

Data protocol in E0060-T

- In each cycle of data transmission, it consists of 5 exactly the same data string with details of each string as follows:

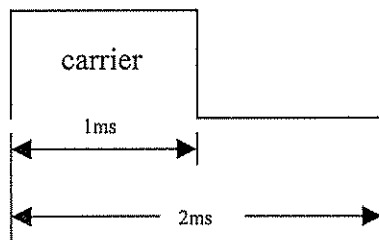
	Description	No. of cycles	Data format (binary)
A	Data Header	4	1 0 1 0
B	Pre-command code	1	1 0 1 1
C	Temperature data	1	12 bits
D	Statue data	1	4 bits
E	Checksum – total number of '1' within (C) to (D) in MOD16	1	4 bits

Note: MSB will be transmitted first for all nibbles of data

Remark:

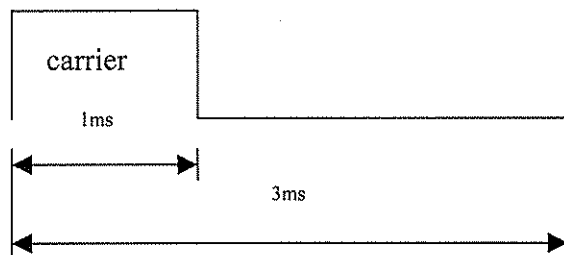
When a '0' is transmitted,

- Carrier of 433MHz is transmitted for 1 ms and inhibited for 1 ms

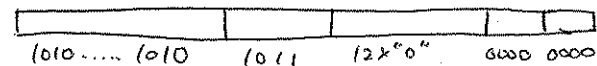


When a '1' is transmitted,

- Carrier of 433MHz is transmitted for 1 ms and inhibited for 2 ms



