

Product Name: Presenter Pro Remote <sup>™</sup> Wireless Cursor Control with Laser	Report No: FCC022022-05616RF14
Product Model: M01664-PGS	Security Classification: Open
Version: V1.0	Total Page: 8

# **TIRT Testing Report**



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# **FCC RF EXPOSURE REPORT**

## **FCC ID: GV3M01664-PGS**

**Project No.** : 2022-05616

**Equipment** : Presenter Pro Remote<sup>™</sup> Wireless Cursor Control with Laser

**Brand Name** : Kensington **Test Model** : M01664-PGS

Series Model : N/A

**Applicant**: ACCO Brands, Inc.

Address : 4 Corporate Drive, Lake Zurich, Illinois 60047, USA

**Manufacturer**: ACCO Brands, Inc.

Address : 4 Corporate Drive, Lake Zurich, Illinois 60047, USA Factory : Dongguan Newmen Electronics Technology Co., Ltd.

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China

**Date of Receipt** : 2022.10.14

**Date of Test** : 2022.10.25-2022.10.28

**Issued Date** : 2022.10.29

Report Version : V1.0

Test Sample : Engineering Sample No.: 20221026018930

Standard(s) : FCC Guidelines for Human Exposure IEEE C95.1 & KDB447498 D04

- The test result referred exclusively to the presented test model /sample.
- Without written approval of TIRT Inc. the test report shall not reproduced except in full.

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### **REPORT ISSUED HISTORY**

Report No.	Version	Description	Issued Date	Note
FCC022022-05616RF14	V1.0	Original Report.	2022.10.29	Valid



#### 1. TEST FACILITY

Company:	Beijing TIRT Technology Service Co.,Ltd Shenzhen
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CNAS Registration Number:	CNAS L14158
A2LA Registration Number:	6049.01
FCC Accredited Lab. Designation Number:	CN1309
FCC Test Firm Registration Number:	825524
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#### 2. GENERAL CONCULUSION

According to FCC §§1.1307 and KDB 447498 D04, the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P<sub>th</sub> (mW).

#### 1) Option A. 1-mW Test Exemption

Per § 1.1307(b)(3)(i)(A), a single RF source is exempt RF device (from the requirement to show data demonstrating compliance to RF exposure limits, as previously mentioned) if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance.

This exemption applies to all operating configurations and exposure conditions, for the frequency range 100 kHz to 100 GHz, regardless of fixed, mobile, or portable device exposure conditions. This is a standalone exemption, and it cannot be applied in conjunction with any other test exemption.

#### 2) Option B. SAR-Based Exemption

A more comprehensive exemption, considering a variable power threshold that depends on both the separation distance and power, is provided in § 1.1307(b)(3)(i)(B). This exemption is applicable to the frequency range between 300 MHz and 6 GHz, with test separation distances between 0.5 cm and 40 cm, and for all RF sources in fixed, mobile, and portable device exposure conditions.

Accordingly, a RF source is considered an RF exempt device if its available maximum time-averaged (matched conducted) power or its effective radiated power (ERP), whichever is greater, are below a specified threshold.

This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). Pth is given by:



$$P_{th} \; (\text{mW}) = \begin{cases} ERP_{20\;cm} (d/20\;\text{cm})^x & d \leq 20\;\text{cm} \\ ERP_{20\;cm} & 20\;\text{cm} < d \leq 40\;\text{cm} \end{cases}$$

Where

$$x = -\log_{10}\left(\frac{60}{\mathit{ERP}_{20\;cm}\sqrt{f}}\right) \; \mathrm{and} \, f \, \mathrm{is} \, \mathrm{in} \, \mathrm{GHz};$$

and

$$\mathit{ERP}_{20\;cm}\;(\mathrm{mW}) = \begin{cases} 2040f & 0.3\;\mathrm{GHz} \leq f < 1.5\;\mathrm{GHz} \\ \\ 3060 & 1.5\;\mathrm{GHz} \leq f \leq 6\;\mathrm{GHz} \end{cases}$$

d = the separation distance (cm);



