TR16,TR17			PCS	2.0000 1 0.00 %	2003/12/16 N
0037-----	HK01409 PC board P-313123-DIP(AMX-140FX)			PCS	1.0000 1 0.00 %	2003/12/24 N
0001-----	SC00004 quartz crystalloid 16.00MHZ LP-3.5S(HC-49US) XT1			PCS	1.0000 1 0.00 %	2003/12/16 N
0002-----	HC00484 row pin (single)#2200 2.54 180° 2*8P 13.5/19mm CN2			PCS	1.0000 1 0.00 %	2003/12/16 N
0003-----	SG00193 SMD integrated circuit AT27LV010A-90JC/L-8 IC4			PCS	1.0000 1 0.00 %	2003/12/16 N
0001-----	SG00139 SMD integrated circuit AT27LV010A-90JC			PCS	1.0000 1 0.00 %	2003/05/30 N

Multi-Level BOM Structure Listing

Report No.: IEBO\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 16 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate	@:Phantom Layer Attrition Rate
0004-----	HK04041 PC board P-313123-AI(L-8)			PCS	1.0000 1	2003/12/16
0001-----	HK03894 PC board P-313123-SMD(L-8)			PCS	0.00 % 1.0000 1	N
0001-----	HB00895 PCB 313123/2(1*6)			PCS	0.00 % 1.0000 1	N
0002-----	CI00049 SMD ceramic capacitor 0603 15PF/50V NPO ±5% C8,C9			PCS	2.0000 1	2003/04/29
0003-----	CI00075 SMD ceramic capacitor 0603 0.1uF/50V Y5V +80,-20% C17,C15,C18,C6,C10,C22,C20,C13,C14,C1,C3,C4,C11			PCS	13.0000 1	2003/04/29
0004-----	RD00061 SMD fixed resistor 1/10W 10 ±5% 0603 R22			PCS	1.0000 1	2003/04/29
0005-----	RD00068 SMD fixed resistor 1/10W 100 ±5% 0603 R12,R14,R7,R8,R34,R17,R13,R33			PCS	0.00 % 8.0000 1	N
0006-----	RD00073 SMD fixed resistor 1/10W 220 ±5% 0603 R3			PCS	1.0000 1	2003/04/29
0007-----	RD00085 SMD fixed resistor 1/10W 1.5K ±5% 0603 R16,R15,R21,R20,R4,R19,R10,R18,R9,R5			PCS	0.00 % 10.0000 1	N
0008-----	RD00088 SMD fixed resistor 1/10W 2.2K ±5% 0603 R28,R27,R23,R24,R29,R30,R25,R26			PCS	0.00 % 8.0000 1	N
0009-----	RD00101 SMD fixed resistor 1/10W 10K ±5% 0603 R32,R31,R1			PCS	0.00 % 3.0000 1	N
0010-----	RD00125 SMD fixed resistor 1/10W 1.0M ±5% 0603 R2			PCS	0.00 % 1.0000 1	N
0011-----	RE00006 SMDrow resistor1/16W 100 *4 ±5% 8P 0603 AR1,AR2			PCS	0.00 % 2.0000 1	N
0012-----	SE00011 SMD rectifier diode RLS4148 0.5A (LL-34) D1			PCS	0.00 % 1.0000 1	N

Multi-Level BOM Structure Listing

Report No.: IEBO\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 17 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate	@:Phantom Layer Attrition Rate
0013-----	SG00068 SMD integrated circuit 74HC14DT IC1			PCS	1.0000 1 0.00 %	2003/04/29 N
0014-----	SG00138 SMD integrated circuit AS4LC256K16E0-60JC IC6			PCS	1.0000 1 0.00 %	2003/04/29 N
0015-----	SG00166 SMD integrated circuit TY-2 ALTO(GMCODE:105022) IC3			PCS	1.0000 1 0.00 %	2003/04/29 N
0001-----	SG00147 SMD integrated circuit CHEF DSP(GMCODE:105022)			PCS	1.0000 1 0.00 %	2003/12/07 N
0016-----	SG00037 SMD integrated circuit LD1117DT33C(TO-252) IC2			PCS	1.0000 1 0.00 %	2003/04/29 N
0017-----	HC00233 IC socket (SMD) PLCC32 (D03-32T.A.4) IC4			PCS	1.0000 1 0.00 %	2003/04/29 N
0018-----	SG00016 SMD integrated circuit UDA1345TS (Philips) IC5			PCS	1.0000 1 0.00 %	2003/04/29 N
0002-----	CB00165 electrolytic capacitor 10uF/16V 4*5mm C7			PCS	1.0000 1 0.00 %	2004/08/13
0003-----	CB00166 electrolytic capacitor 100uF/16V 6*5mm C19,C12,C5,C24,C16,C21,C25,C26,C28,C2			PCS	10.0000 1 0.00 %	2004/08/13
0005-----	NE11475 label L-8			PCS	1.0000 1 0.00 %	2003/12/16
0001-----	NH00035 bond paper 0.06*1M			M	1.0000 410 0.00 %	2003/06/26 N
0002-----	NI00017 membrane 0.055*1M			M	1.0000 410 0.00 %	2003/06/26 N
0038-----	NI02911 handle ALTO 072C			PCS	1.0000 1 0.00 %	2004/01/02
0039-----	MG00326 screw 3*4			PCS	6.0000 1 0.00 %	2004/01/10
0040-----	MG00050 screw M3*8			PCS	3.0000 1 0.00 %	2004/01/10

