FCC ID PER PART 15.231
EMI MEASUREMENT AND TEST REPORT

FOR

Global Assistive Devices, Inc.

4950 North Dixie Highway Suite 121
Fort Lauderdale, FL 33334-3947

FCC ID: O9QDBT300

January 2, 2001

This Report Concerns:	**Equipment Type:**
☒ Original Report	Door Beacon

Test Engineer:	Victor Liu
Test Date:	January 2, 2001
Reviewed By:	John Y. Chan – Engineering Manager
Prepared By:	Bay Area Compliance Laboratory Corporation 230 Commercial Street, Suite 2 Sunnyvale, CA 94086 Tel: (408) 732-9162 Fax: (408) 732 9164

TABLE OF CONTENTS

1 - GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

The Global Assistive Devices, Inc., model O9QDBT300 or the "EUT" as referred to in this report is a door beacon which measures 3 1/8" L x 2 ¼ " W x 3 ¼ " H.

1.2 Objective

This certification report is prepared on behalf of Global Assistive Devices, Inc. in accordance with Part 2, Subpart J, and Part 15, Subparts A, B, and C of the Federal Communication Commissions rules.

The objective of the manufacturer is to demonstrate compliance with FCC rules, Part 15, Sec 205, 209, and 231 for conducted and radiated margin.

1.3 Related Submittal(s)/Grant(s)

No Related Submittals

1.4 Test Methodology

All measurements contained in this report were conducted with ANSI C63.4 –1992, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz. All radiated and conducted emissions measurement was performed at Bay Area Compliance Laboratory, Corp. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

1.5 Test Facility

The Open Area Test site used by Bay Area Compliance Laboratory Corporation to collect radiated and conducted emission measurement data is located in the back parking lot of the building at 230 Commercial Street, Suite 2, Sunnyvale, California, USA.

Test sites at Bay Area Compliance Laboratory Corporation has been fully described in reports submitted to the Federal Communication Commission (FCC) and Voluntary Control Council for Interference (VCCI). The details of these reports has been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on February 11 and December 10, 1997 and Article 8 of the VCCI regulations on December 25, 1997. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-1992.

The Federal Communications Commission and Voluntary Control Council for Interference has the reports on file and is listed under FCC file 31040/SIT 1300F2 and VCCI Registration No.: C-674 and R-657. The test sites has been approved by the FCC and VCCI for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratory Corporation is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (NVLAP). The scope of the accreditation covers the FCC Method - 47 CFR Part 15 - Digital Devices, IEC/CISPR 22: 1993, and AS/NZS 3548: Electromagnetic Interference - Limits and Methods of Measurement of Information Technology Equipment test methods under NVLAP Lab Code 200167-0.

1.6 Test Equipment List

Manufacturer	Description	Model	Serial Number	Cal. Due Data
HP	Spectrum Analyzer	8568B	2610A02165	12/6/01
HP	Spectrum Analyzer	8593B	2919A00242	12/20/01
HP	Amplifier	8349B	2644A02662	12/20/01
HP	Quasi-Peak Adapter	85650A	917059	12/6/01
HP	Amplifier	8447E	1937A01046	12/6/01
A.H. System	Horn Antenna	SAS0200/571	261	12/27/01
Com-Power	Log Periodic Antenna	AL-100	16005	11/2/01
Com-Power	Biconical Antenna	AB-100	14012	11/2/01
Solar Electronics	LISN	8012-50-R-24-BNC	968447	12/28/01
Com-Power	LISN	LI-200	12208	12/20/01
Com-Power	LISN	LI-200	12005	12/20/01
BACL	Data Entry Software	DES1	0001	12/20/01

1.7 Equipment Under Test (EUT)

Manufacturer	Description	Model	Serial Number	FCC ID
Global Assistive Devices, Inc.	Door Beacon	DBT300	N/A	O9QDBT300

1.8 Power Supply and Line Filters

Manufacturer	Description	Model	Serial Number	FCC ID
SANYO	Battery	9V	N/A	N/A

2 - SYSTEM TEST CONFIGURATION

2.1 Justification

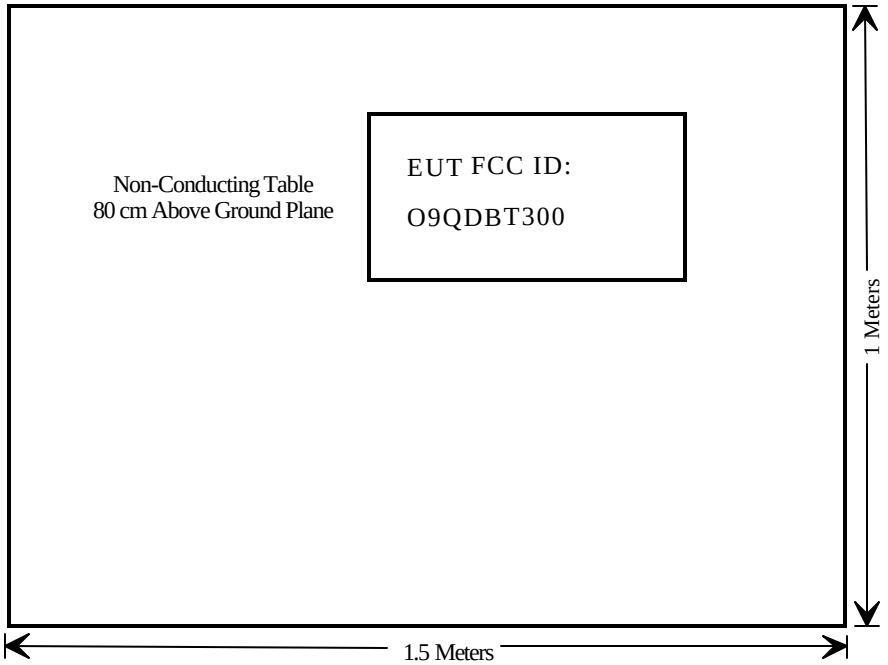
The EUT was configured for testing in a typical fashion (as normally used in a typical application).

The final qualification test was performed with the EUT operating at normal mode.

2.2 Block Diagram

Appendix A contains a copy of the EUT's block diagram as reference.

