SAMPLE CALCULATIONS

$$\text{dB } \mu N = 20 \log_{10} (\mu N/\text{m})$$

$$\mu N = 10^{(\text{dB } \mu N/20)}$$

EX. 1.

@20.3 MHz Class B limit = 250 μN = 48.0 dB μN

Reading = 40.8 dB μN (calibrated level)

$10^{(40.8/20)}$ = 109.64 μN

Margin = 48.0 - 40.8 = 7.2

7.2 dB below limit

EX. 2.

@57.7 MHz Class B limit = 100 μN/m = 40.0 dB μN/m

Reading = 19.1 dB μN(calibrated level)
Antenna factor + Cable Loss = 10.12 dB
Total = 29.22 dB μN/m

Margin = 40.0 - 29.22 = 10.78

10.78 dB below the limit

ACCURACY OF MEASUREMENT

The Measurement Uncertainties stated were calculated in accordance with the requirements of NIST Technical Note 1297 with the confidence level of 95%

Contribution	Distribution	Uncertainties	
		3 m	10 m
Field Strength Monitor	Gaussian (2s)	+/- 0.5	+/- 0.5
Field Strength Variation	Rectangular	+/- 1.2	+/- 1.5
Random	Gaussian (1s)	+/- 0.7	+/- 0.7
Total Uncertainty@95% min. confidence probability		+/- 1.91	+/- 2.11

Measurement Uncertainty Calculations:

$$U = 2\sqrt{S^2\ s1 + S^2\ s1... + S^2\ sr}$$

TEST EQUIPMENT

Name of Equipment	Manufactory	Model	Cal. Date
Test Receiver	R/S	ESPC	Oct. 2001
Test Receiver	PMM	8010	Sep. 2001
Teat Receiver	PMM	8030	Sep. 2001
Spectrum Analyzer	Hewlett Packard	E4411A	Dec. 2000
Spectrum Analyzer	Hewlett Packard	HP8563E	Oct. 2001
Spectrum Analyzer	Hewlett Packard	HP-8568B	Oct. 2001
Spectrum Analyzer	Hewlett Packard	HP-8561B	Oct. 2001
Quasi Peak Adapter	Hewlett Packard	HP-85605A	Oct. 2001
RF Preselector	Hewlett Packard	HP-85685A	Oct. 2001
Signal Generator	R/S	SMG	Jul. 2001
Color Plotter	Hewlett Packard	HP-7475A	Dec. 2000
LISN	PMM	L3-25	Apr. 2001
LISN	PMM	L1-150	Aug. 2001
LISN	EMCO	3825/2	Apr. 2001
RF Amplifier	Hewlett Packard	8447F/OPT H64	Dec. 2000
High Impedance Voltage Probe	PMM	SHC-1	Aug. 2001
Absorbing Clamp	EMV Mess-System	ACF-01	Jun. 2001
Close E-Field Probe	Hewlett Packard	HP11940A	Dec. 2000
Close H-Field probe	Hewlett Packard	HP11941A	Jan. 2001
HP9000 Model 300 Controller	Hewlett Packard	HP-9000/300	Dec. 2000
Loop Antenna	Electro-Mechanics	EMCO-6502	Oct. 2001
Biconical Antenna	Electro-Mechanics	EMCO-3110	Apr. 2001
Log Periodic Antenna	Electro-Mechanics	EMCO-3146	Oct. 2001
Tuned Dipole Antenna	Electro-Mechanics	EMCO-3121C	Oct. 2001
Horn Antenna	SCHWARZBECK	BBHA 9120D	Oct. 2001
Non-Metallic Tripod	Electro-Mechanics	0960-0744	Dec. 2000
Biconical Antenna	PMM	BIC01	Oct. 2001
Log Periodic Antenna	PMM	LP01	Oct. 2001
Non-Metallic Tripod	PMM	R-01	Sep. 2001
Antenna Master	Electro-Mechanics	EMCO-1050	Sep. 2001
Turn Table	Electro-Mechanics	EMCO-1062	Sep. 2001
Turn Table	Dail EMC	DIE-1500	Dec. 2000
Pulse Limiter	PMM	PL-01	Oct. 2001
50 OHM Three-Way SIG Distributer	Meguro Electronics Corp.	R-Type	Dec. 2000
Portable Electromagnetic Field Strength Meter	PMM	PMM8051	Aug. 2001
E-Field Probe	PMM	BA-01/03B/05	Aug. 2001
H-Field Probe	PMM	BA-04/08	Aug, 2001

RECOMMENDATION/CONCLUSION

The data collected shows that the **PRINCE ELECTRONICS CO.**
Model : **WR-2000S**
complies with § 15.107 and 15.109 of the FCC Rules. The highest emission observed was at 2.46MHz for conducted emissions with a margin of 33.0dB and at 254.30MHz for radiated emissions with a margin of 23.97dB.

