

# BOSS AC-2

## SERVICE NOTES

First Edition

Issued by RJA

## SPECIFICATIONS / 仕様

Control .....	MODE (STANDARD, JUMBO, ENHANCE, PIEZO), LEVEL, BODY, TOP, Pedal Switch
Indicator .....	Check Indicator (Serves also as battery check indicator)
Jacks .....	INPUT, OUTPUT, E.G. OUT, AC Adaptor
Nominal Input Level .....	-20dBm
Input Impedance .....	1MΩ
Nominal Output Level .....	-20dBm
Output Impedance .....	1kΩ
Residual Noise Level .....	-80dBm (IHF-A Weighted, Typical)
	(BODY Knob: Center, TOP Knob: Center)
Power Supply .....	DC9V; Dry Battery (9V), AC Adaptor (PSA Series: Option)
Current Draw .....	18mA
Dimensions .....	70 (W) × 125 (D) × 55 (H) mm
	2-3/4 × 4-15/16 × 2-3/16 inch
Weight .....	440g/1lb (including Battery)
Accessories .....	Owner's Manual (English) (No. G6017261)
	Owner's Manual (Japanese) (No. G6017260)
	Dry Battery S-006P (9V)
Options .....	AC Adaptor PSA-100, PSA-120, PSA-230, PSA-240
	Battery S-006P/9V (6F22/9V)