Multi-Level BOM Structure Listing

Report No.: IEB0\_P02  
 Prepared by 020050[賴玉菁]

Date 2004/12/03  
 Page No.: 18 / 18

Item No. PF01441 Version  
 DESCRIPTION: AMX-100FX  
 AMX-100FX\_ALTO\_230V

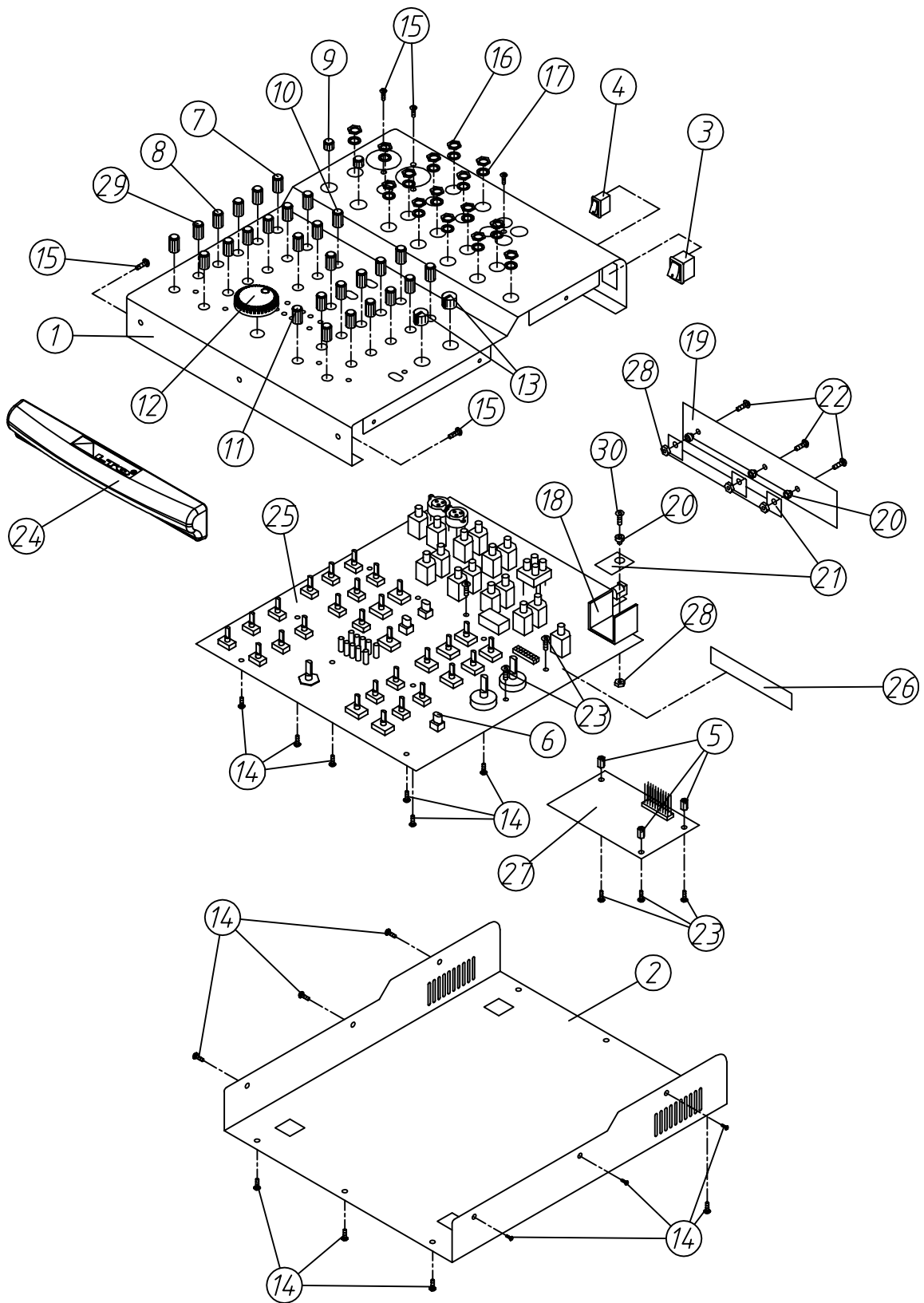
UNIT: PCS  
 Date: 2003/12/17

Version	Item No	Loss %	Ver.	Unit	Cardinal	Effective Date
Component Remark	Item Descri				Usage Rate @:Phantom Layer	Attrition Rate
0041-----	NI02082 knob 10.5*18mm			PCS	4.0000 1	2004/03/06
0042-----	AD00012 twin adhesive 90*120mm_V1.0			M	0.0024 1	2004/11/03
0043-----	NA00279 clip-chain bag 0.04t*100*150mm_V1.0			PCS	1.0000 1	2004/09/07
0044-----	MI02085 fixed bracket AMX-120 left_V1.0			PCS	1.0000 1	2004/10/29
0001-----	MI02084 fixed bracket AMX-120 left_V1.0			PCS	1.0000 1	2004/04/06 N
0001-----	MJ00058 iron board 1*2135*1220 20.45kg			PCS KG	1.0000 49 0.00	2004/04/14 N %
0045-----	MI02087 fixed bracket AMX-120 right_V1.0			PCS	1.0000 1	2004/10/29
0001-----	MI02086 fixed bracket AMX-120 right_V1.0			PCS	1.0000 1	2004/04/06 N
0001-----	MJ00058 iron board 1*2135*1220 20.45kg			PCS KG	1.0000 49 0.00	2004/04/14 N %

