

Service Manual

Model: X23SW (2-WAY STEREO PLUS SUBWOOFER)
ACTIVE CROSSOVER



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 (X23SW)

Electrical

Subwoofer Frequency Range	50Hz ~ 250Hz
Low - High Frequency Range	250Hz ~ 6KHz
THD	<0.05%
S/N Ratio	>95dB

Controls

Input Level	Continuously variable
Output Level	Sub, Low, High continuously variable
Low Cut	Front panel switches
Phase	Front panel switches

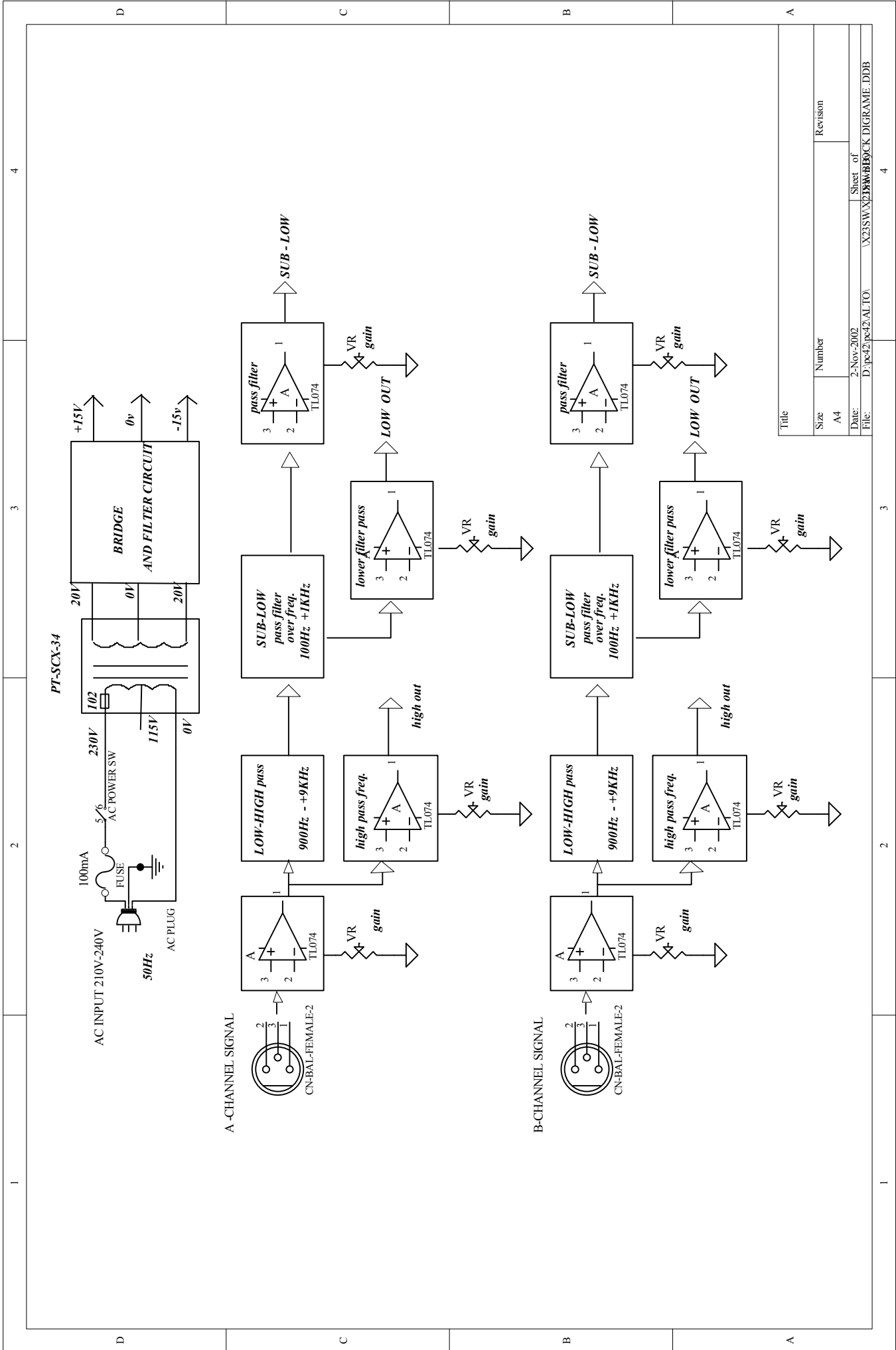
Power Supply

Connector type	3-pole IEC , grounded
Type	Servo controlled, stabilized
Mains supply	95-120V~/210-240V~,60-50Hz
Power Rating	6W

Physical

Dimensions	483(W)×194.5(D)×44(H)mm (19"×7.7"×1.7")
Weight	2.95 Kg(6.50lb)

2. Block Diagram



Title	
Size	Number
A4	
Date:	Sheet of
2-Nov-2002	1
File:	Revision
D:\pc42\pc42\AL\TO\	
\X23\W\X23\BWB\BLOCK DIGRAM - DDB	