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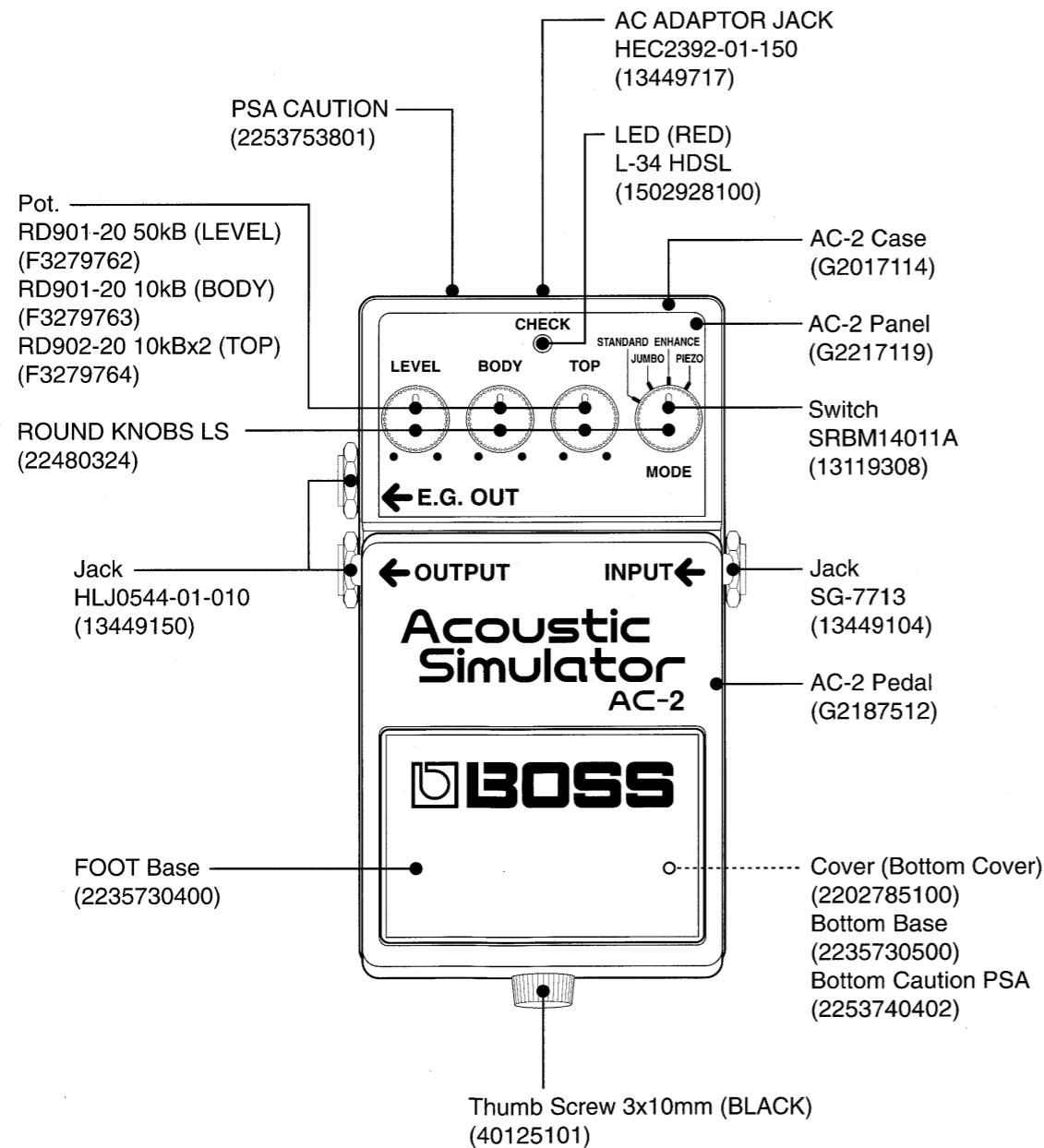
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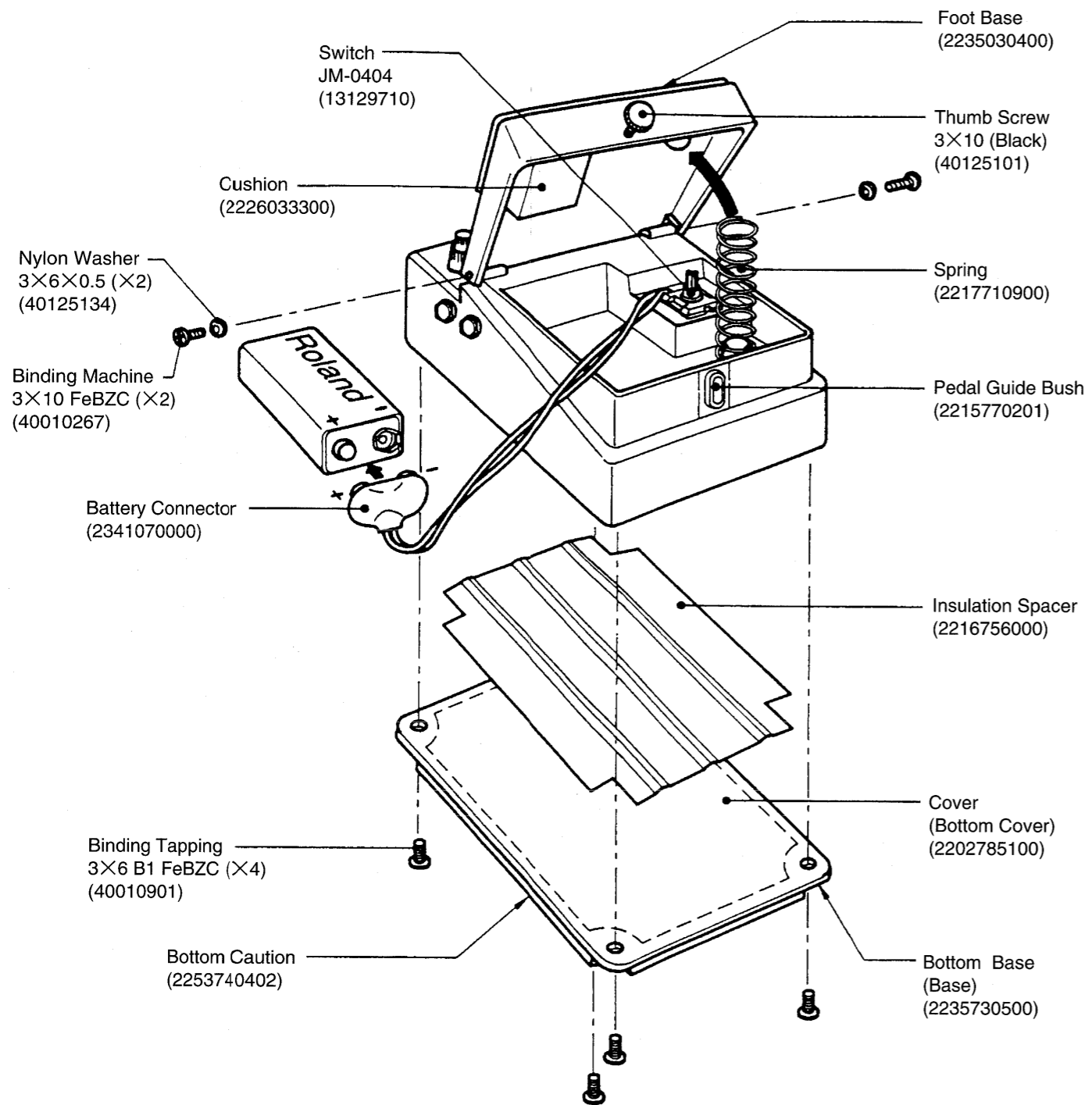
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### LOCATION OF CONTROLS / パネル外観図



