

User Manual RF Remote Control



Product Name: RF Remote Control Product No.: RCIJ0002AG-2401 Model No.: TSIJ-2401 Version: Ver. 1.0 Date: 2008/07/05



Description:

- 1. Preliminary Product Specification:
 - 1.1 Scope:

This Spec. provies an overview of the required RF remote control and receiver functionality for Customer systems. The product includes:

- an RF Remote Control (2.4GHz)
- an USB Receiver dangle
- 2 AA batteries.
- 1.2 General:
 - 1.2.1 Batteries: 2 AA batteries are designed to be used in RF remote to support at least 3 months normal usage.
 - 1.2.2 Restricted Substances and Environmental Requirements: all the materials and manufacturing process used to produce RF remote must comply to RoHS requirements.
 - 1.2.3 RoHS (we can put some RoHS requirements here and state that all the materials used in the product specification complies to RoHS requirements).

1.3 Ergonomics Requirements:

- This product was designed to be ergonomics for all users.
- 1.3.1 The ergonomic remote design is to fit into users' palms to reduce the discomfort caused by long time usage.
- 1.3.2 The symmetrical design is to be fit for both left-handed and right-handed users to reduce the discomfort or strain caused to users.
- 1.3.3 Every key designed on the remote is to be designed easy to reach for users for easy usability and reduce strain.
- **1.4 Product Functional Requirements:**
 - 1.4.1 Operation System: needs to be functional when working under Customer systems.
 - 1.4.2 Interface: Receiver needs to be working under USB 1.1 and 2.0 Interface.
 - 1.4.3 Range Requirements: the transmission of the remote control shall be at least 30-50 meters with optical filter in place.
 - 1.4.4 RF Protocol: Using Topseed Standard RF protocol with HID Driver.
 - 1.4.5 Frequency Range: 2.4 to 2.483 GHz (16 multi channels and 65535 ID channels for RF Remote Control)
 - 1.4.6 Battery Life: 2 AA batteries to provide at least 3 months normal usage.
 - 1.4.7 Weight: 125.8g
 - 1.4.8 Operation Temperature: 50° C



1.5 Detailed Product Specification – RF Remote Control

1.5.1 RF Remote Control

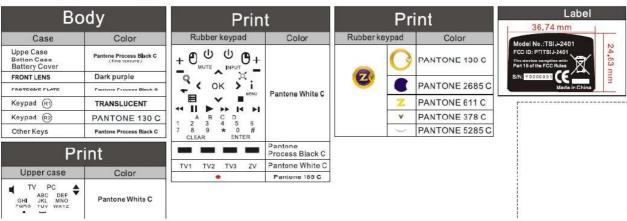
Item	Standard Specification	81	Option
RF	Frequency Range	2.4GHz-2.483 GHz	
Characteristics	Modulation	GFSK	10000
(TX)	Channel Spacing	1 MHz	
	Channel No.	78	
	Channel I.D	65535	
	TX Power	1 mW	
	Transmission rate	64K bps	
	TX frequency deviation	+/- 100 KHz	
	Frequency tolerance	+/- 20ppm	
	Distance of Transmission	30 m min.	
	Antenna type	PCB Track	
Input power	AA*2 DC 3.2V batteries.		
Power	working mode	9.5mA Max	
Consumption	saving mode	100uA	
Power	Battery	AA*2 DC 3.2V batteries	2. · · ·
	Batter Life	3 months	
Electrical Performance	Supply Voltage	DC 2.2V ~ 3.2V	
	Button	52	
Mechanical	Dimension	217.93 x 61.46x 28.02 mm	0.00
Performance	Key Operating Force	105 ± 40 gf	
	Operating Stroke	0.9 ± 0.1 mm	
	Keytop Material	Silicon Rubber	



1.5.2

Physical Description and Specification – 2D Drawing







1.5.3 Remote Control Buttons

item	Function	lcon
1	Power (PC Standby)	PC
2	Power (TV)	U
3	TV1	TV1
4	TV2	TV2
5	TV3	TV3
6	ZV Button	ZV
7	Mouse R Button	C
8	Mouse L Button	Ð
9	Input	INPUT
10	Guide	
11	Menu	MENU
12	Media Center Start	
13/14	Volume Up/Down	+



1.5.3 Remote Control Buttons (cont.)

item	Function	Icon
15/16	Channel up/down	+ +
17	Browser Back	E
18		Q
19		X
20	More	C
21	Volume Mute	MUTE
22	ок	ок
23	Up	•
24	Down	v
25	Left	<
26	Right	>
27	Media Reocrd	•



1.5.3 Remote Control Buttons (cont.)

item	Function	Icon
28	Media Pause	
29	Media Play	Þ
30	RWD	44
31	FWD	**
32	Replay	H
33	Media Stop	
34	Skip	M
35	A	A
36	В	В
37	с	С
38	D	D



1.5.3 Remote Control Buttons (cont.)

tem	Function	Icon
39	0	
40	1	1
41	2	ABC 2
42	3	DEF 3
43	4	GHI 4
44	5	JKL 5
45	6	м NO 6
46	7	PQRS 7
47	8	
48	9	WXYZ 9
49	*	÷
50	#	#
51	ESCAPE	CLEAR
52	RETURN	ENTER



Appendix: Warning Statement

FCC Guidelines

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Declaration of Conformity for R&TTE directive 1999/5/EC

Essential requirements – Article 3

Protection requirements for health and safety – Article 3.1a

Testing for electric safety according to EN 60950-1 has been conducted. These are considered relevant and sufficient.

Protection requirements for electromagnetic compatibility – Article 3.1b Testing for electromagnetic compatibility according to EN 301 489-1, EN 301 489-3 has been conducted. These are considered relevant and sufficient.

Effective use of the radio spectrum – Article 3.2 Testing for radio test suites according to EN 300 440-2 has been conducted. These are considered relevant and sufficient.

Hereby, [Dong Guan Jess-Link Electronics Co., Ltd.], declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

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