4

3

2

1

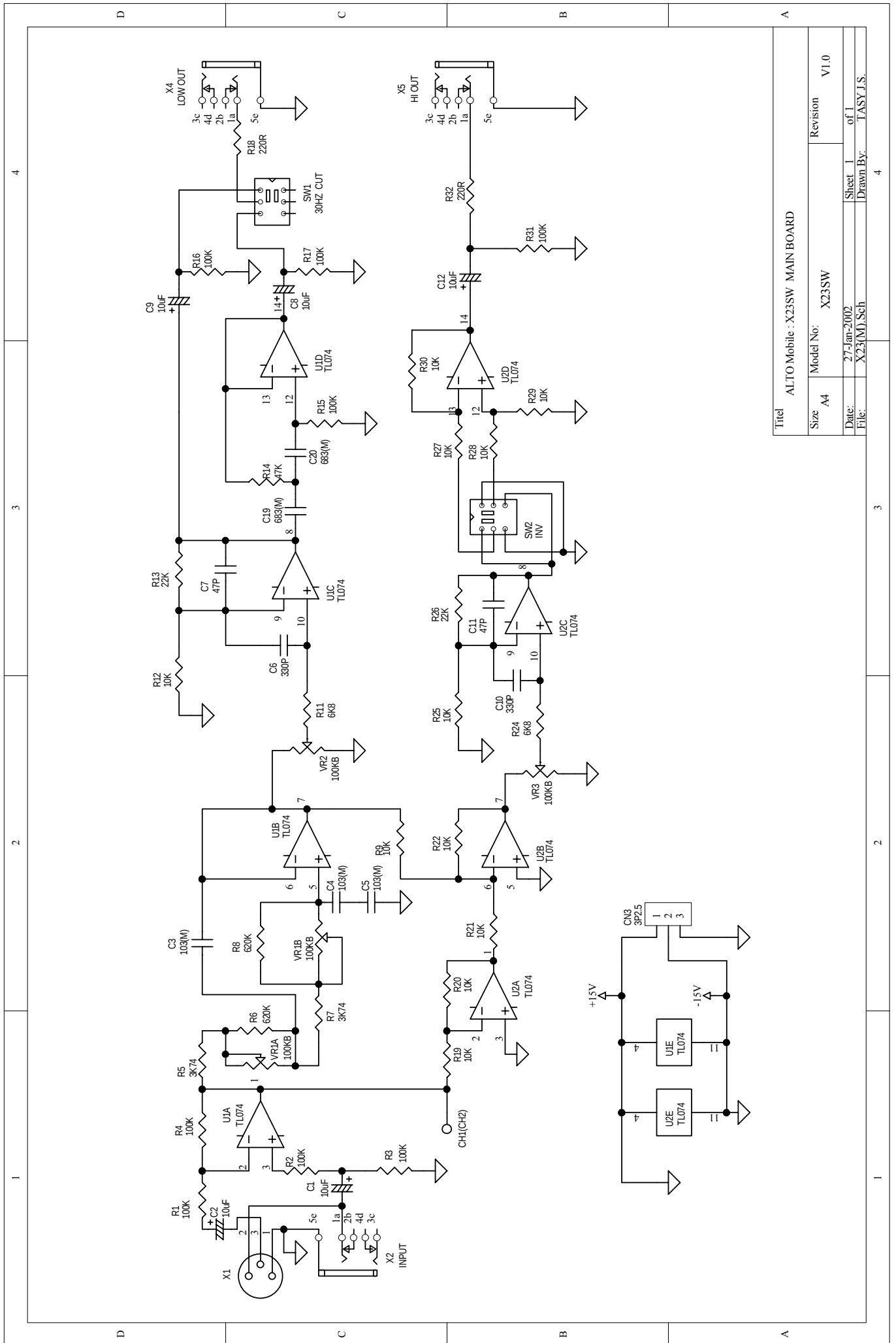
4

3

2

1

3. Schematic Diagram



Titel ALTO Mobile : X23SW MAIN BOARD

Size	A4	Model No:	X23SW	Revision	V1.0
Date:	27-Jan-2002	Sheet	1	of	1
File:	X23(M)_Sch	Drawn By:	TASY J.S.		

D

C

B

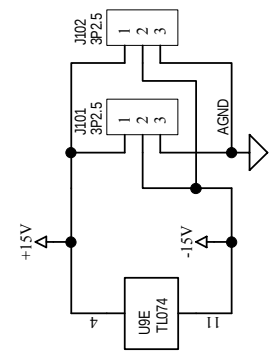
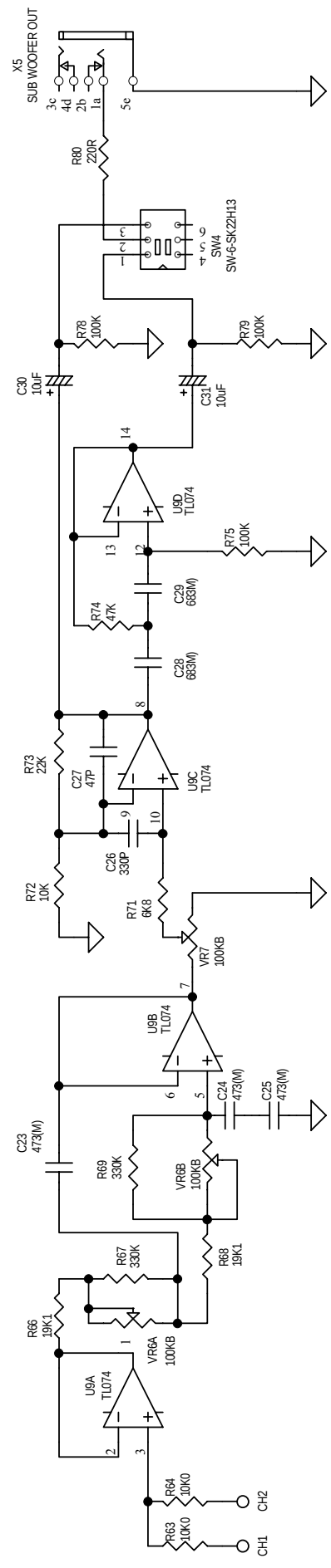
A