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

**A EXPLODED VIEW / 分解図**



**PARTS LIST / パーツリスト**

**SAFETY PRECAUTIONS:**  
 The parts marked  $\Delta$  have safety-related characteristics.  
 Use only listed parts for replacement.  
**安全上の注意:**  
 $\Delta$  が付いている部品は、安全上特別な規格でつくられたものです。  
 交換の際は、注意をよく読み、指定された部品番号以外の部品は使わないようにして下さい。

**CONSIDERATIONS ON PARTS ORDERING**  
 When ordering any parts listed in the parts list, please specify the following items in the order sheet.  
 Ex. QTY PART NUMBER DESCRIPTION MODEL NUMBER  
 10 22575241 Sharp key C-20/50  
 15 2247017300 Knob (orange) DAC-15D  
 Failure to completely fill the above items with correct number and description will result in delayed or even undelivered replacement.  
 パーツ発注に関するお願い  
 オーダーシートには、必ず下記の4項目は正確に記入して下さい。(例外は除く)  
 必要数 パーツナンバー 品名 使用機種  
 例) 10 22575241 Sharp key C-20/50  
 15 2247017300 Knob (orange) DAC-15D  
 もし記入忘れ、誤記等がある場合、必要部品が発送できなかったり、大幅な遅れの原因になります。御協力をお願いします。

Note: The parts marked # are new (initial parts).  
 注意: #が付いた部品は新規部品です。

**CASING / ケース**

#	G2017114	AC-2 Case
#	G2217119	AC-2 Panel
	2202785100	Cover(Bottom Cover)
	2235730500	Bottom Base
#	G2187512	AC-2 Pedal
	2235730400	Foot Base

**KNOB, BUTTON / つまみ、ボタン**

	22480324	ROUND KNOB LS
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**SWITCH / スイッチ**

	13129710	Key SW JM-0404	SW2
	13119308	SW SRBM14011A	SW1(MODE)

**JACK, SOCKET / ジャック、ソケット**

	13449104	SG-7713		INPUT
#	13449150	HLJ0544-01-010		OUTPUT, E.G. OUT"
	13449717	HEC2392-01-150	AC Adaptor JACK	

**PWB ASSY / 基板完成品**

#	70901367	Main Board Assy
#	7042645200	LED Board Assy

**IC**

	15189261	M5218AFP	OP Amp	IC1, IC2, IC3, IC6
	15259115	TC4066BF SOP	C-MOS IC	IC5
	15259119T0	TC4052BF SOP	C-MOS IC	IC4

**TRANSISTOR / トランジスター**

	151391160Y	FET 2SK118Y		Q9, Q10
	15329103T0	FET 2SK880GR		Q3, Q4, Q8
	15309108	TR 2SC3324GR		Q5, Q6, Q7, Q11
	15319107	TR 2SC4116GR		Q1, Q2

**DIODE / ダイオード**

	F5019203	Di 1N4004		D1, D3
	15019526	ZENER DIODE RD5.6EB3		D2
	1502928100	LED L-34HDSL		D8
	15339135T0	Di 1SS300		D6
	15339119T0	Di 1SS352		D4, D5, D7

**POTENTIOMETER / ボリューム**

#	F3279762	VR RD901-20-15K-B54	50k $\Omega$	VR1(LEVEL)
#	F3279763	VR RD901-20-15K-B14	10k $\Omega$	VR2(BODY)
#	F3279764	VR RD902-20	10k $\Omega$ x2	VR3(TOP)

**WIRING / ワイヤリング**

#	G3477131	Flat Cable 9P
#	G3477123	Flat Cable 4P

**SCREW / ねじ類**

	40010834	3×6mm Binding Tapping B1 FeCm	
	40010901	3×6mm Binding Tapping B1 FeBc	Bottom Cover
	40010267	3×10mm Binding Machine FeBc	Pedal
	40125134	Nylon Washer 3×6×0.5	Pedal
	40125101	3×10mm Thumb Screw	Pedal