2.3 Test Setup Block Diagram



2.4 Equipment Modifications

No modifications were necessary for the EUT to comply.

3 - CONDUCTED EMISSIONS TEST DATA

Not applicable because of battery operation.

4 - RADIATED EMISSION DATA

4.1 EUT Setup

The radiated emission tests were performed in the open area 3-meter test site, using the setup accordance with the ANSI C63.4 - 1992. The specification used was the FCC Class B limits.

The spacing between the peripherals was 10 cm.

External I/O cables are draped over edge of test table or bundled when necessary.

4.2 Spectrum Analyzer Setup

According to FCC Rules, 47 CFR 15.33, since the internal processor speed operates between 108 MHz and 500 MHz, the EUT was tested to 2000 MHz.

During the radiated emission test, the spectrum analyzer was set with the following configurations:

Start Frequency	30 MHz
Stop Frequency	2000 MHz
Sweep Speed	Auto
IF Bandwidth	100 KHz
Video Bandwidth	1 MHz
Quasi-Peak Adapter Bandwidth	120 kHz
Quasi-Peak Adapter Mode	Normal
Resolution Bandwidth	1MHz

4.3 Test Procedure

Maximizing procedure was performed on the six (6) highest emissions to ensure EUT is compliant with all installation combination.

All data was recorded in the peak detection mode. Quasi-peak readings performed only when an emission was found to be marginal (less than -4 dBµV), and are distinguished with a "**QP**" in the data table.

The EUT was operating at normal to represent worst case results during final qualification test. Therefore, this configuration was used for final test data recorded in the table(s) listed under section 4.7 of this report.

4.4 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Antenna Factor + Cable Factor - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dBµV means the emission is 7dBµV below the maximum limit for Class B. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – FCC Limit

4.5 Summary of Test Results

According to the final data in section 4.6, the EUT complied with the FCC 15.231 (b) standards and these test results are deemed satisfactory evidence of compliance with RSS210 of the Canadian Interference-Causing Equipment Regulations, and had the worst margin of:

-2.2 dBmV at **315.84 MHz** in the **Horizontal** polarization for Normal operating mode, 30 to 2000MHz, 3 meters.

4.6 Radiated Emissions Test Result Data

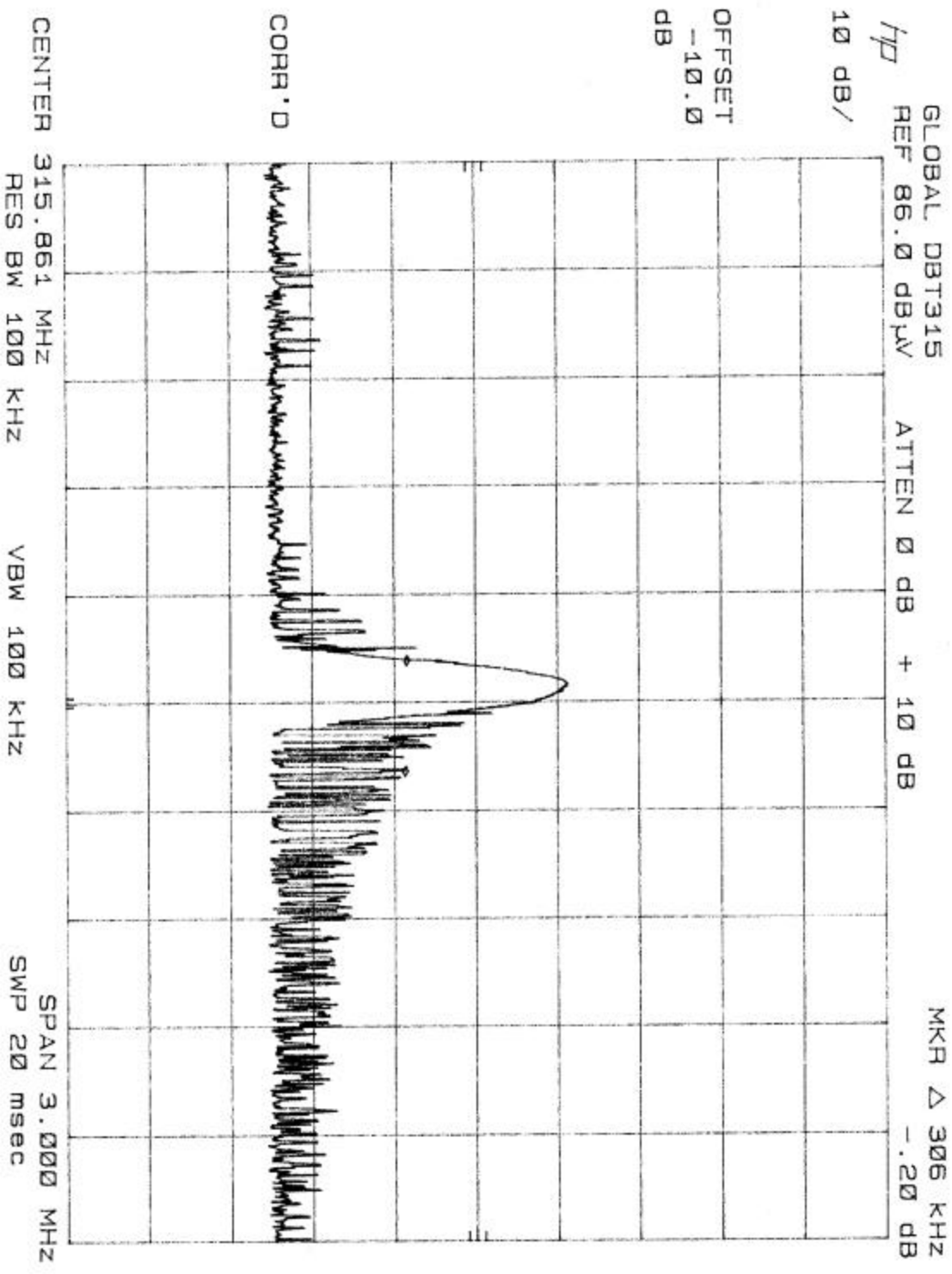
4.6.1 Final Test Data for Normal Operating Mode, 30 to 2000 MHz, 3 meters.

