P10 product Specification

Customer :

Product model：   P10

Specification : TWS ANC Active Noise Cancelling earphone

Version :   A1.0

Color of the product: black/white

Date：   20xx-xx-xx

Approved by	INSPECT	MADE BY

Shenzhen Teanabuds Electronics CO., LTD

Add: Building 1,9# Wugang Road, Henggang Street, Longgang District, Shenzhen, China.

Web: www.Teanabuds-tws.com

Content

1. Product feature description

project	specifications
Bluetooth standard	Version5.0
Bluetooth level	Bluetooth Class2
Bluetooth certification	/
frequency band	2402-2480MHz
supporting agreement	AVRCP 、A2DP 、HFP 、HSP
Bluetooth audio decoding	SBC, AAC
Bluetooth distance	Barrier-free use ≥10m
Antenna specifications	Ceramic antenna
Antenna VSWR 2400 ~ 2483.5 MHz	Typical : 1.3 Limit : 1.5
Antenna Return Loss	Typical: -14dB Limit :-12dB
Antenna Radiation Efficiency 2400 ~ 2483.5 MHz	≥ 40%
BT receiver sensitivity	Conduction test is ≥ -88dBm
BT Initial Carrier Offset	<20KHZ
Compatibility requirements	IOS/Android
ANC active noise cancellinig	Support single feed ANC
Game mode	Support low court time game mode, court time ≤ 80ms
Battery level display	IOS/android 4.0

2.Product specifications

Single speaker	specification	10*5MM
	diameter	10MM
	impedance	32R
	Material	PET
	power	3mW

	chipset	Realtek 8773BFR
Bluetooth specification	Bluetooth protocol	HFP, AVRCP, A2DP
	Bluetooth version	V5.0
	Working frequency	2.401-2.448GHZ
	Bluetooth distance	10M
	Antenna type	ceramic
Audio specifications	Output watt	2MW
	rated power	5MW
	Frequency response	20-20KHZ
	Sensitivity	1KHz 90dB
	Distortion	0.7%
	Audio signal to noise ratio S/N	90dB
Battery (earbud)	Type/capacity	Lithium polymer battery 40MAH
	Battery cycle life	300 次
	Music time	4H
	Calling time	4H
	Charging time	1.5H
battery (case)	Type/ capacity	Lithium polymer battery 500MAH
	Battery cycle life	300 times
	Charging time	1.5H

3.Performance standards/technical specifications

item	Test conditions and methods	standard
1 Bluetooth connection and name	Press and hold the power button of the headset until the white\red light flashes to enter the pairing state. Use the Bluetooth tester to search for the pairing connection to see if the headset can be successfully connected, and observe whether the connection name displayed on the Bluetooth tester is: MAXELL TWS- ANC1	connection succeeded Bluetooth name: MAXELL TWS-ANC1
2 Power on\off	Long press the power on/off button to perform power on/off test. When turning on: the white light flashes three times with a prompt sound, and when shutting down: the red light flashes three times with a prompt sound	The power on/off is normal, the indicator light and the prompt sound are normal
3 Bluetooth play	After the Bluetooth tester is successfully paired and connected with the headset, play music, adjust the volume to the maximum, and pay attention to whether there is current sound, low sound, noisy sound, broken sound, etc.	The sound is played normally without any problems
4 Soundtrack test	After the Bluetooth tester is successfully connected to the headset and play music, plug in the auxiliary ear cable to listen to the song as standard. Note that the sound is output at the same time (without left and right channels)	Mono output is normal
5 Touch button function	After using the Bluetooth tester to successfully connect with the headset and play music, it is required to test the following touch button functions: play\pause, previous\next music, volume up\down and other functions are normal,	Button function is normal
6 Microphone test	Use the Bluetooth tester to pair with the headset and enter the phone mode, aim at the headset MIC hole to speak, pay attention to whether the output sound of the tester is noisy, small, broken, etc.	The microphone call is normal and the sound is normal
7 Indicator light	The white light flashes three times when the power is on, the pairing white light flashes alternately, Bluetooth status: white light flashes, music status: light off, low battery status: red light flashes Charging process: the red light is on, and the charging is completed: the light is off	The indicator and the corresponding status are normal
8 Call distance	Successfully connect the headset with an Apple mobile phone to make and receive calls, the speaker is facing the mobile phone, ≥10 meters, and the back to the mobile phone, ≥8 meters, the call sound must not be stuck, blurred, etc.	Facing the mobile phone, ≥10 meters, back to the mobile phone, ≥8 meters, the call sound is