**MISCELLANEOUS / その他**

	2341070000	Battery Connector	
	2215770201	Pedal Guide Bush	
	2217710900	Spring	
	2216756000	Insulation Spacer	
	2226733300	Cushion	
	2253740402	Bottom Caution PSA(CE Mark)	Silver
	2253753801	PSA CAUTION	

**ACCESSORIES (Standard) / 標準付属品**

#	G6017261	AC-2 Owner's Manual(English)
#	G6017260	AC-2 Owner's Manual(Japanese)
	*****	Battery S-006P 9V

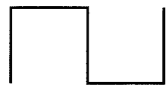
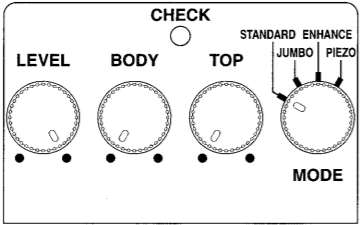
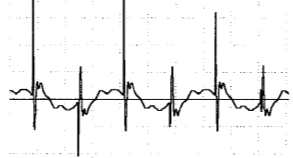
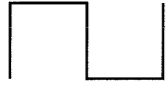
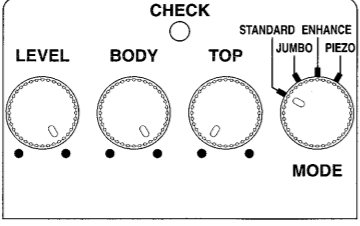
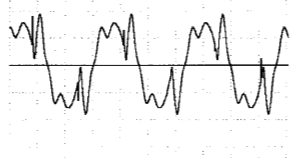
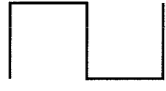
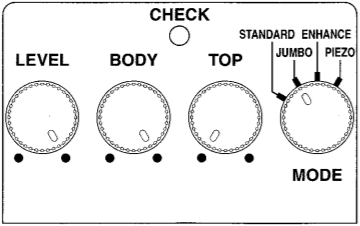
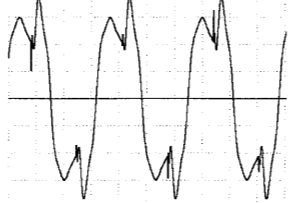
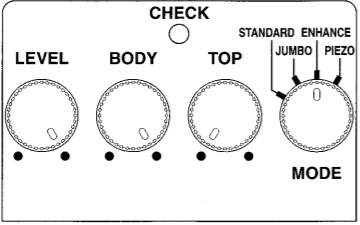
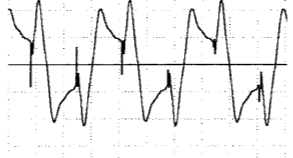
# APPENDIX / 付録


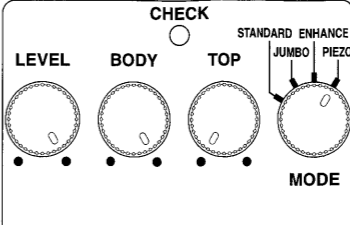
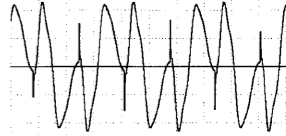

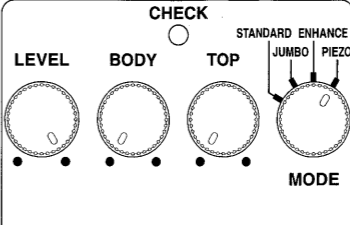
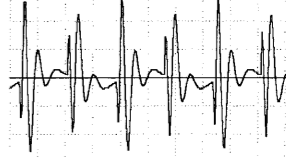

