CANARY II MODEL 4080

INSTRUCTION SHEET

TURNING THE CANARY II ON AND OFF AND BATTERY CHECK

The on/off switch is located on the right side of the instrument behind the oblong opening. To turn the instrument on slide the on-off switch towards the top of the instrument. You will not be able to do it with your finger, but a pen or pencil inserted into the slot will work. When first turned on the Canary II will beep. This indicates a good or poor battery. If it goes BEEEEEEEEEP then it is a good battery. If it goes beep, rather like a chirp, then it is a poor battery and should be replaced.

BACKGROUND RADIATION

The Canary as delivered will beep every 0.01 mR. Each time it beeps the length of beep will indicate the battery condition. If it has a short beep, rather like a chirp, then it needs a new battery.

DIGITAL DISPLAY

The display shows the cumulative radiation level since the instrument was turned on. The display has a maximum of 6 digits. The first digit on the digital display is 0.01 mR. The numbers under the display correspond to the digit above them. If the display reads 326, the 3 is over the 1 mR and indicates 3 mR. The 2 is over the .1 mR and indicates .2 mR. The 6 is over the .01 mR and indicates .06 mR. This would be a reading of 3.26. Another way to think of the level is to think of the decimal point two places to the left.

RESET

To reset the instrument to zero, turn it off, wait 5 seconds, then turn it back on. The display should read 0.

BATTERIES

The batteries will last about 1000 hours at background levels. To change them, remove the thumbscrew on the top and slide the back up from the front. It should slide easily. Remove the batteries by sliding them toward the top of the instrument. Do ***NOT*** use a metal screwdriver to remove them as this may short the batteries. We supply a wood battery removing tool Replace them with the polarity as shown on the battery holder. BATTERY TYPE: 2 ea. BR2325.

BEEPER

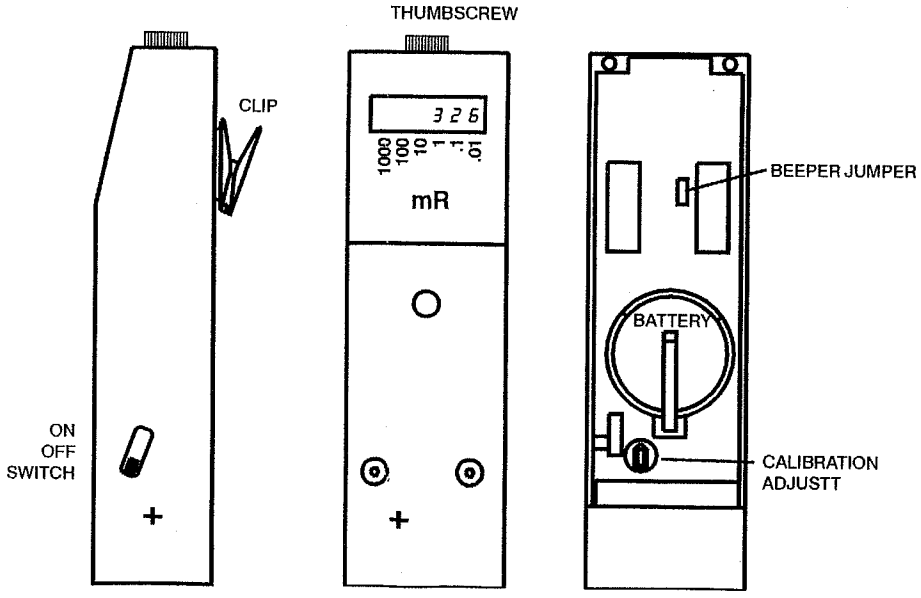
The beeper will beep every time the instrument receives 0.01 mR. The beeper can be turned off. Open the case as described under BATTERIES above. Remove the small jumper in the center of the board. Replace the case. The beeper will still beep at turn on to indicate the battery condition.

CALIBRATION

To calibrate the instrument, expose it from the front. The center of the detector is midway between the front and the rear of the case, and 1/2 in up from the bottom. The calibration adjust potentiometer is on the bottom of the circuit board near the detector. Turn it clockwise to increase the sensitivity.

SHOCK

If the case is severely banged by a hard instrument or dropped on a hard floor, the display may add a count. This is to be expected, however remember that it is only 0.01 mR



Health Physics Instruments, 330 D South Kellogg Ave, Goleta, CA 93117 TEL 805.964.3615 FAX 805.964.3162 fwt.com
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DOSIMETER CALIBRATION

CAL# 12554
Prev. New

health physics instruments
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INSTRUMENT OWNED BY:	EQUIPMENT NO.	DATE:
Harvard Science Center		May 31, 2006

MFG.:	MODEL:	TYPE:
HPI	4080	Solid State

CALIBRATION DATA :

Source	Type	Cal Constant		Due Date	Source	Type	Cal Constant		Due Date
CS1:	CS137		mR/h @ 1 m	8/27	S:	Ra-226	2.095	mR/h @ 1 m	8/27
CS2:	CS137		mR/h @ 1 m	8/27	W:	Ra-226	0.138	mR/h @ 1 m	8/27
CS1-1:	CS137		mR/h @ 1 m	8/27	N1:	Cf252		mrem/h@ 1 m	Assay 1/91
CS1-2:	CS137	98.6	mR/h @ 1 m	8/27	N2:	Cf252		mrem/h@ 1 m	Assay 1/99
CS1-3:	CS137		mR/h @ 1 m	8/27	Pulser:	Model: MP2	Serial No.:	001	6/06

Source	Distance	Time	Exposure	Scale Readings / Serial Number				
	cm	Minute	mR	1500	1501	1502	1503	1504
CS1-2	128.2	1	1	1.01	1.01	0.98	1.07	1.07
	286.6	0.5	0.1	0.11	0.09	0.09	0.11	0.10
				1505	1506	1507	1508	1509
CS1-2	128.2	1	1	0.95	1.00	0.96	1.06	1.05
	286.6	0.5	0.1	0.09	0.11	0.11	0.09	0.10
				1510	1511			
CS1-2	128.2	1	1	1.01	0.97			
	286.6	0.5	0.1	0.11	0.11			

BAROMETER mmHg:	TEMPERATURE °C	BACKGROUND @ 4HRS
763	30	OK

COMMENTS:

CPM ranges set electronically. Background subtracted from all readings. ( ) indicates reading as found. Gamma calibrations from the side of all GM tubes. Calibrations traceable to the National Institute Of Standards And Technology.

☒ Instrument OK

CALIBRATION BY: RON GODDEN	DATE	CHECKED BY: JOHN S. HANDLOSER, JR.	DATE
Ron Godden	6-1-06	JSH	6.1.06