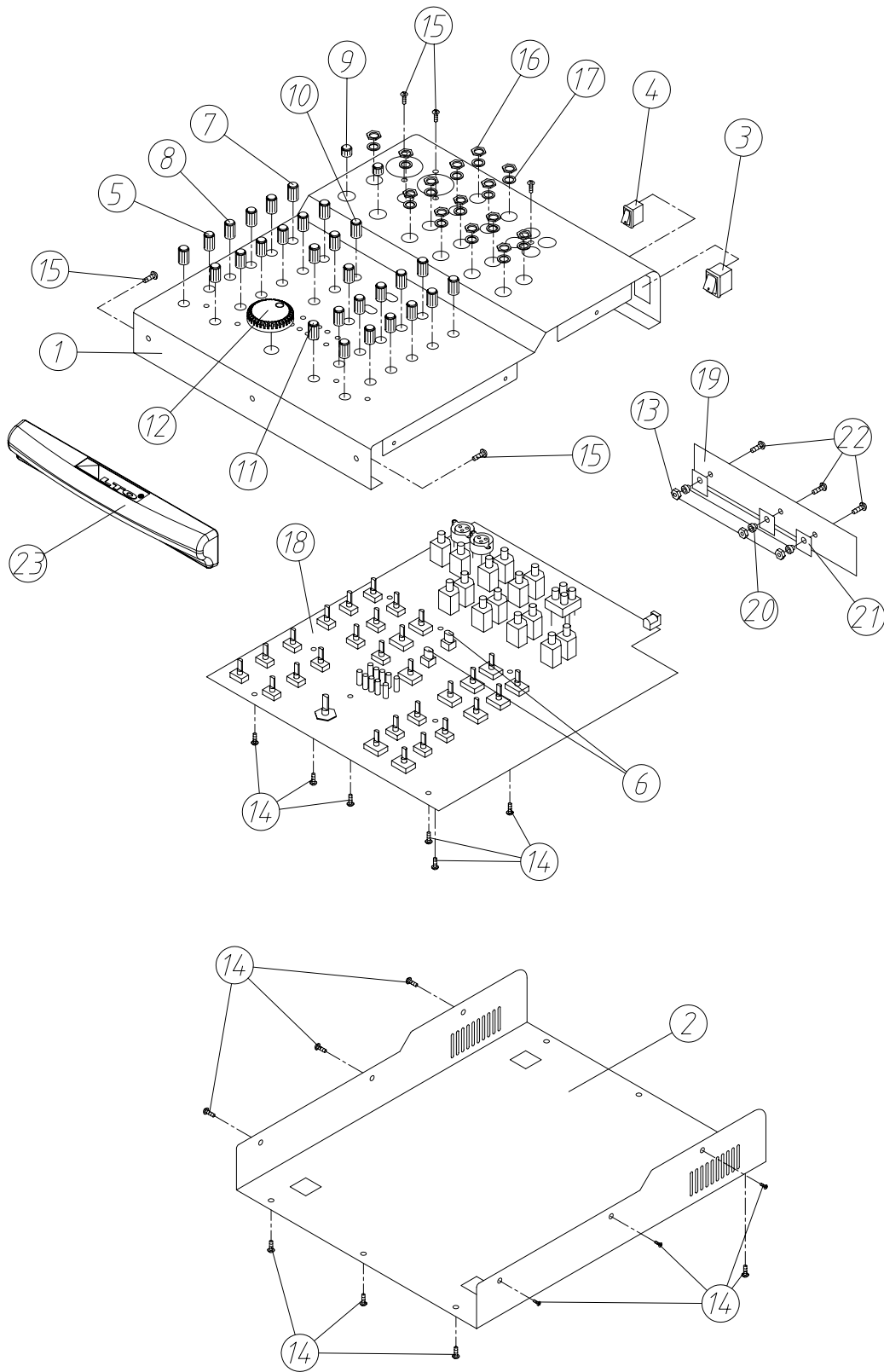


# 8.Exploded Views & Mechanical Parts List

SEKAKU



Machine type:AMX-100FX  
Serial number:AMX100FX-00  
Date:2004/01/01



Machine type:AMX-100  
Serial number:AMX100-00  
Date:2004/01/02

Mechanical Parts List				
Model No.		ALTO AMX-100FX		
NO	Item No	Item Description		pcs
1	MA04527	panel	AMX-100FX ALTO	1
2	MB03080	rear board	AMX-120	1
3	HI00026	power switch	RA12KKATOF 2P	1
4	HI00171	power switch	R612KKATOF1	1
5	MG00238	copper pillar	M3*6*0.5PH	3
6	NI01863	key	φ5.5*W10*7.5	3
7	NI02083	knob	φ10.5*18mm	12
8	NI02633	knob	φ10.5*18	6
9	NI02714	knob	φ10*13.5mm	2
10	NI02817	knob	φ10.5*18mm	2
11	NI00826	knob	φ12*18mm double color	4
12	NI02837	knob	φ35*11mm 534C	1
13	NI02386	konb	φ14*13mm	2
14	MG00041	screw	M3*6	20
15	MG00061	screw	M3*10	8
16	ME00060	nut	JY-6351G-02-250	15
17	MF00061	washer	JY-6351G-02-250	15
18	MI01953	heat sink	AMX-100FX 1.5t*24*21*20.5mm	1
19	MI01906	heat sink	AMX-120 V1.1	1
20	NI02249	insulate bean	TW-1(TO-220)	4
21	NC00005	silicone insulator	TO-220 square type	4
22	MG00162	screw	M3*8	3
23	MG00036	screw	M3*4	6
24	NI02834	handle	208*33*26mm AMX-120 black	1