Worst Case Pattern



Duty cycle

$$= \frac{4 \times 4 + 4 + 12 + 4 + 4 + 4}{100}$$

$$= \frac{44}{100}$$

$$= 0.44$$

Average Factor

$$= 20 \log 0.44$$

$$= -7.1 \text{ dB}$$

- End -

1/17

REF -20.0 dBm

#AT 0 dB

PEAK

LOG

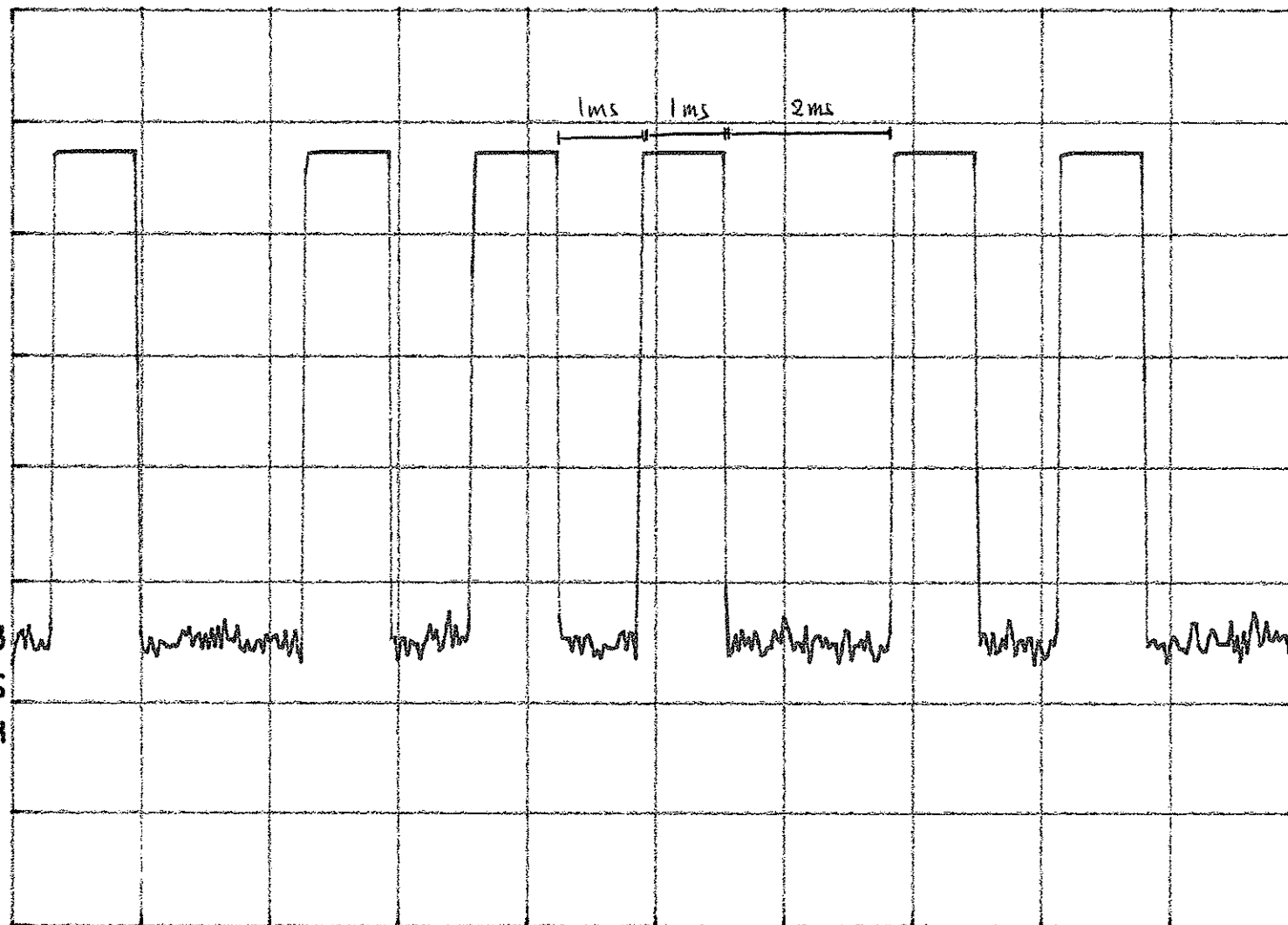
10

dB/

WA SB

SC FS

CORR



CENTER 433.746 MHz

SPAN 0 Hz

#RES BW 3.0 MHz

#VBW 3 MHz

#SWP 15.0 msec

hp

MKR 462.50 msec

REF -20.0 dBm

#AT 0 dB

-32.27 dBm

PEAK

LOG

10

dB/

WA SB

SC VC

CORR

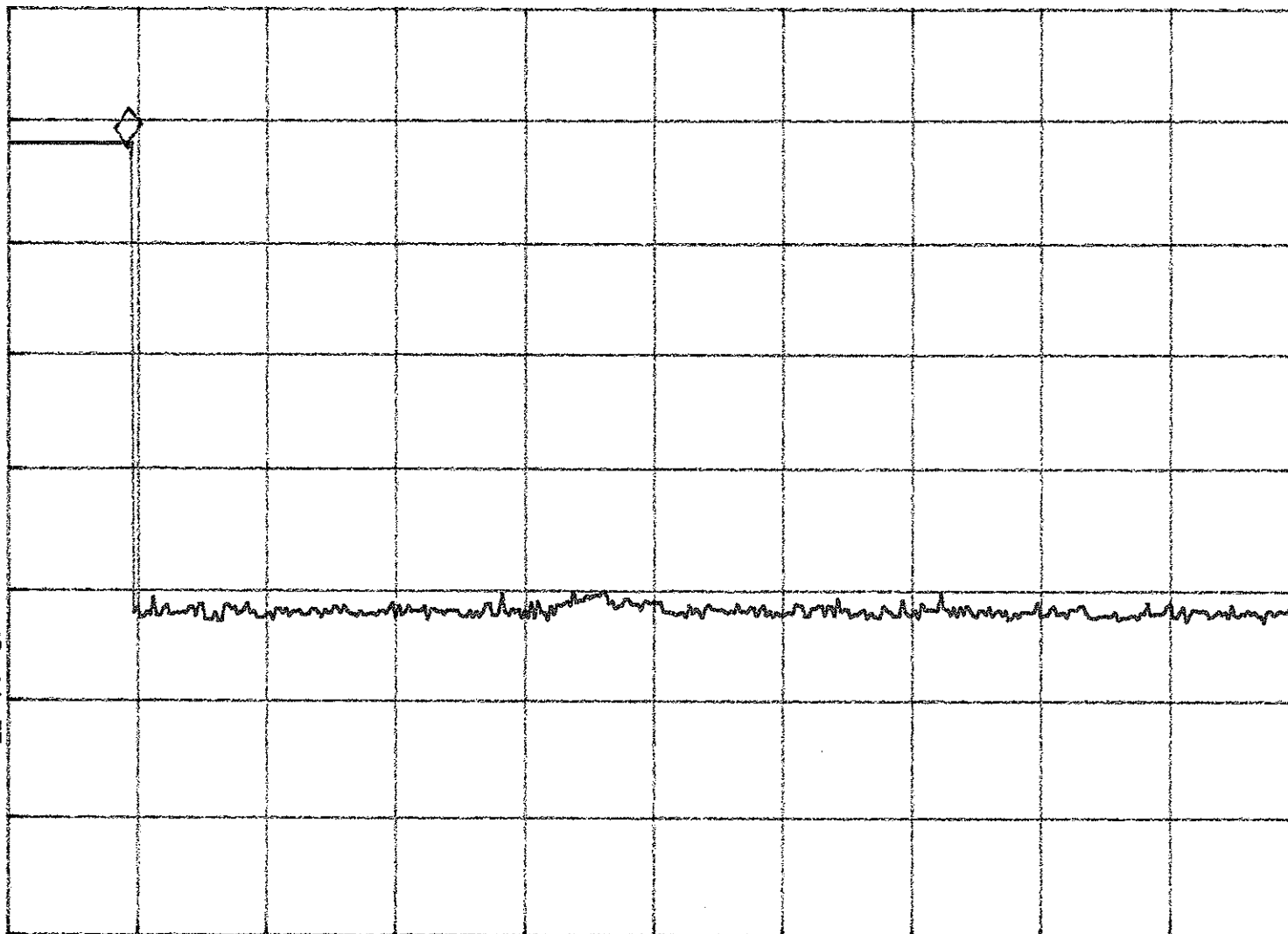
CENTER 433.746 MHz

#RES BW 3.0 MHz

#VBW 3 MHz

SPAN 0 Hz

#SWP 5.00 sec



tip

REF -20.0 dBm

#AT 0 dB

PEAK

LOG

10

dB/

VA SB

SC VC

CORR

5:44 PM
3.3

CENTER 433.746 MHz

SPAN 0 Hz

#RES BW 3.0 MHz

#VBW 3 MHz

#SWP 60.0 sec