			normal
9	Connection stability	Use the Apple mobile phone to successfully connect the earphones and play music. When the distance between the obstacles and the straight line connection is ≥10 meters, pay attention to whether there are any pauses, sound jams, etc. when listening to the music	Facing the mobile phone, ≥10 meters, back to the mobile phone, ≥10 meters, the music sound is normal
10	Automatic shut-down	First connect the headset to the mobile phone successfully, and then disconnect it from a long distance for 5 minutes to see if the headset will automatically shut down	Normal automatic shutdown
11	auto connect	First connect the headset to the mobile phone successfully, then turn off the headset and turn it on again, it can automatically connect with the last connected device	Automatic connection is normal
12	Automatic return	First connect the headset to the mobile phone successfully, and then disconnect the mobile phone from the headset by walking a long distance, and then approach the mobile phone again within 3 minutes to automatically connect with the mobile phone.	Automatic return connection is normal
13	Charging test	Use the DC power supply to adjust to 5V\≥200mA output to charge the earphones, and watch whether the red light is on during the earphone charging process	The red light is on during charging
14	Full charge time	Use a 5V\≥200mA charger to charge the headset, observe the time to complete the full charge and the LED light status	Fully charged: about 1.5 hours Fully charged: light off
15	Charging voltage\current	DC power output: 5V\≥200mA to charge the earphones, and watch whether the DC current indication meets the standard requirements	Charging current: ≤40mA

4.Instructions

function	button	Voice prompts	LED
Charging box charging mode (External power supply)	N/A		＜**20% power, the red light flashes once per second.**
			＞**20%-95% power, the green light flashes once per second,**
			When the charging box is fully charged, the green light of the charging box is always on
Charging box to charge the headset, charging box status	N/A		Put the earphone into the charging box for 5 seconds and then the charging box will turn off the light. (The red light of the headset is always on, and the indicator light of the headset is off when it is fully charged)
			The charging compartment power is less than 20% and the red light of the charging box flashes quickly
Pairing state standby (TWS is connected, not connected to mobile phone)	N/A		The white and red light of the headset main unit flashes alternately
Low battery in charging box	N/A		The red indicator light of the charging box flashes quickly;
Headphones low battery	N/A	Battery low	The red light of the earphone lights up once in 60 seconds (voice prompt once every 1 minute)
Enter pairing	Press and hold for 5 seconds when it is off	Pairing	The white and red light of the headset main unit flashes alternately
Pairing between the headsets is successful	N/A		The white and red lights of the main engine flash alternately, and the lights of the auxiliary engine are off
Incoming call	N/A	Apple and Android calls are the same as the ringtone (some Android phones cannot synchronize the ringtone with the ringtone, and there is a ringtone)	

Connect mobile phone Bluetooth	N/A	Your device is connected	Headphone indicator white light turns off after 1 second
Disconnect the phone's Bluetooth connection	N/A	Yourdevice is disconnected	
Boot up	Long press for 3 seconds	Power ON	The white light of the headset indicator flashes quickly three times and then flashes once every 5 seconds
Shut down	Long press for 10 seconds	Power OFF	The red light of the headset flashes three times quickly
answer the phone	Click L or R		
hang up the phone	Click L or R	Beep sound	
Refused to answer the call	Long press L or R for 2 seconds	Hum prompt tone	
Music pause/play	Click L or R		
Volume up	Double click R	Maximum volume "didi" alert	
Volume down	Double-click L	Minimum volume "didi" alarm	
previous piece	Long press for 2 seconds to release L		
next track	Long press for 2 seconds to release R		
voice assistant	Quick three-click L or R		
Noise reduction on	Long press R for 4 seconds	ANC ON	
Noise reduction	Long press R for 4 seconds	ANC OFF	
APT (Transparent Mode)	Long press R for 4 seconds	APT ON	
Low delay mode ON	Long press L for 4 seconds	gaming_mode_on	
Low delay mode OFF	Long press L for 4 seconds	gaming_mode_off	