D

C

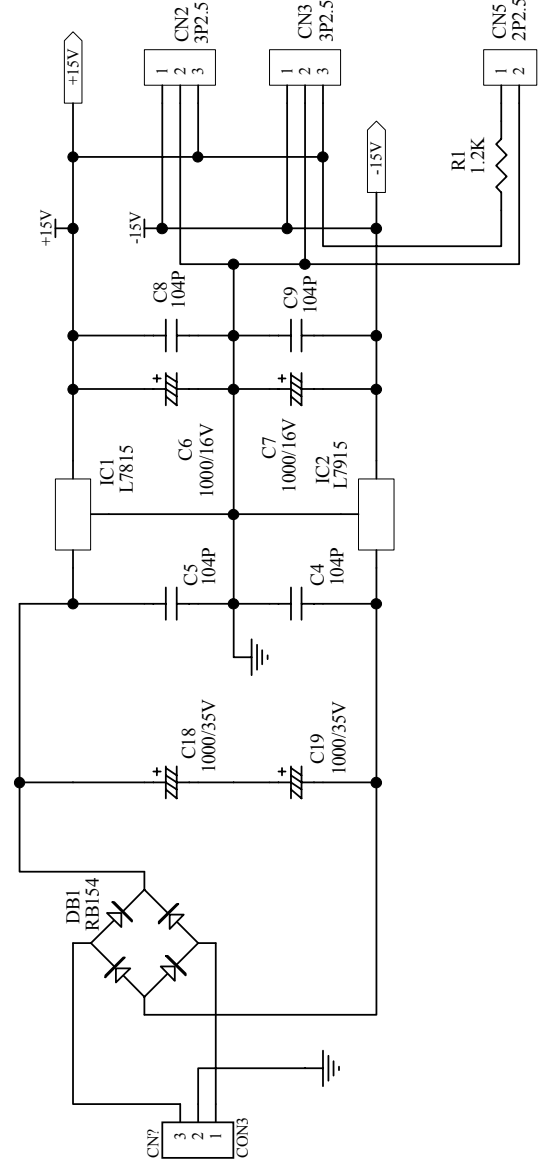
B

A



Titel ALTO Mobile : X23SW SUB WOOFER BOARD

Size	A4	Model No:	X23SW	Revision	V1.0
Date:	27-Jan-2002	Sheet	1	of 1	
File:	X23(SUB).Sch	Drawn By:	TASY J.S.		