INDICATED		TABLE	ANTENNA		CORRECTION FACTOR			CORRECTED AMPLITUDE	FCC 15.231	
Freqency MHz	Ampl. dBmV/m	Angle Degree	Height Meter	Polar H/ V	Antenna dBmV/m	Cable dB	Amp. dB	Corr. Ampl. dBmV/m	Limit dBmV/m	Margin dB
315.84	76.3	0	1.5	H	15.9	3.7	22.4	73.5	75.7	-2.2
315.92	73.9	0	1.5	V	15.9	3.7	22.4	71.1	75.7	-4.6
947.48	32.7	0	1.5	H	24.4	3.7	22.7	38.1	55.7	-17.5
630.08	32.6	0	1.5	V	20.5	3.4	21.4	35.1	55.7	-20.5
947.24	28.4	0	1.5	V	24.4	3.7	22.7	33.8	55.7	-21.8
630.12	29.8	0	1.5	H	20.5	3.4	21.4	32.3	55.7	-23.3

Appendix A:

15.231C. 20dB bandwidth

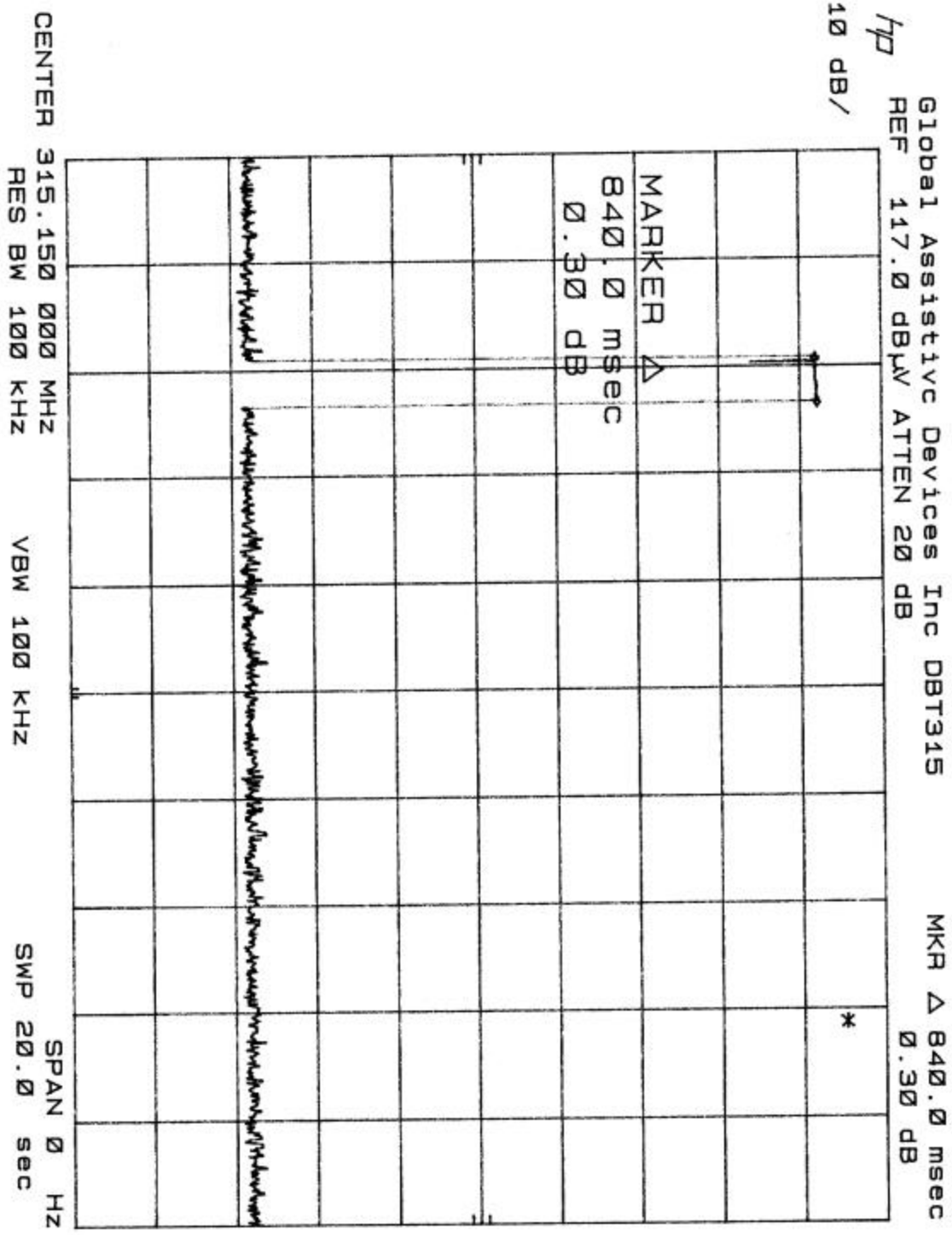
Result: Complies with the requirement. (306kHz < 0.25% of 315.84 MHz)


GLOBAL DBT315
REF 86.0 dBµV
10 dB/
ATTEN 0 dB + 10 dB
OFFSET
-10.0
dB
CORR'D
MKR Δ 306 kHz
-.20 dB
CENTER 315.861 MHz
RES BW 100 kHz
VBW 100 kHz
SPAN 3.000 MHz
SWP 20 msec

Appendix B:

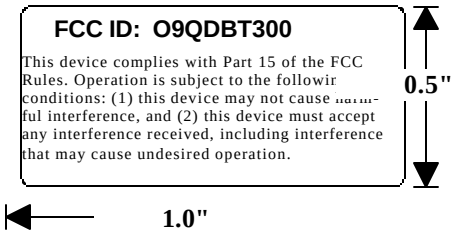
15.231(a). Activation time less than 5 seconds. Periodic Transmissions at regular predetermined intervals are not permitted.