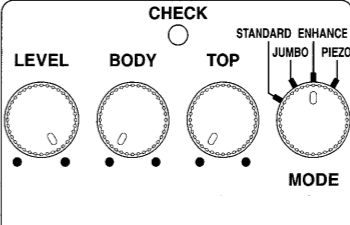
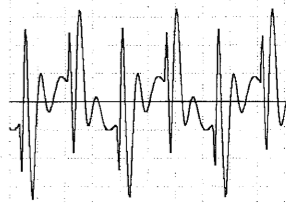
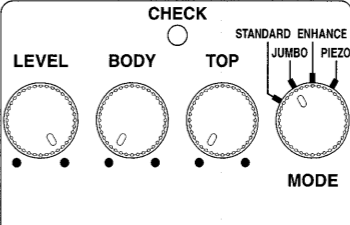
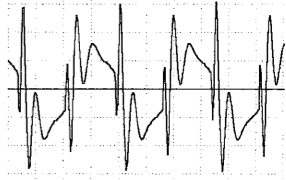
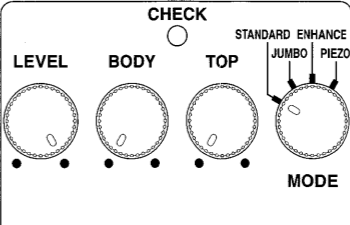
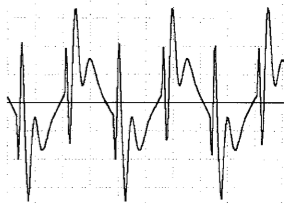
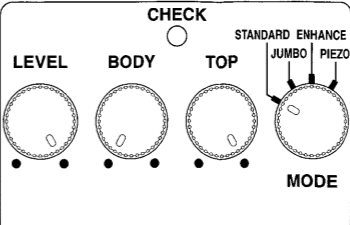
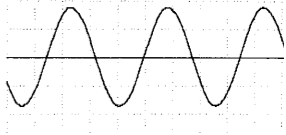
## Check OUTPUT Waveform

1. Connect the oscillator to the INPUT jack and apply a test signal.
2. Connect the oscilloscope to the OUTPUT jack and E.G. OUT jack.
3. If the LED (EFFECT ON) is lit up, press the pedal to set EFFECT OFF.
4. Check that a signal is sent from the E.G. OUT jack and that nothing is sent from the OUTPUT jack.
5. Press the pedal to set EFFECT ON (LED lights up).
6. Check that a signal is sent from the OUTPUT jack and that nothing is sent from the E.G. OUT jack.
7. While set at EFFECT ON check the waveform obtained with the following settings.

## 出力波形のチェック

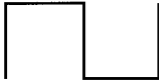
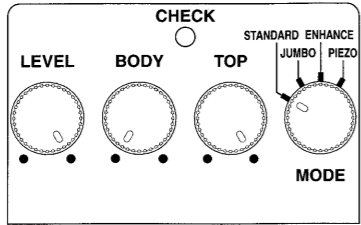
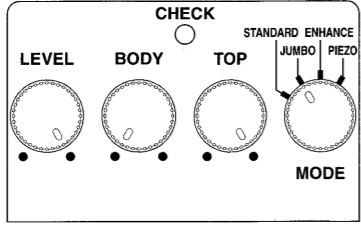
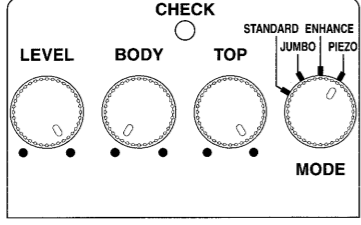
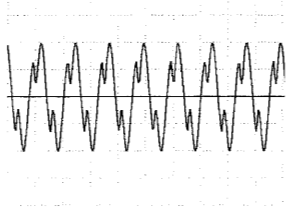
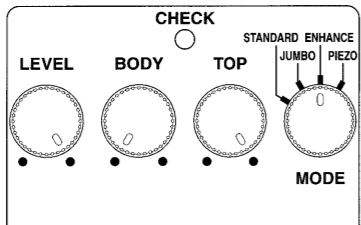
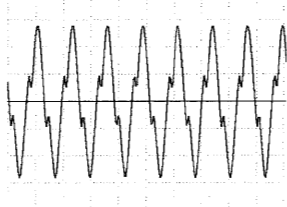
1. INPUT ジャックに発振器を接続し、テスト信号を加える。
2. OUTPUT ジャックと E.G. OUT ジャックにオシロスコプを接続する。
3. もし、LED が点灯してる (EFFECT ON の場合は、ペダルを踏み EFFECT OFF にする。
4. E.G. OUT ジャックから THRU の信号が出力され、OUTPUT からは何も出力されていないことを確認する。
5. ペダルを踏み EFFECT ON (LED が点灯) にする。
6. OUTPUT ジャックから何らかの信号が出力され、E.G. OUT からは何も出力されていないことを確認する。
7. EFFECT ON の状態で下記のセッティングにおける波形を確認する。