Title
SCX系列] POWER Schematic

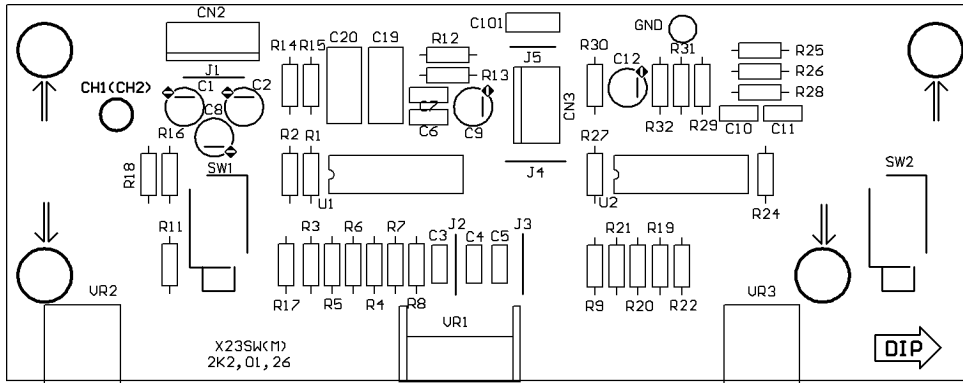
Size
Number
A4

Revision

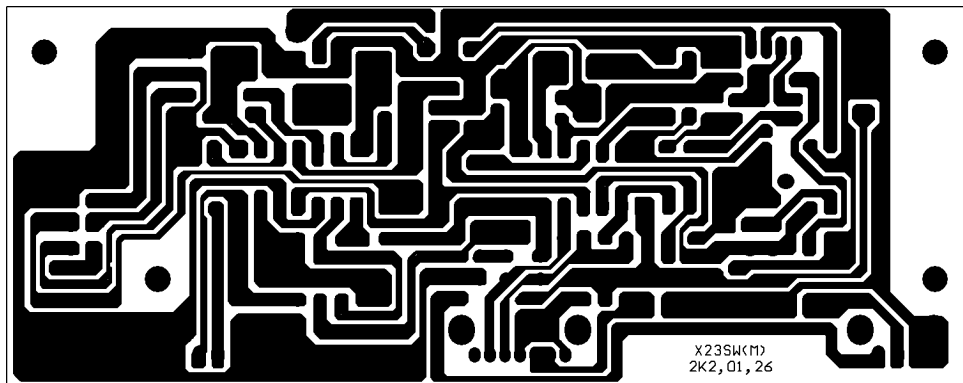
Date:
27-Jan-2002

File:
D:\pc42\pc42\ipc42\IS-OVER\SCX202\SCX202S.ddb

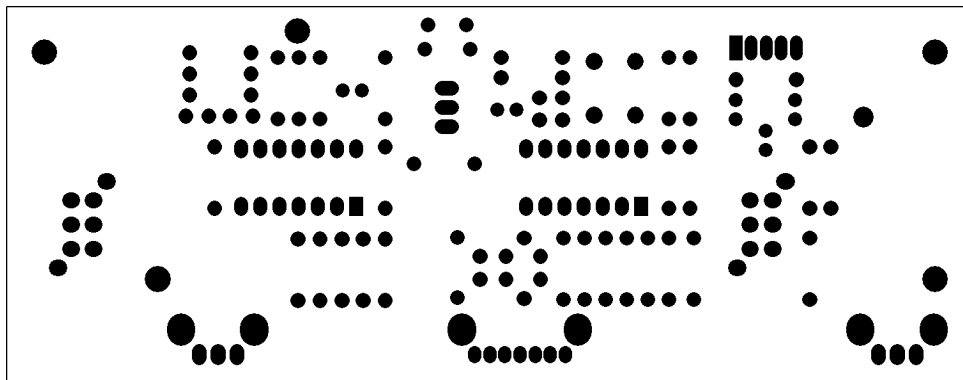
X23SW(M) PCB LAYOUT



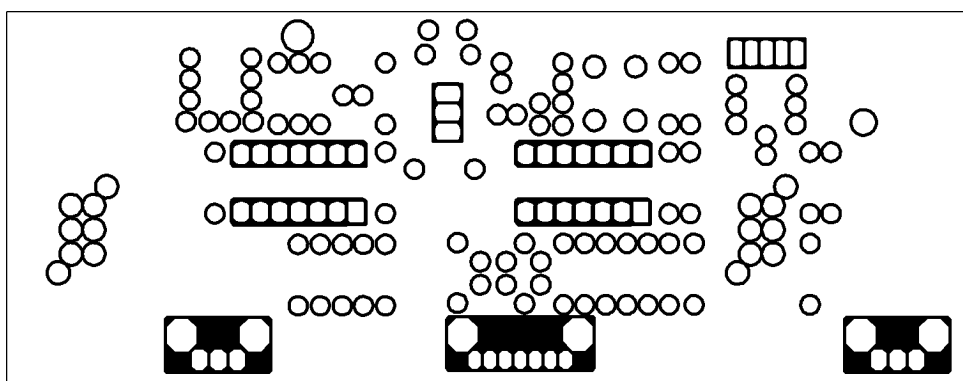
PCB : X23SW(M) Top Overlay



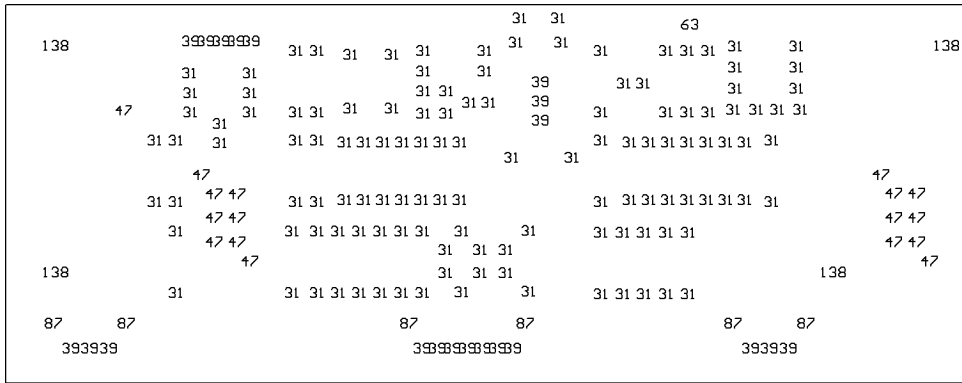
PCB : X23SW(M) Bottom Layer



PCB : X23SW(M) Bottom Solder Mask



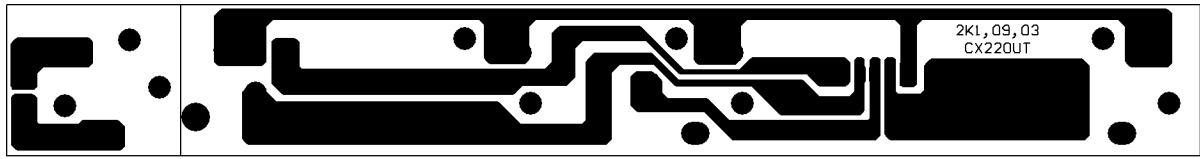
PCB : X23SW(M) Bottom Overlay



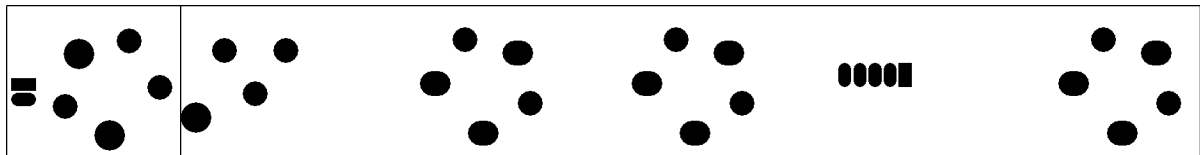
PCB : X23SW(M) Drill Drawing Plots

Hole Size	Hole Count
31mil (0.8mm)	128
39mil (1.0mm)	21
47mil (1.2mm)	17
63mil (1.6mm)	1
87mil (2.2mm)	6
138mil (3.5mm)	4
Totals	177