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Table B2-Example	Power	Inresholds	(mw)

					Dista	ınce(mm	1)				
	mW	5	10	15	20	25	30	35	40	45	50
	300	39	65	88	110	129	148	166	184	201	217
Fraguenav	450	22	44	67	89	112	135	158	180	203	226
Frequency	835	9	25	44	66	90	116	145	175	207	240
(MHz)	1900	3	12	26	44	66	92	122	157	195	236
	2450	3	10	22	38	59	83	111	143	179	219
	3600	2	8	18	32	49	71	96	125	158	195
	5800	1	6	14	25	40	58	80	106	136	169

#### 3) Option C MPE-Based Exemption

An alternative to the SAR-based exemption is provided in § 1.1307(b)(3)(i)(C), for a much wider frequency range, from 300 kHz to 100 GHz, applicable for separation distances greater or equal to  $\lambda/2\pi$ , where  $\lambda$  is the free-space operating wavelength in meters. The MPE-based test exemption condition is in terms of ERP, defined as the product of the maximum antenna gain and the delivered maximum time-averaged power. For this case, a RF source is an RF exempt device if its ERP (watts) is no more than a frequency-dependent value, as detailed tabular form in Appendix B. These limits have been derived based on the basic specifications on Maximum Permissible Exposure (MPE) considered for the FCC rules in § 1.1310(e)(1).

TABLE B.1—THRESHOLDS FOR SINGLE RF SOURCES SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

RF Sour			Minimum Distance			Threshold ERP
fi MHz		∫H MHz	λ <sub>L</sub> / 2π		λ <sub>H</sub> / 2π	W
0.3	_	1.34	159 m	_	35.6 m	1,920 R <sup>2</sup>
1.34	_	30	35.6 m	_	1.6 m	3,450 R <sup>2</sup> /f <sup>2</sup>
30	_	300	1.6 m	_	159 mm	3.83 R <sup>2</sup>
300	_	1,500	159 mm	_	31.8 mm	0.0128 R <sup>2</sup> f
1,500	_	100,00 0	31.8 mm	_	0.5 mm	19.2R <sup>2</sup>

Subscripts L and H are low and high;  $\lambda$  is wavelength.

From § 1.1307(b)(3)(i)(C), modified by adding Minimum Distance columns.



In the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation.

$$\sum_{i=1}^{a} \frac{P_i}{P_{th,i}} + \sum_{j=1}^{b} \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^{c} \frac{Evaluated_k}{Exposure\ Limit_k} \le 1$$

Where:

- a = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(B) of this section for Pth, including existing exempt transmitters and those being added.
- b = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(C) of this section for Threshold ERP, including existing exempt transmitters and those being added.
- c = number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance including existing evaluated transmitters.
- P<sub>i</sub> = the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive).
- $P_{th,i}$  = the exemption threshold power ( $P_{th}$ ) according to paragraph (b)(3)(i)(B) of this section for fixed, mobile, or portable RF source i.
- $ERP_i$  = the ERP of fixed, mobile, or portable RF source j.
- ERP<sub>th,j</sub> = exemption threshold ERP for fixed, mobile, or portable RF source j, at a distance of at least  $\lambda/2\pi$  according to the applicable formula of paragraph (b)(3)(i)(C) of this section.
- Evaluated<sub>k</sub> = the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure.
- Exposure  $Limit_k$  = either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable RF source k, as applicable from §1.1310 of this chapter.



### 3. PRDUCT INFO

Tune up tolerance(dBm)	
≤-8.00	

Band	Freq. (MHz)	Output Power (dBm)	Ant. Gain (dBi)	Duty cycle (%)	DC Factor	EIRP (dBm)	EIRP (mW)	Distances (mm)
2.4G SRD	2440	-8.38	0.11	49.38	3.06	-5.21	0.30	5

#### 4. TEST RESULTS

Band	Freq (MHz)	Result Option A
2.4G SRD	2440	exempt

Note:

- (1) Output power including tune up tolerance.(2) SAR and MPE evaluation is not required.

**End of Test Report**