APPENDIX A – SAMPLE LABEL

New Labelling Requirements

The sample label shown shall be *permanently affixed* at a conspicuous location on the device and be readily visible to the user at the time of purchase.

Wireless Receiver **Model : WR-2000S** **Serial Number: 2005612** **FCC ID : NPXWR-2000S** **PRINCE ELECTRONICS CO.**
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE CONDITION THAT THIS DEVICE DOES NOT CAUSE HARMFUL INTERFERENCE.

APPENDIX B – CIRCUIT DIAGRAM

APPENDIX C – TEST PHOTOGRAPHS

The **Line-Conducted** and **Radiated** and **Antenna Power Conducted Test Picture** show the worst-case configuration and cable placement.

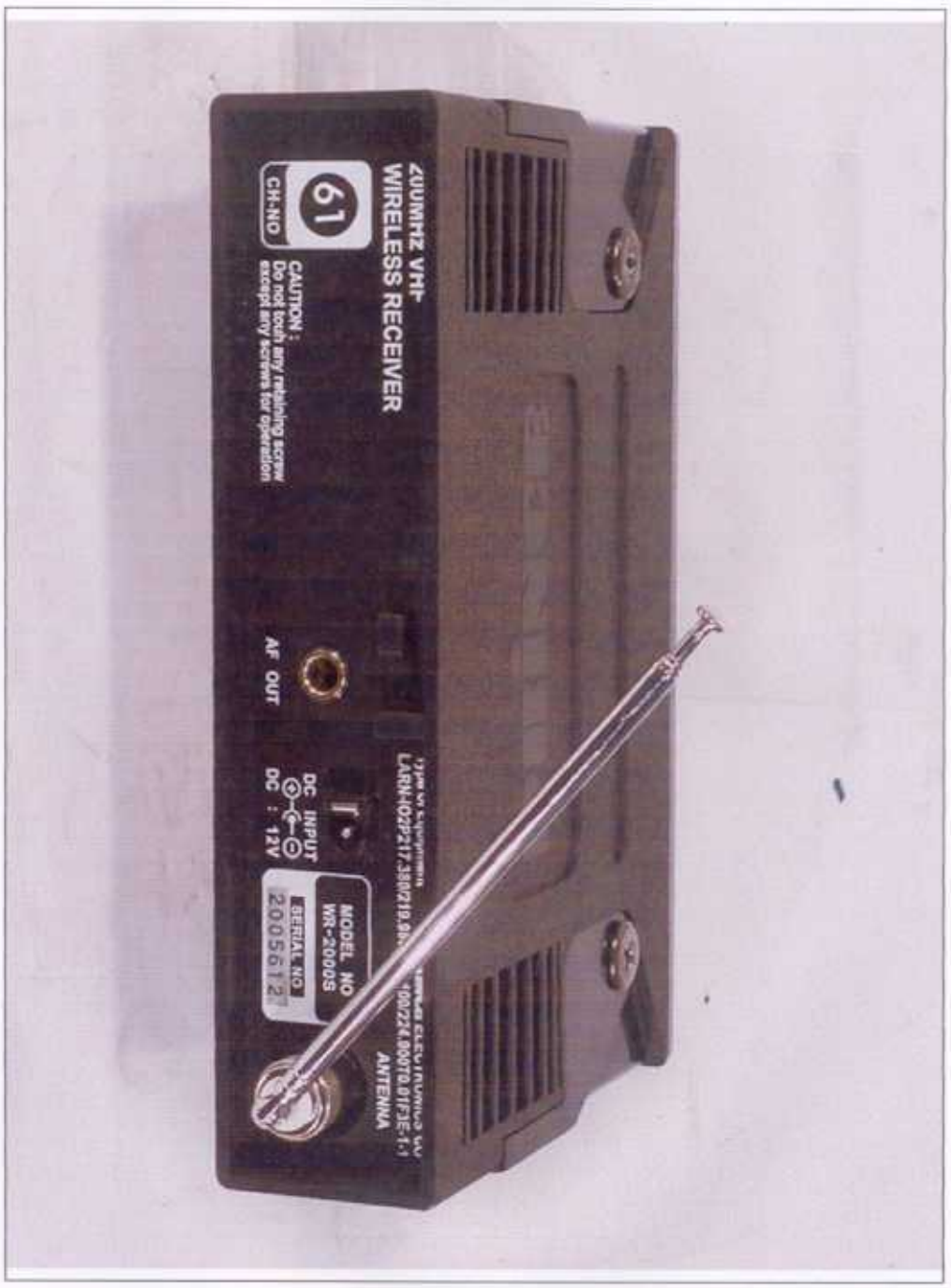
- **Conducted Test Picture**