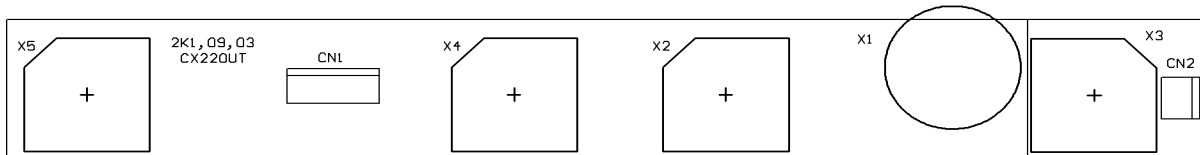
CX22OUT PCB LAYOUT



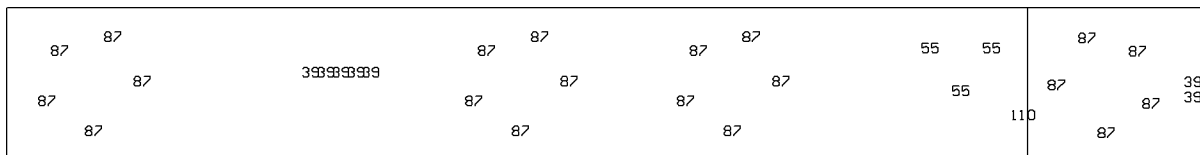
PCB : CX22OUT Bottom Layer



PCB : CX22OUT Bottom Solder Mask



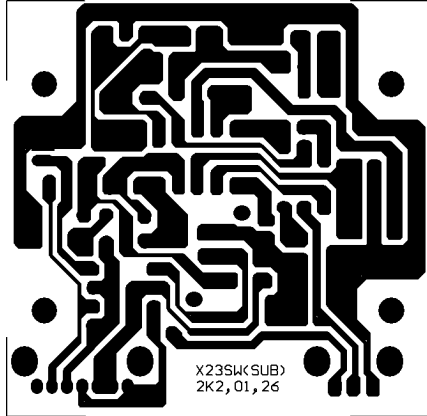
PCB : CX22OUT Top Overlay



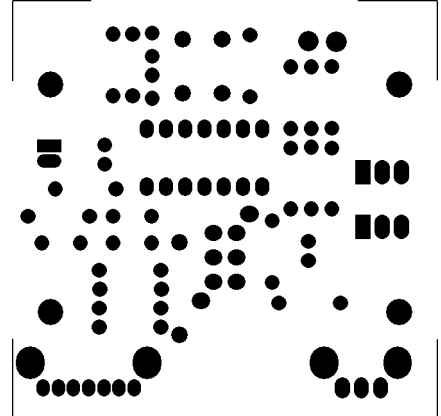
PCB : CX22OUT Drill Drawing Plots

Hole Size		Hole Count
39mil	(1.0mm)	7
55mil	(1.4mm)	3
87mil	(2.2mm)	20
110mil	(2.8mm)	1
Totals		31

