

HORIZON

Horizon Hobby Distributors, Inc.
4105 Fieldstone Road, Champaign, IL 61822
Phone: (217) 352-1913 Fax: (217) 355-0058

FAX

March 25, 1999

Mr. Joe Dichoso
Federal Communications Commission
Equipment Authorization Division,
Applications Processing Branch
7435 Oakland Mills Road
Columbia, MD 21046

RE) FCC ID: BRWXR-3
Reference #: 6569

Dear Mr. Dichoso;

Good Day. The requested information in response to your Fax dated March 15, 1999 is as follows:

- 1) Provide the necessary BW calculations $2M+2D$, where M is the maximum modulating frequency and D is the maximum deviation.

Please refer to the attachment included with this fax for this information.

- 2) Section 95.645 (b) states that plug-in crystals must not be accessible to the user. Indicate whether or not crystals are accessible to the user.

Although the transmitter crystal is visible from the back of the transmitter, each crystal is glued in place prior to shipment making it a permanent installation. Consumer removal of the crystal will normally result in damage to the crystal. Therefore, frequency changes are done at the service center only.

Thank you for bringing these questions to my attention. If you require additional information to complete the processing of these documents, please address correspondence to myself directly at:

Horizon Hobby Distributors
ATTN: Len Sabato
Fax: 217-355-0058
Phone: 217-352-1958 Ext. 454

Thank you for your time Mr. Dichoso.

Best Regards;



Len Sabato

FEDERAL COMMUNICATIONS COMMISSION
Equipment Authorization Division, Applications Processing Branch
7435 Oakland Mills Road, Columbia, MD 21046
Telephone: (301) 362-3000, Facsimile: (301) 344-2050

Date: March 15, 1999 04:46 pm

From: Joe Dichoso Telephone: (301)-362-3024

To: Rick Stephens

Organization: _____

Telephone: _____ Facsimile: 217 333-0058

This cover sheet is page 1 of _____. Please direct inquiries to the sender at the above extension.

Reference FCC ID: BRWXR-3

Applicant: Horizon Hobby Distributors Inc

The items indicated below must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 60 days may result in application dismissal pursuant to Section 2.917(e) and forfeiture of the filing fee pursuant to Section 1.1108.

- 1) Provide the necessary BW calculations $2M+2D$, where M is the maximum modulating frequency and D is the maximum deviation.
- 2) Section 95.645(b) states that plug-in crystals must not be accessible to the user. Indicate whether or not crystals are accessible to the user.

Replies to this letter MUST contain the Reference Number: 6569

Designated by Ministry of International Trade and Industry

KANSAI ELECTRONIC INDUSTRY DEVELOPMENT CENTER



HEAD OFFICE
6-8-7, NISHITEMMA
KITA-KU, OSAKA, 530-0047 JAPAN

IKOMA
TESTING LABORATORY
12128, TAKAYAMA-CHO
IKOMA-CITY, NARA, 630-0101 JAPAN

Corporate Juridical Person

Federal Communications Commission
Application Processing Branch
7435 Oakland Mills Road
Columbia, MD 21046

March 23, 1999
KEC No. L-362

Mr. Joe Dichoso

SUBJECT : Additional Information on FCC ID: BRWXR-3[Corresponding ID: 6569]

Reference :

Reference Number :	6569
FCC ID	: BRWXR-3
Applicant	: JAPAN REMOTE CONTROL Co., Ltd.
Device Name	: Radio Control Transmitter
Model No.	: XR-3
Applied Regulation	: Part 95

Dir. Mr. Dichoso

I reply for your question of "Addition Information on FCC ID:BRWXR-3.

Test Items and Procedure

1. Measurement of the Necessary Bandwidth

Above tests were performed under . FCC Part 95 Subpart E Section 95.633(b).

Test Place : KANSAI ELECTRIC INDUSTRY DEVELOPMENT CENTER.

Please put appended the report below in place of the engineering test report which was already submitted.