INPUT	SET CONTROLS	OUTPUT Waveform
 60Hz 2Vp-p		 0.5V/DIV, 5ms/DIV
 60Hz 400mVp-p		 0.5V/DIV, 5ms/DIV
 60Hz 400mVp-p		 0.5V/DIV, 5ms/DIV
		 0.5V/DIV, 5ms/DIV

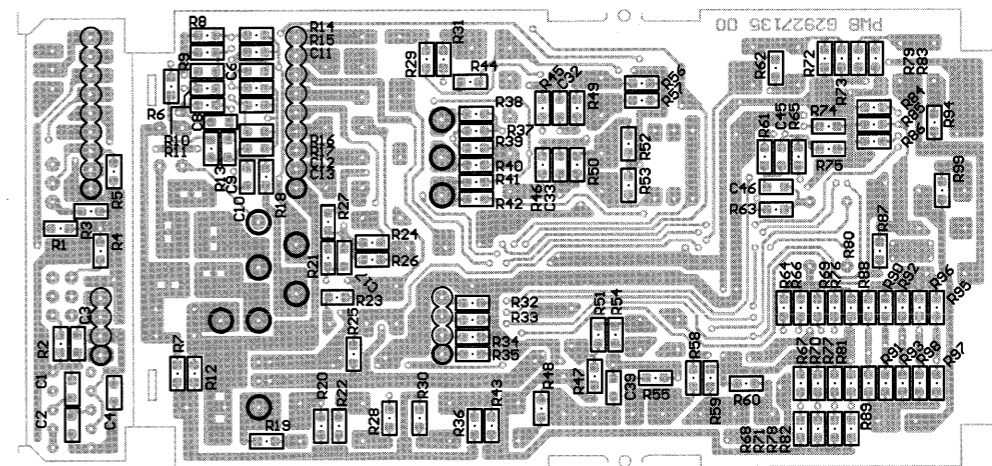
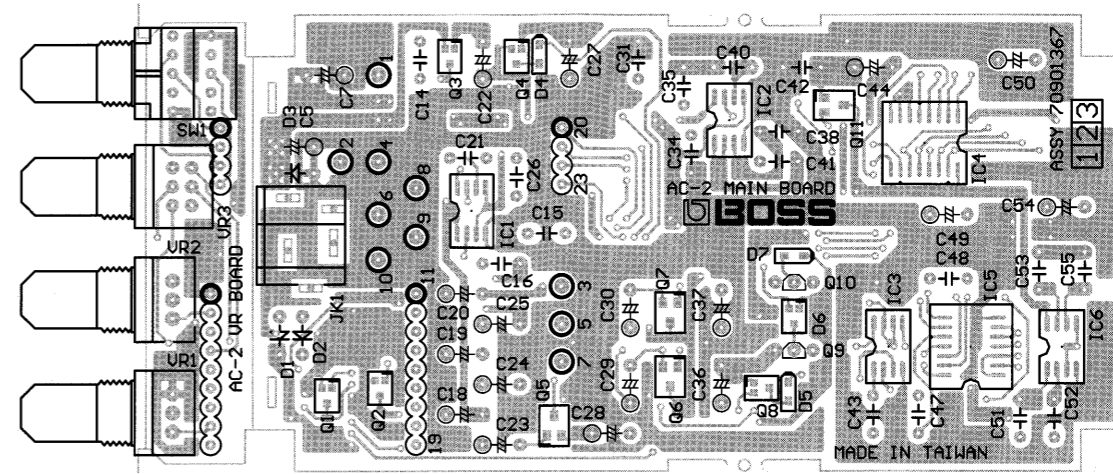
INPUT	SET CONTROLS	OUTPUT Waveform
 60Hz 400mVp-p		 0.5V/DIV, 5ms/DIV
 1.4kHz 1Vp-p		 0.5V/DIV, 0.2ms/DIV
 1.4kHz 1Vp-p		 0.5V/DIV, 0.2ms/DIV
		 0.5V/DIV, 0.2ms/DIV
		 0.5V/DIV, 0.2ms/DIV
Sin Wave 1.4kHz 800mVp-p		 50mV/DIV, 0.2ms/DIV

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V

INPUT	SET CONTROLS	OUTPUT Waveform
 <p>8kHz 40mVp-p</p>	  	 <p>0.5V/DIV, 0.1ms/DIV</p>
		 <p>0.5V/DIV, 0.1ms/DIV</p>

### CIRCUIT BOARD / 基板图



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

# A CIRCUIT DIAGRAM / 回路图

B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V