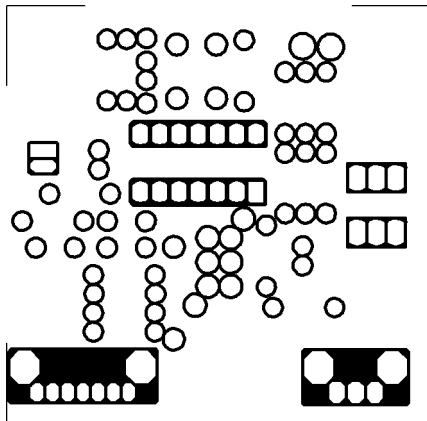
X23SW(SUB) PCB LAYOUT



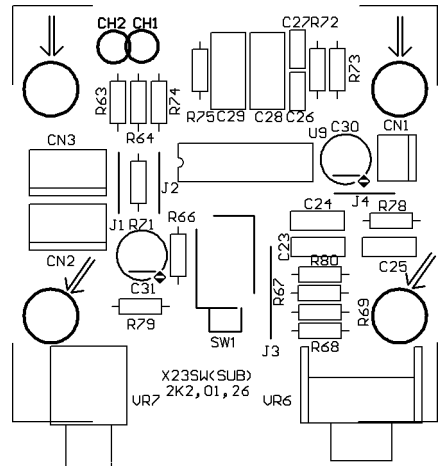
PCB : X23SW(SUB) Bottom Layer



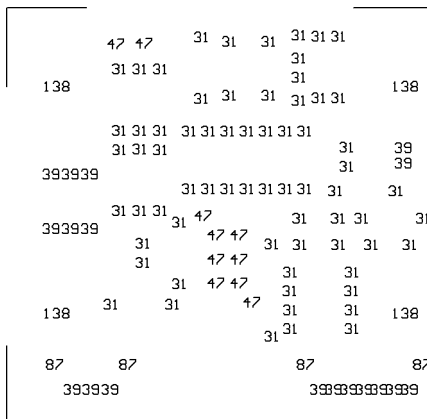
PCB : X23SW(SUB) Bottom Solder Mask



PCB : X23SW(SUB) Bottom Overlay

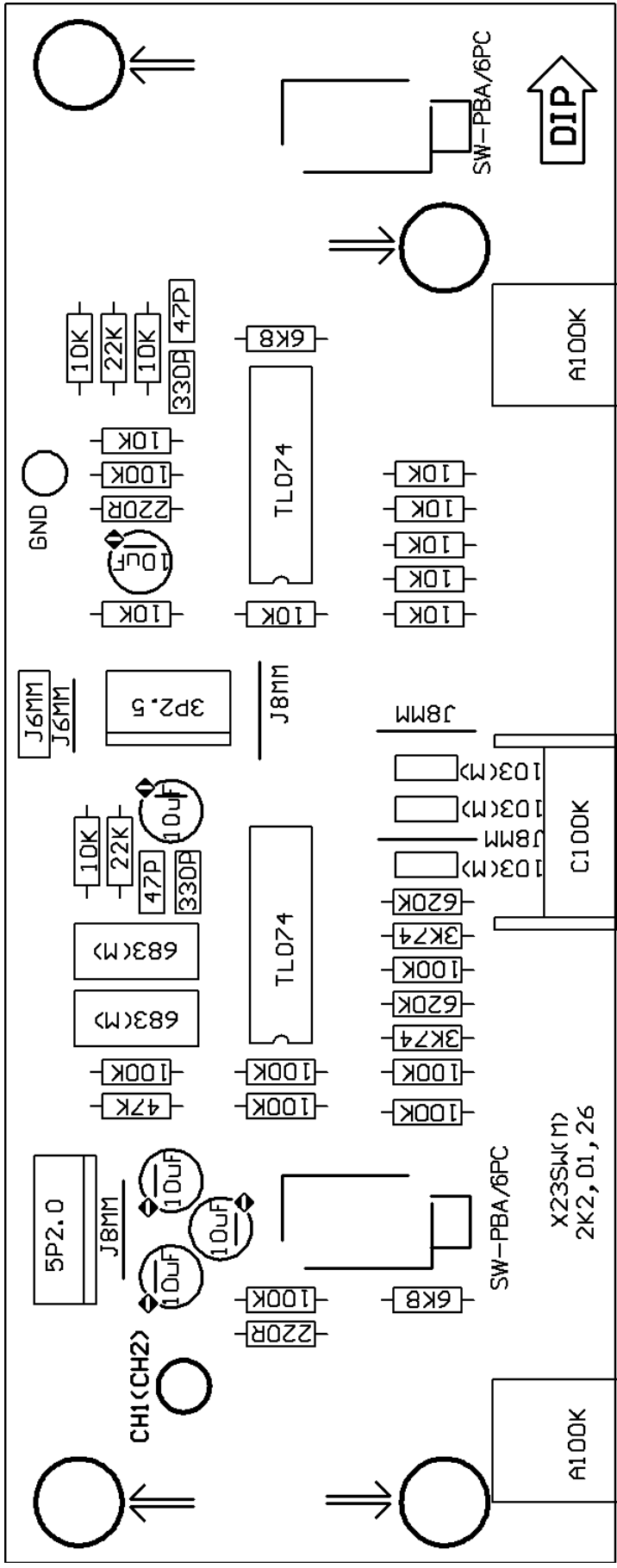


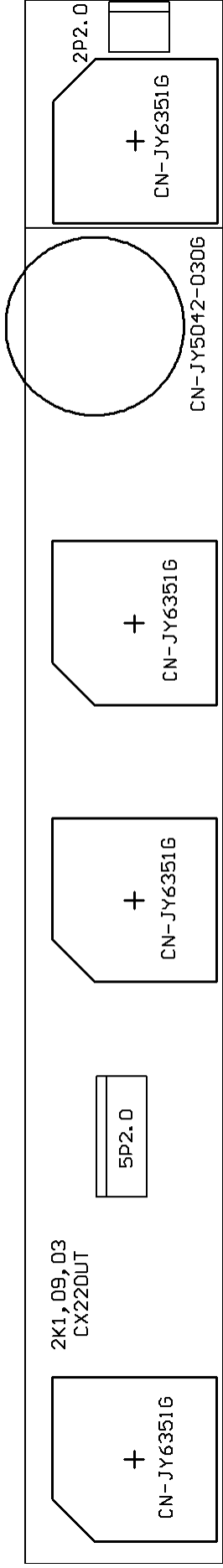
PCB : X23SW(SUB) Top Overlay

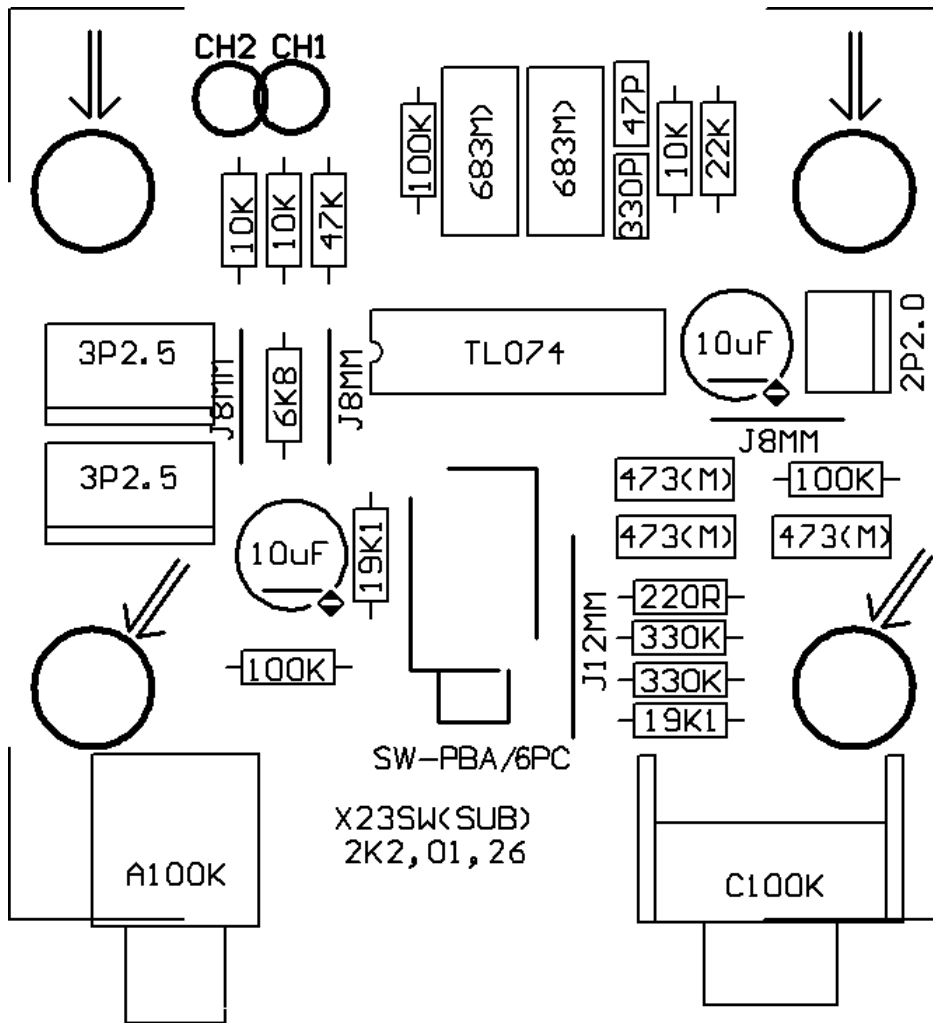