- **Radiated Test Picture**

APPENDIX D – EUT PHOTOGRAPHS

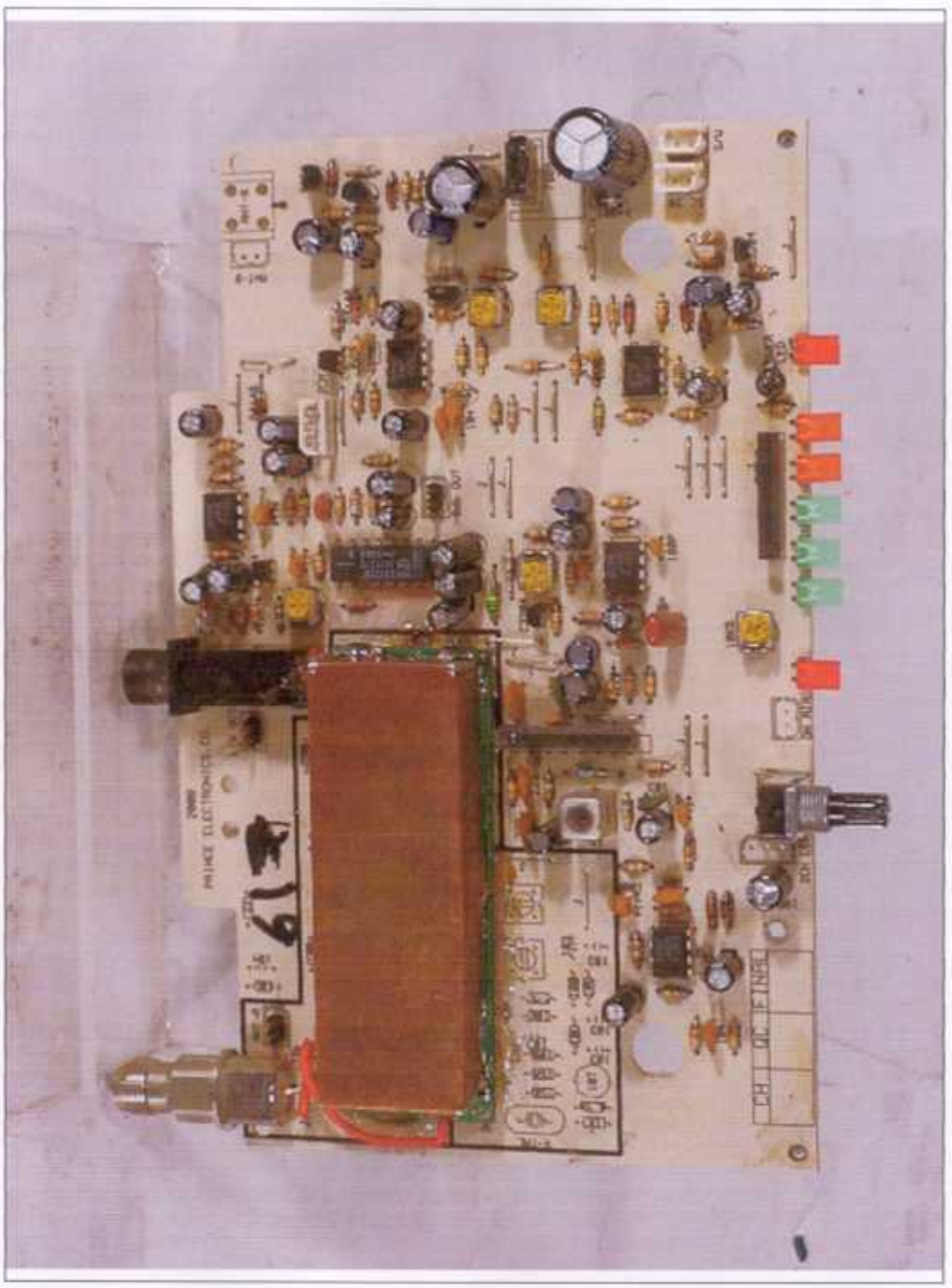
FRONT VIEW

REAR VIEW

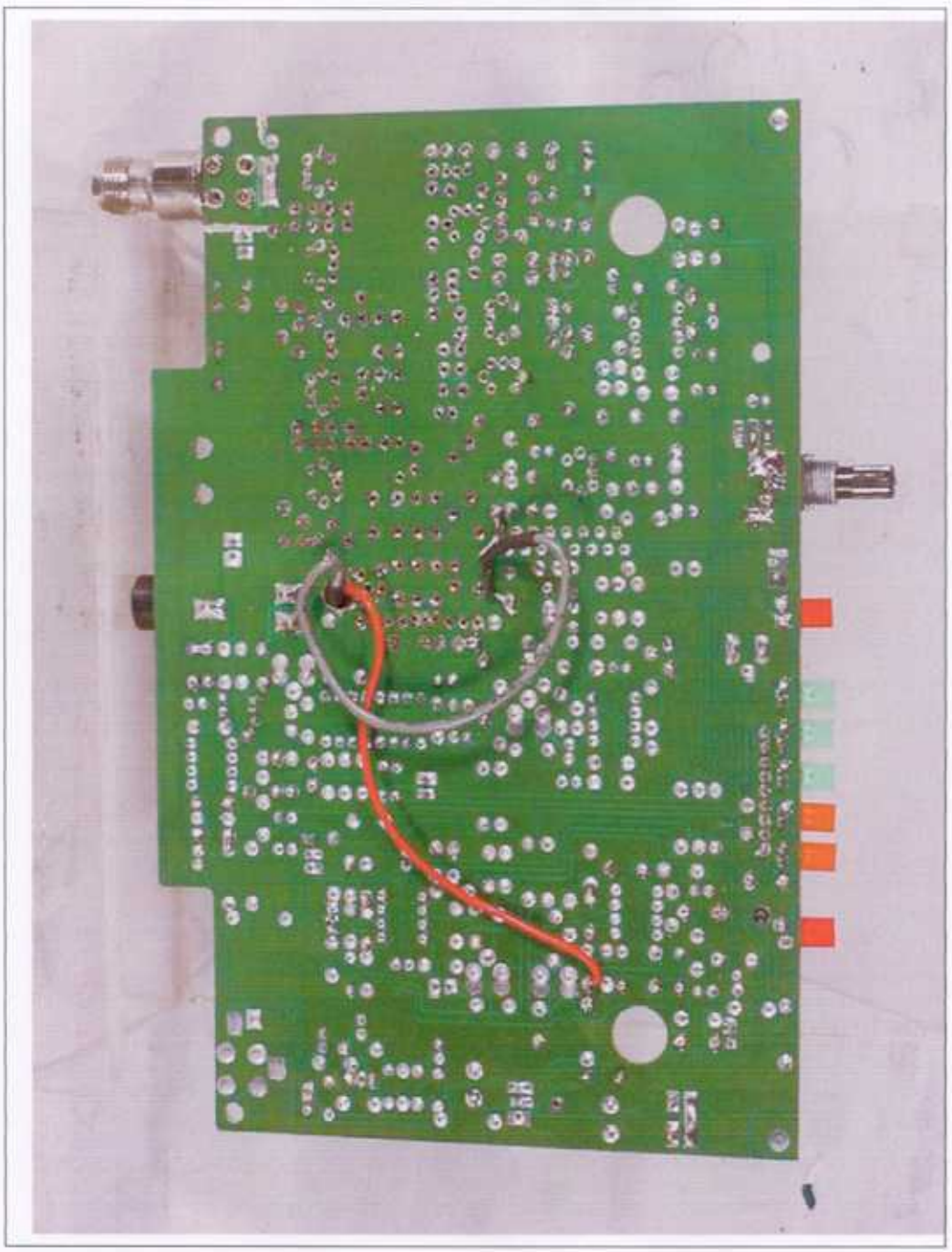

200MHz VHF
WIRELESS RECEIVER
61
CH-NO
CAUTION :
Do not touch any retaining screw
except any screws for operation
AF OUT
DC INPUT
DC : 12V
MODEL NO
WR-2000S
SERIAL NO
2005612
ANTENNA