25	HK00838	PC board	P-AMX-100FX-DIP	1
26	HK00832	PC board	P-FX-DSP-DIP	1
27	HK01409	PC board	P-313123-DIP(AMX-140FX)	1
28	ME00015	nut	3m/m	4
29	NI02082	knob	φ10.5*18mm	4
30	MG00166	screw	M3*10	1
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				

Mechanical Parts List

Model No.		ALTO AMX-100		
NO	Item No	Item Description		pcs
1	MA04530	panel	AMX-100 ALTO	1
2	MB03080	rear board	AMX-120	1
3	HI00026	power switch	RA12KKATOF 2P	1
4	HI00171	power switch	R612KKATOF1	1
5	NI02082	knob	φ10.5*18mm	4
6	NI01863	key	φ5.5*W10*7.5	2
7	NI02083	knob	φ10.5*18mm	12
8	NI02081	knob	φ10.5*18mm	6
9	NI02714	knob	φ10*13.5mm	2
10	NI02817	knob	φ10.5*18mm	2
11	NI00826	knob	φ12*18mm double color	4
12	NI02837	knob	φ35*11mm 534C	1
13	ME00015	nut	3m/m	3
14	MG00041	screw	M3*6	20
15	MG00061	screw	M3*10	8
16	ME00060	nut	JY-6351G-02-250	14
17	MF00061	washer	JY-6351G-02-250	14
18	HK00838	PC board	P-AMX-100FX-DIP	1
19	MI01906	heat sink	AMX-120 V1.1	1
20	NI02249	insulate bean	TW-1(TO-220)	3
21	NC00005	silicone insulator	TO-220 square type	3
22	MG00162	screw	M3*8	3
23	NI02834	handle	208*33*26mm AMX-120 black	1
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				