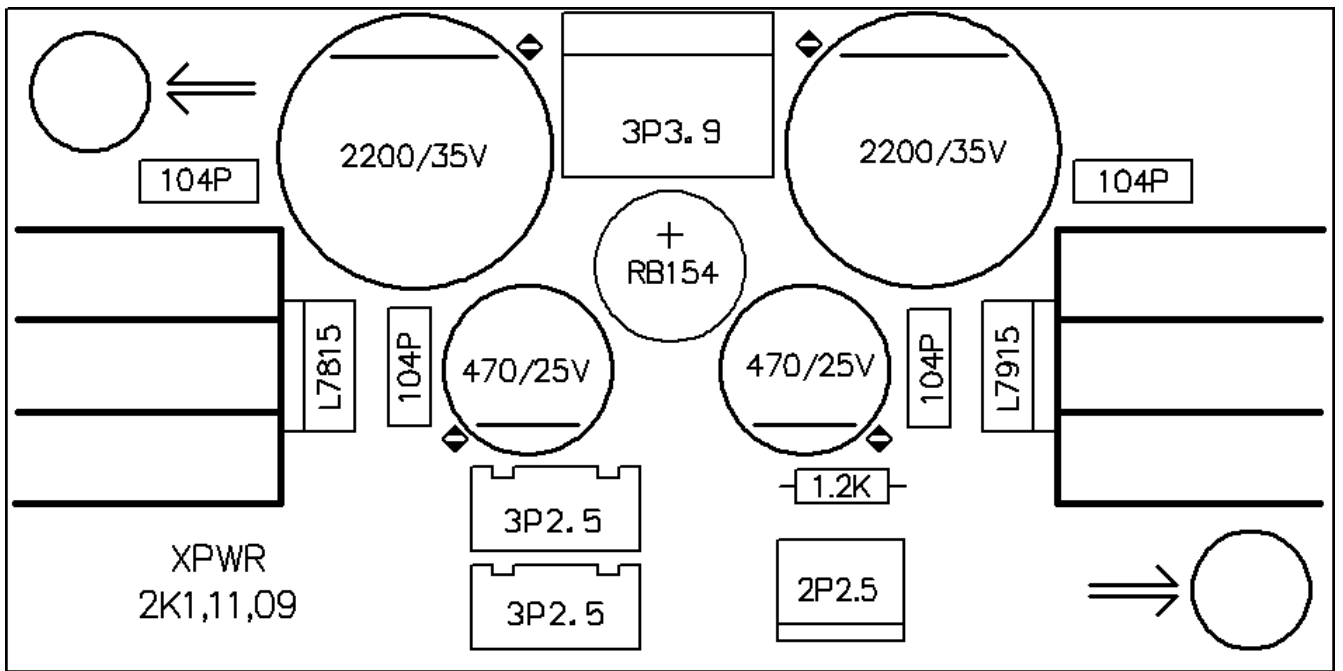
PCB : X23SW(SUB) Drill Drawing Plots

Hole Size	Hole Count
31mil (0.8mm)	68
39mil (1.0mm)	18
47mil (1.2mm)	10
87mil (2.2mm)	4
138mil (3.5mm)	4
Totals	104









7. Electrical Parts List **X23SW-ALTO-230V**

Structure Needing Material Detail List

<u>NO.</u>	<u>Midprod NO</u>	<u>Quantity</u>	<u>Unit</u>
-------------------	--------------------------	------------------------	--------------------