Result: Complies with the requirement. (The EUT will stop transmission within 5 seconds)


Global Assistivc Devices Inc DBT315
REF 117.0 dBµV ATTEN 20 dB
MKR Δ 840.0 msec
0.30 dB
10 dB/
MARKER Δ
840.0 msec
0.30 dB
CENTER 315.150 000 MHz
RES BW 100 kHz
VBW 100 kHz
SPAN 0 Hz
SWP 20.0 sec

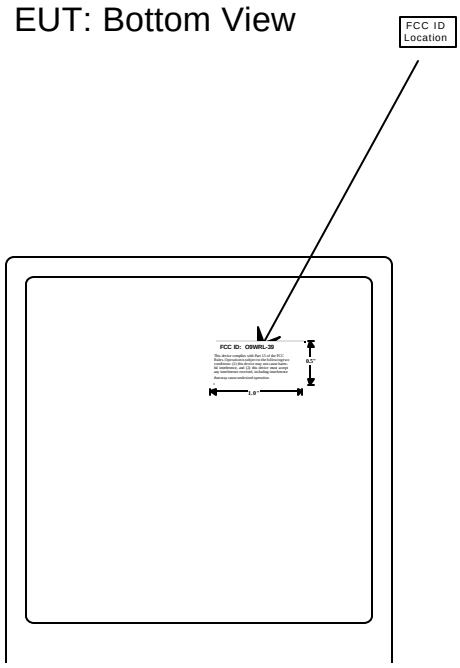
5– FCC PRODUCT LABELING AND WARNING STATEMENT

5.1 FCC ID Label



Specifications: Text is black in color and is left justified. Labels are printed in indelible ink on permanent adhesive backing and shall be affixed at a conspicuous location on the EUT.

5.2 Proposed Label Location on EUT



5.3 FCC Warning Statement

The FCC Warning Statement is included in the product manual. A proposed sample of the statement is presented in Appendix D of this report as reference.