5.Raw materials list（BOM）

No.	part	specification	unit	amount	note
1	Horn cover—L		PCS	1	
2	Horn cover—R		PCS	1	
3	Left ear shell		PCS	1	
4	Right ear shell		PCS	1	
5	Left tail cover		PCS	1	
6	Right tail cover		PCS	1	
7	Top cover of charging box		PCS	1	
8	Inner cover of charging box		PCS	1	
9	Lower shell of charging case		PCS	1	
10	Charging box middle frame		PCS	1	
11	Shaft		PCS	1	
12	PCB screws		PCS	1	
13	Light blocking cloth		PCS	1	
14	Sound-absorbing cotton		PCS	2	
15	magnet		PCS	5	
16	magnet		PCS	2	
17	EVA double-sided back 3M glue		PCS	1	
18	Double-sided 3M glue		PCS	2	
19	Tuning Network		PCS	2	
20	speaker	Diameter 10MM 32R	PCS	2	
21	Speaker Cable		PCS	2	
22	battery	501012 40mah	PCS	2	
23	battery	902030 500mah with protection board	PCS	1	
24	Earplugs large		PCS	2	
25	Earplugs medium		PCS	2	
26	Earplugs trumpet			2	
27	Connect the flexible FPC board		PCS	1	
28	Charging PCBA board		PCS	1	
29	PCBA left and right ear bluetooth board		PCS	2	

6.dimensions

7.Structure diagram/exploded diagram

8.product picture

9.porduct label / logo printing picture

10.Packing,specification/accessory specification/packing specification

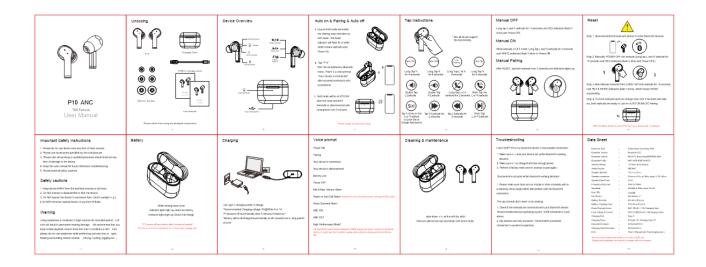|		Packing material details	date:	2021/6/19
			page number:	
	product name:	TWS-ANC1	version:	A1.0
Item	Material name	specification	unit	amount
1	Color box		PCS	1
3	Accessory box		PCS	1
4	USB charging cable		PCS	1
5	Manual		PCS	1
6	Heat shrinkable film		PCS	1
7	Flannel Blister		PCS	1
8	Earplugs		PCS	4
9	Outside cartoon box		PCS	1
10	Inner box		PCS	1

Packaging Inspection

13.1 The outer box label is pasted in the format required by the company, the content is clear and correct, and the box is sealed with adhesive paper and has

QC PASS post;

13.2 The packaging box body must not show obvious collapse, bumps, dirt, color spots, etc., and the size meets the design specifications;

13.3 The package shape has complete cuts, basically no gaps, no burrs, etc.

13.4 The silk screen on the single color or color box packaging is clear and correct; there are no missing characters or bad hyphenation;

13.5 The box needs to be filled with anti-impact, anti-vibration, and anti-pressure materials that can protect the product;

13.6 Package coordination: The product can be packed well and matched with the package normally.

11.Manuel

12.Definition of production date number

LOT NO: 200902 (20: year, 09: order month, 02: first batch in May)

Product date code: 200622 (Production on June 22, 2021)