NO	Material No	Item Name	Specific
-----------	--------------------	------------------	-----------------

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

NO	Material No	Item Name	Specific
-----------	--------------------	------------------	-----------------

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

<i>NO</i>	<i>Material No</i>	<i>Item Name</i>	<i>Specific</i>
------------------	---------------------------	-------------------------	------------------------

MARK:

MARK:

MARK:

MARK:

MARK:

<i>NO</i>	<i>Material No</i>	<i>Item Name</i>	<i>Specific</i>
------------------	---------------------------	-------------------------	------------------------

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

NO	Material No	Item Name	Specific
-----------	--------------------	------------------	-----------------

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

NO	Material No	Item Name	Specific
-----------	--------------------	------------------	-----------------

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

<i>NO</i>	<i>Material No</i>	<i>Item Name</i>	<i>Specific</i>
------------------	---------------------------	-------------------------	------------------------

MARK:

MARK:

MARK:

MARK:

<i>NO</i>	<i>Material No</i>	<i>Item Name</i>	<i>Specific</i>
------------------	---------------------------	-------------------------	------------------------

MARK:

MARK:

MARK:

MARK:

MARK:

<i>NO</i>	<i>Material No</i>	<i>Item Name</i>	<i>Specific</i>
------------------	---------------------------	-------------------------	------------------------

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

MARK:

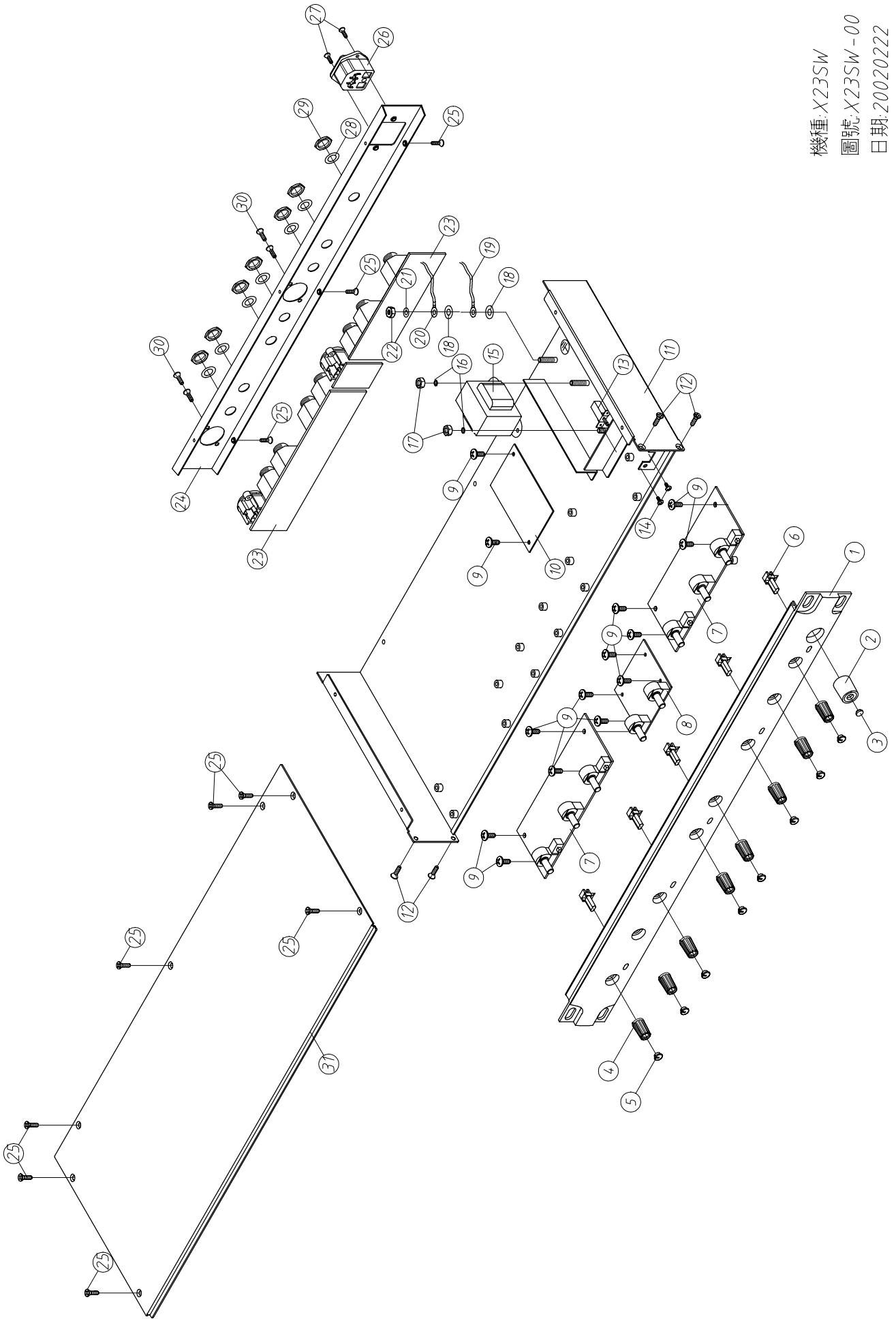
MARK:

MARK:

MARK:

8. Exploded Views

SEKAKU



機種: X23SW
圖號: X23SW-00
日期: 20020222