We are grateful if you would issue the grant at your earliest convenience

Very truly yours :

Seiichi Izumi
Manager
IKOMA TESTING LABORATORY
E-mail: izumi@kec.or.jp



A-036-98-C

ENGINEERING TEST REPORT

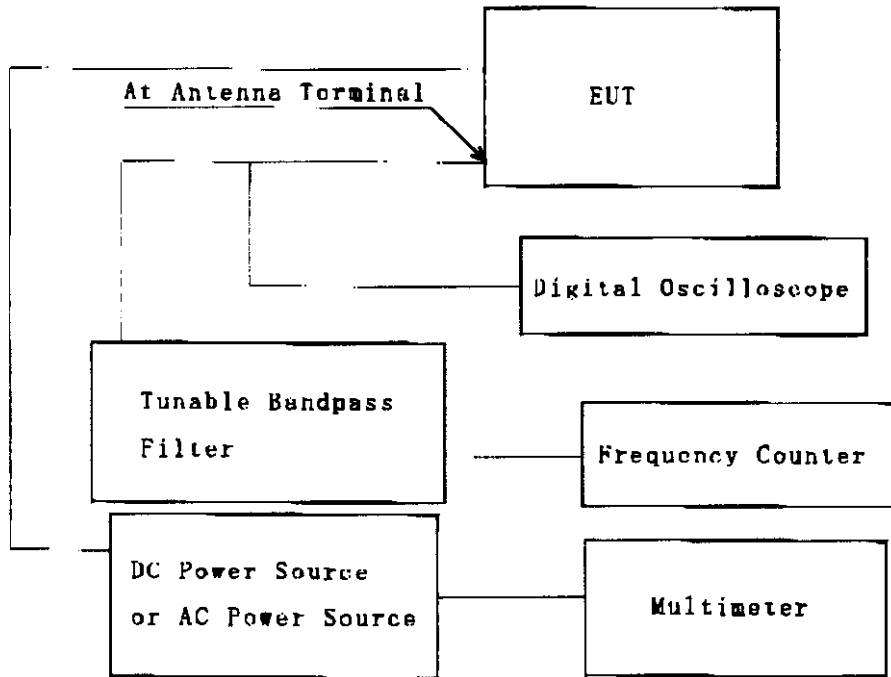
Page 1 of 4

1. MEASUREMENT OF THE NECESSARY BANDWIDTH

1.1 Reference Rule and Specification

FCC Rule Part 95 Subpart E [§ 95.633(b)]

1.2 Test Configuration



1.3 Test Results

1) Measurement of the Peak Frequency Deviation(D)

Flow (low frequency of carrier) : 75.64837 [MHz]
 Fhigh (high frequency of carrier) : 75.65159 [MHz]

[Environment]

Temperature : 21 °C Humidity : 55 %

[Calculation of the Peak Frequency Deviation]