INSIDE VIEW

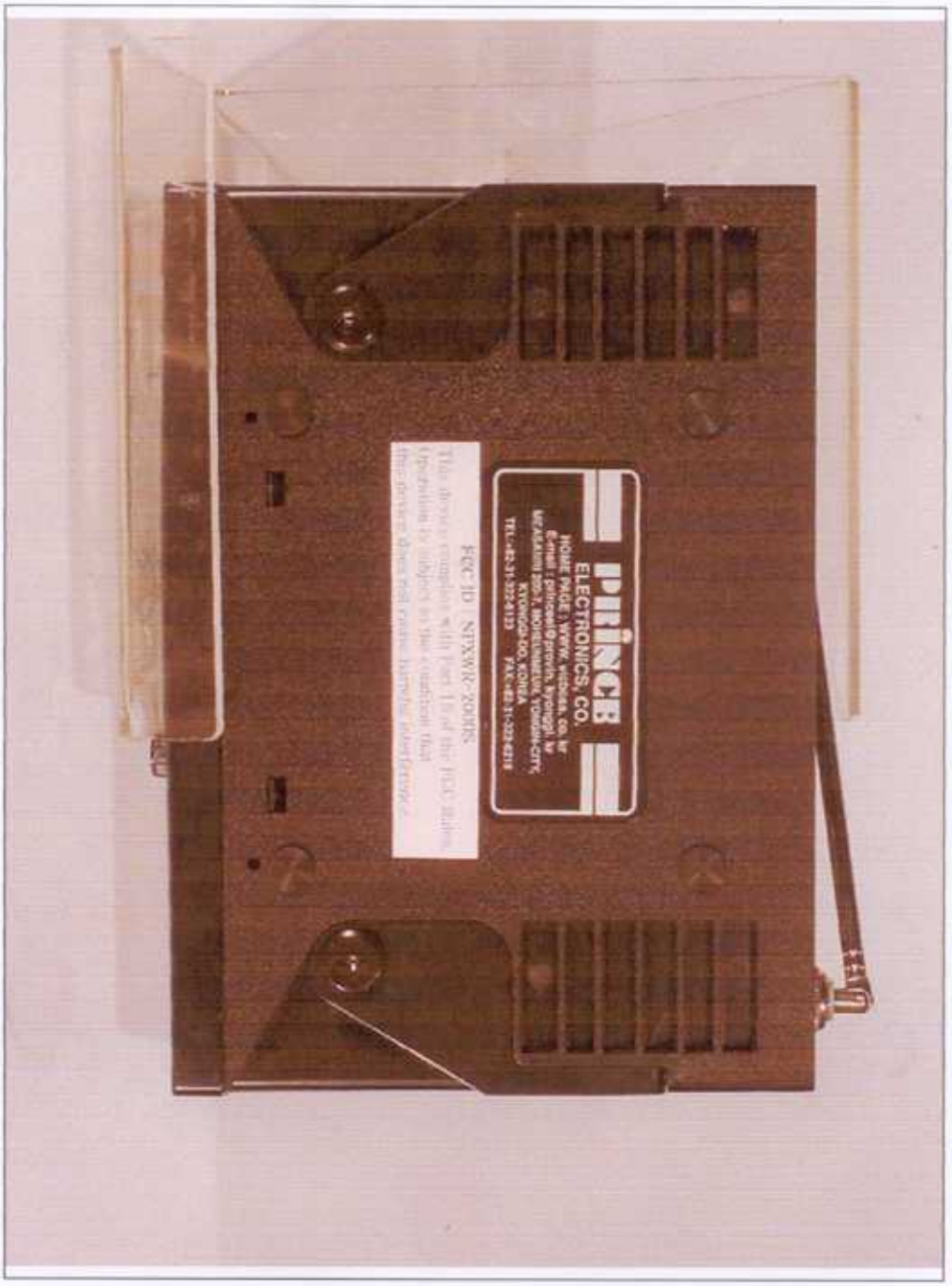
FRONT VIEW OF BOARD



REAR VIEW OF BOARD



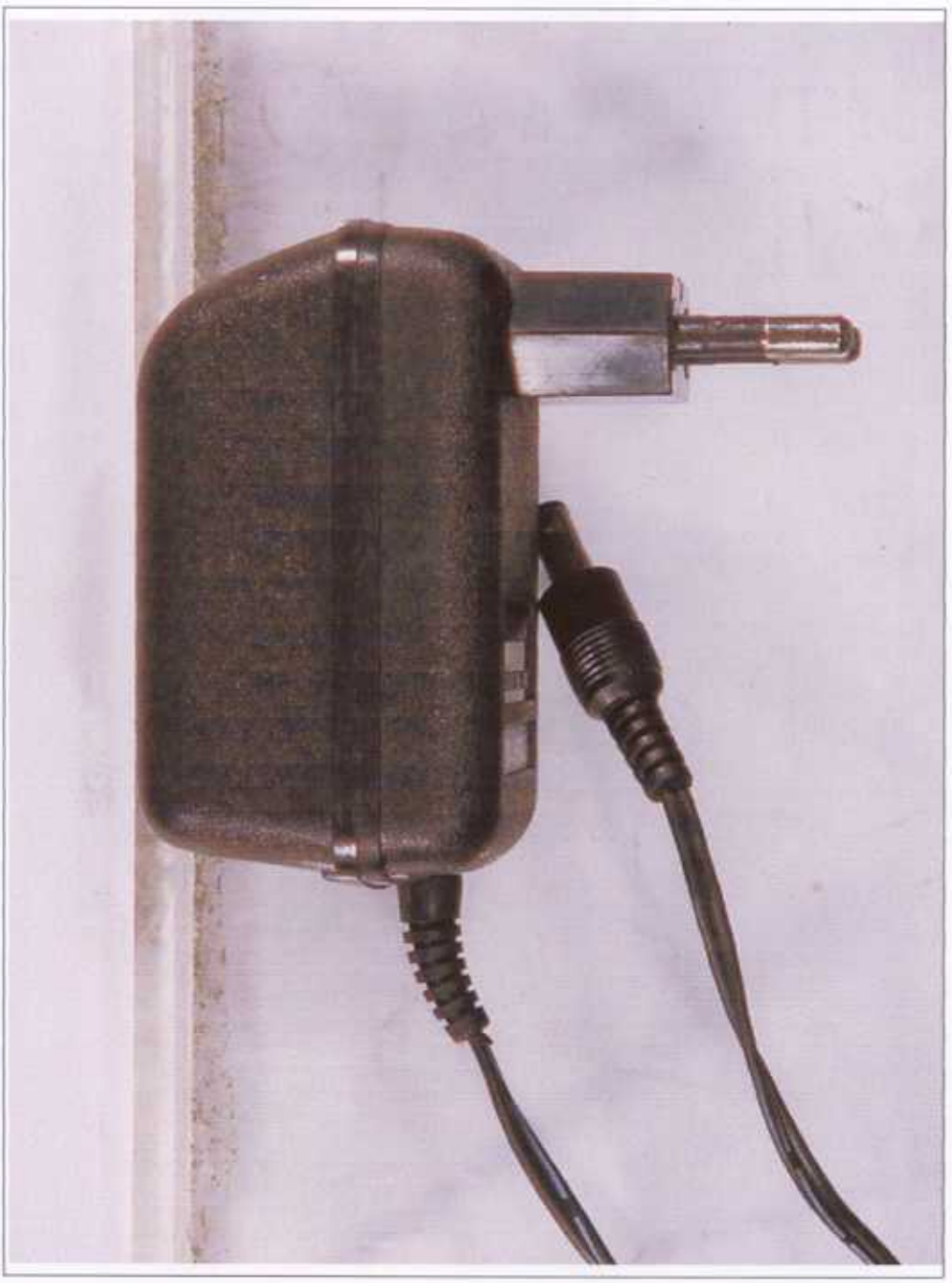
LABEL LOCATION



LABEL

PRINCE
ELECTRONICS, CO.
HOME PAGE : WWW. vicboss. co. kr
E-mail : princeel@provin. kyonggi. kr
MEASANRI 200-7, MOHEUNMEUN, YONGIN-CITY,
KYONGGI-DO, KOREA
TEL:+82-31-322-6123 FAX:+82-31-322-6218
FCC ID : NPXWR-2000S
This device complies with Part 15 of the FCC Rules.
Operation is subject to the condition that
this device does not cause harmful interference.

ADAPTER



APPENDIX E – USER'S MANUAL