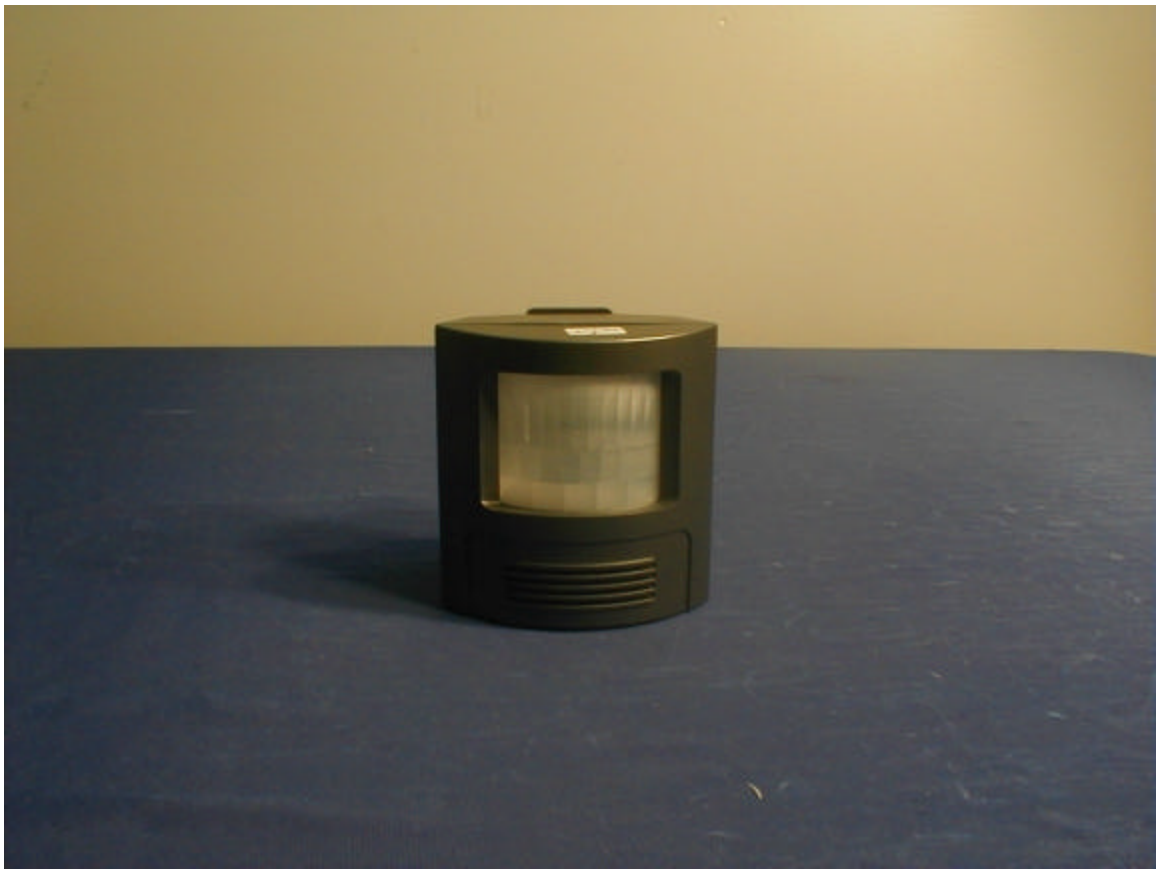
6 - Radiated Setup Photographs

6.1 Radiated Emission Photograph – Front View

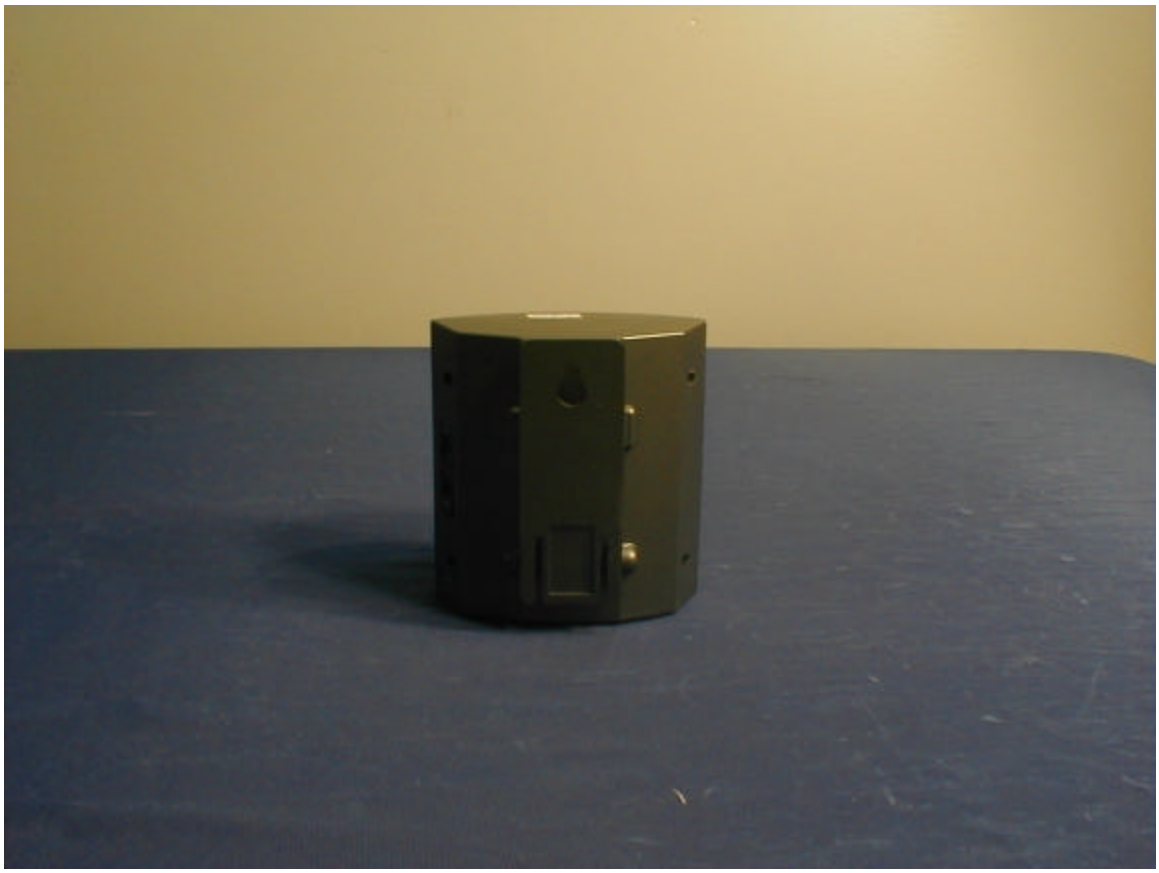
6.2 Radiated Emission Photograph – Rear View