$D = (F_{high} - F_{low}) / 2 = 1.61 [kHz]$

D [kHz] : the Peak Frequency Deviation



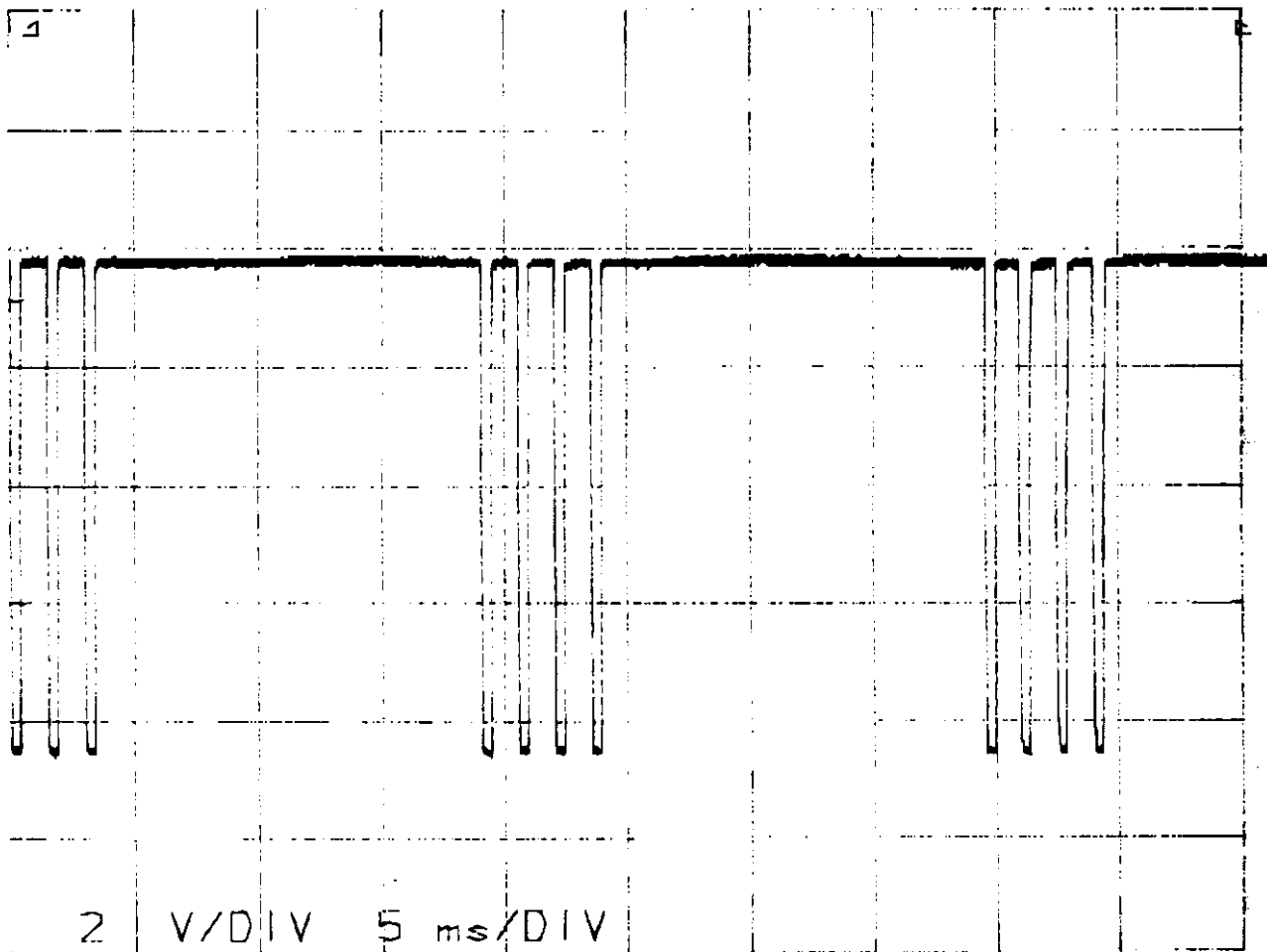
A-036-98-C

ENGINEERING TEST REPORT

Page 2 of 4

2) Measurement of the Maximum Moduration Frequency(M)

Encoded Waveform





A-036-98-C

ENGINEERING TEST REPORT

Page 3 of 4

[Environment]

Temperature : 21 °C Humidity : 55 %

[Calculation of the Maximum Moduration Frequency]

From Encoded Waveform, the Modulation Pulse Width (most minimum) was readed on the plotted graph.

$$T = 4.8 \text{ [mm]} / 16.2 \text{ [mm / DIV]} \times 5 \text{ [ms / DIV]}$$

$$= 1.48 \text{ [ms]}$$

$$M = 1 / T$$

$$= 0.68 \text{ [kHz]}$$

T [ms] : the Modulation Pulse Width (most minimum)

M [kHz] : the Maximum Moduration Frequency

3) Calculation of the Necessary Bandwidth(B)

From the result 1) and 2) , the Necessary Bandwidth(B) was calculated as follows

$$B = 2M + 2D = 4.58 \text{ [kHz]}$$

B [kHz] : the Necessary Bandwidth

[Summary of Test Result]

Above test results show that the Necessary Bandwidth is less than 8.0 kHz

Tested Date: March 19, 1999

Tester Signature

Y. Kawai
Yasunari Kawai



A-036-98-C

ENGINEERING TEST REPORT

Page 4 of 4

1.4 LIST OF TEST INSTRUMENTS

Instrument	Manufacturer	Model No	Specifications	KEC Control No.	if used checked by "X"	Last Cal.	Next Cal.
Regulated DC Power Supply	Kikusui	PAB18-3A	Output 0 ~ 18V, 3A	PD-32	<input checked="" type="checkbox"/>		-
Frequency Counter	Advantest	TR5823II	Frcq Range 1 mHz-1300 MHz	CU-17	<input checked="" type="checkbox"/>	1998/5	1999/5
Digital Plotter	Hewlett Packard	7090A	Plot Area A3 size	RE-17	<input checked="" type="checkbox"/>	-	-
Multimeter	John Fluke	37	Volt Range 0.1mV - 1000 V Ampere Range 0.01 mA - 20 A	MM-91	<input checked="" type="checkbox"/>	1998/3	1999/3
Digital Oscilloscope	Matsushita Communication Ind.	VP-5740A	Frequency Range DC -10 MHz	OS-22	<input checked="" type="checkbox"/>	1998/5	1999/5