7 – EUT PHOTOGRAPHS

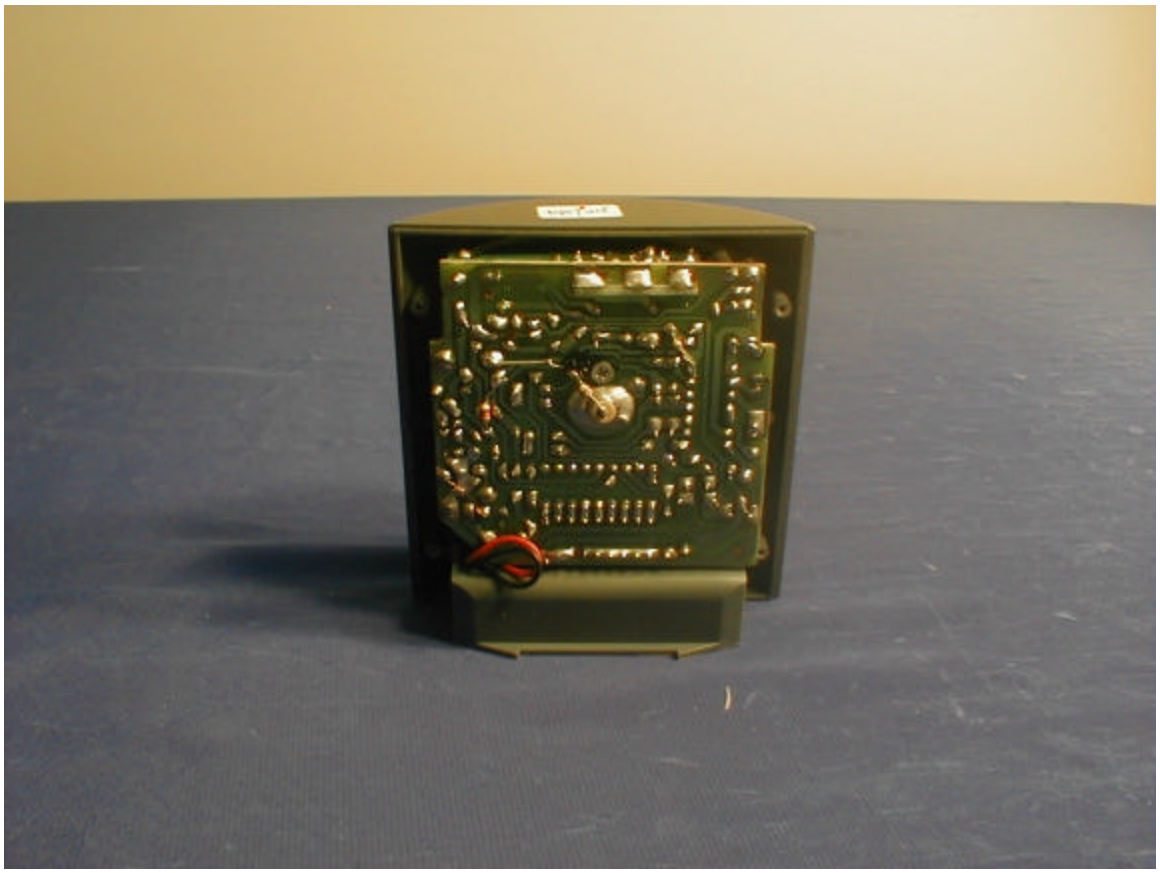
7.1 EUT: Chassis Front View



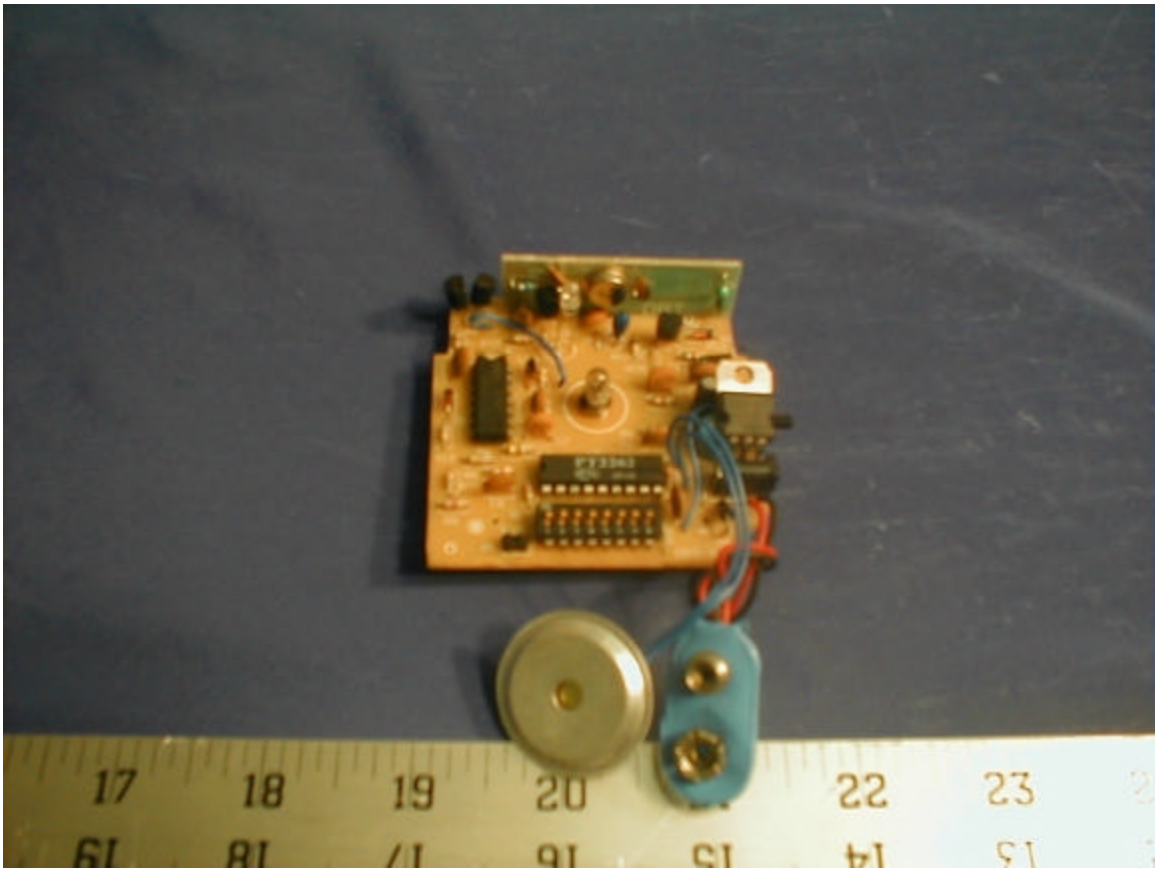
7.2 EUT: Chassis Rear View



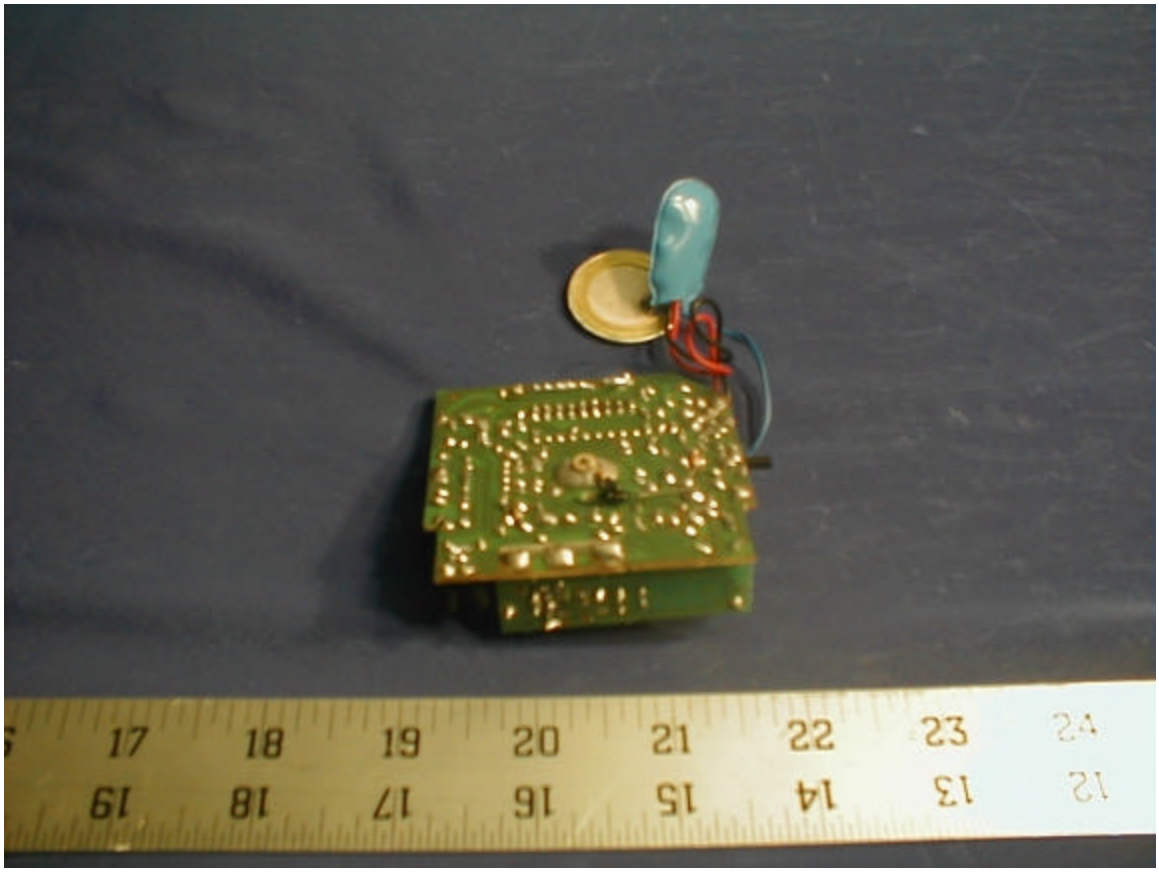
7.3 EUT: Chassis Without Cover



7.4 EUT: Transmitter Component View



7.5 EUT: Transmitter Solder View



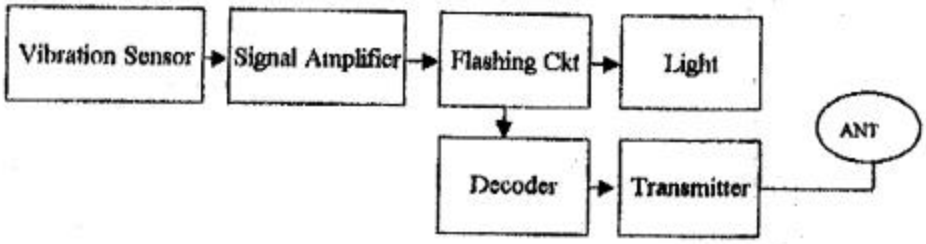
Appendix C –EUT BLOCK DIAGRAM /SCHEMATICS

o: BACL SZ 传真 From: Lily Wu 0755 6055620 0-12-11 18:32:26 Page 4 of 6

FROM : CHINASON PHONE NO. : 07556055620 Dec. 11 2000 06:21PM P01

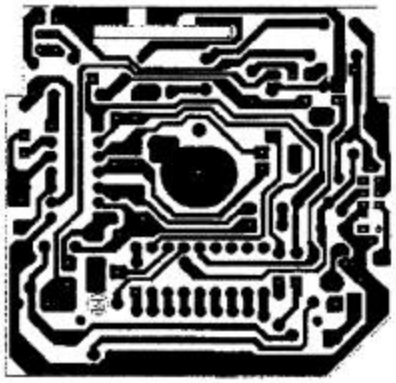
DBT300 原理框图

DBT300 Flashing Transimitter POWER : 电压：9VD

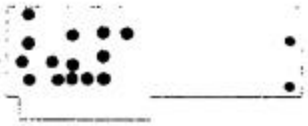


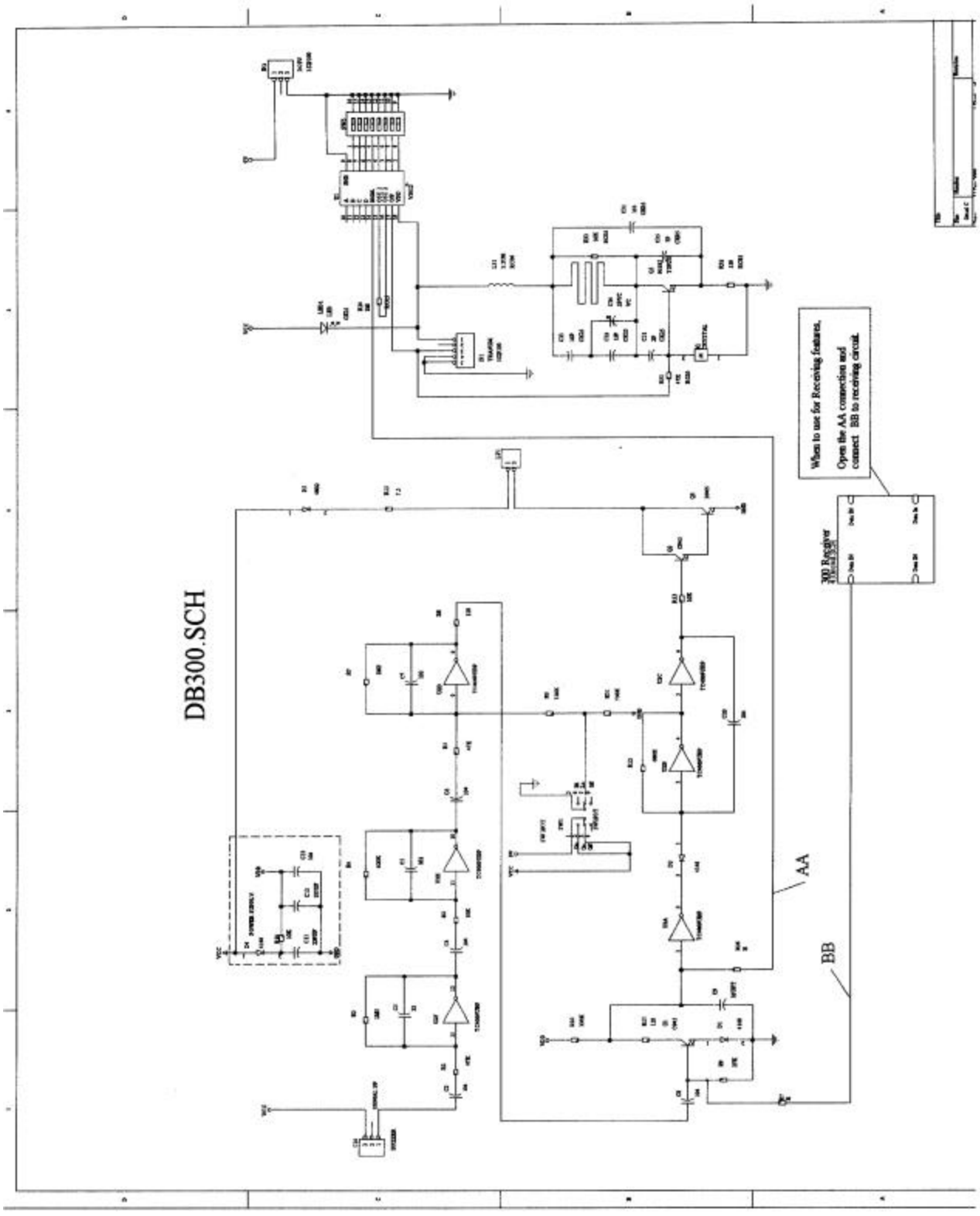
5 6055620 0-12-25 16:42:54 Page 2 of 8

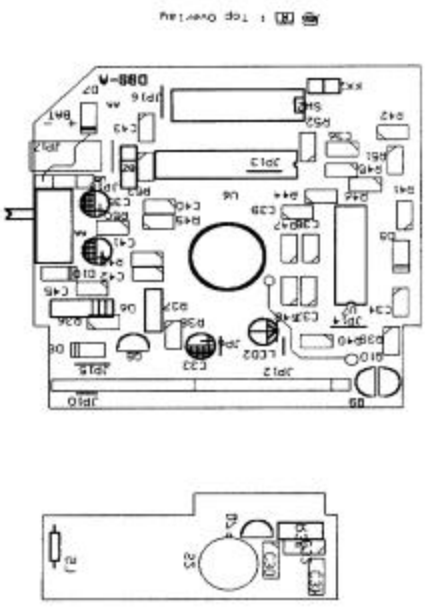
File Name : DBT300.PCB

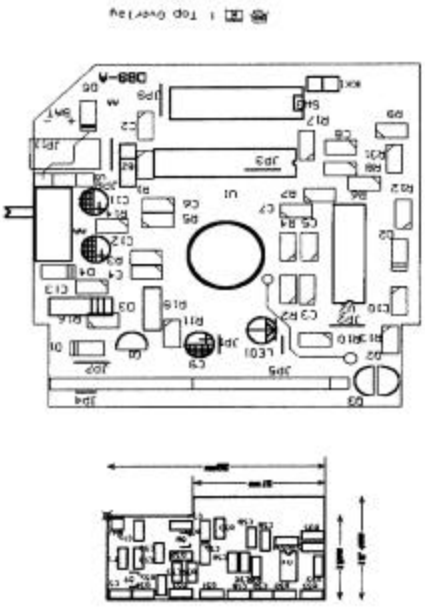


File Name : DBT300.PCB




DB300.SCH
When to use for Receiving feature,
Open the AA connection and
connect BB to receiving circuit.
AA
BB





Appendix D – USER MANUAL

DOOR BEACON™ DOOR KNOCK TRANSMITTER

MODEL DBT300

Sends signal of knock up to 80 feet to remote wireless receiver(s).
Use with DOOR BEACON™ *DOOR KNOCK RECEIVER(S) MODEL DBR 300*
Or ACCESS 3, *MODEL ALR130 ALERTING DEVICE (Purchased Separately)*

Built in Light will flash to alert you of knock.
Vibration from each knock will active light to flash for several seconds.

Easy to Use.
Simply hang or fasten to door with bracket or Velcro included.

Battery Operated & Portable
Uses one 9 volt Alkaline Battery (purchased separately)

Model DBT300

o: BACL SZ 보기 From: Office SZ 0755 6055620 0-12-25 16:51:56 Page 3 of 3

DBT300/DBR300 features.

DBT300 silent chime w/transmitter.

Function:

As DBT300 is activated by door knocking, it may flash and transmit coded data out, transmitting range may up to 30 meters.

DBT electrical characteristics:

quiescent current : 0.7ma.
working current : 100-200ma.
rated voltage : 9VDC.
flashing duration : 2-3seconds.

DOOR BEACON™ DOOR KNOCK TRANSMITTER

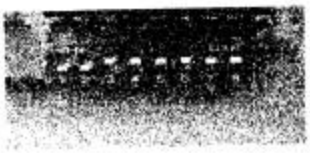
MODEL DBT300

Open Battery Compartment Cover and connect one 9 volt Alkaline Battery to terminals.
Insert Battery into compartment and reposition cover.

To attach the included "Over the Door" Wire Hanging bracket, Insert from bottom of unit and slide upward until bracket is secure in slots at bottom of unit. Unit may also be positioned on a door by using the Velcro included. Unit should be positioned on the inside of the door.

Slide switch to ON position to activate. Select High or Low Sensitivity. Unit should be in Off position when not in use.

Easy to set Selectable Frequencies are located inside battery compartment. Set the numbered dip switches to match the receiver dip switches being used. Different settings can be used to allow for use of more than one transmitter/receiver system without interference.



To replace the light bulb: (290 ma, 4.8 volt required; one replacement included)

1) Remove 4 screws in back of cabinet.
2) Remove Battery Compartment Cover and Cabinet back.
3) Remove screw in middle of circuit board
4) Lift printed circuit board.
5) Unscrew bulb (small pliers may be required)
6) Install replacement 290ma, 4.8Volt Light Bulb.

ONE YEAR LIMITED WARRANTY:

DOOR BEACON™ DOOR KNOCK TRANSMITTER Model DBT300 is warranted to be free from defects in material or workmanship for one year from the date of purchase. This warranty does not include light bulb. This warranty does not apply to any unit which has been used for other than its intended use, or has been subjected to misuse, negligence or accident, or has been opened or serviced by anyone other than an authorized GLOBAL ASSISTIVE DEVICES, INC. Service Center. GLOBAL ASSISTIVE DEVICES, INC. may select to replace the entire unit rather than repair it. Before sending unit for service, check to ensure that battery and/or light bulb do not need replacing. For service during the warranty period, return the unit, with proof of purchase date, in a secure package, insured and with shipping charges prepaid. No C.O.D. packages will be accepted. Include your return street address and a note describing the service required. Enclose $7.50 (check, money order, Visa, Master Card or American Express) for domestic shipping and handling charges. Other countries please contact us for pricing.

GLOBAL ASSISTIVE DEVICES, INC.
Fort Lauderdale FL USA

UPC CODE
797097 328307

Made in China

Appendix E –AUTHORIZATION LETTER

November 14, 2000.

GLOBAL
ASSISTIVE DEVICES, INC.

Federal Communications Commission
7435 Oakland Mills Road
Columbia, Maryland, 21046

Manufacturers
of Assistive Devices
for Special Needs

Sir/Madam,

Re: FCC grand for Door Beacon Door Knock Signaler Transmitter and Receiver

This letter is an authorization to accept Bay Area Compliance Lab. Corporation as an agent for GLOBAL ASSISTIVE DEVICES, INC., 4950 North Dixie Highway, Fort Lauderdale, Florida 33334, to sign applications before the Commission on our behalf, to make representations to you on our behalf, and to receive and exchange data between our company and the commission in connection with certification of the following Chinason product:

Door Beacon Door Knock Signaler Transmitter Model DBT300 and Door Beacon Door Knock Signaler Receiver Model DBR300.

Under FCC docket number 20780 and general docket number 80-284 persuant to part 15, FCC rules and regulations.

Sincerely,

Brian Hewitt
President

4950 North Dixie Highway
Suite 121
Fort Lauderdale
Florida
33334-3947
U.S.A.

Telephone
(954) 784-0035

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(954) 784-0047

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www.globalassistive.com