TALK&TALK TK5 Bluetooth Handset User Manual V1
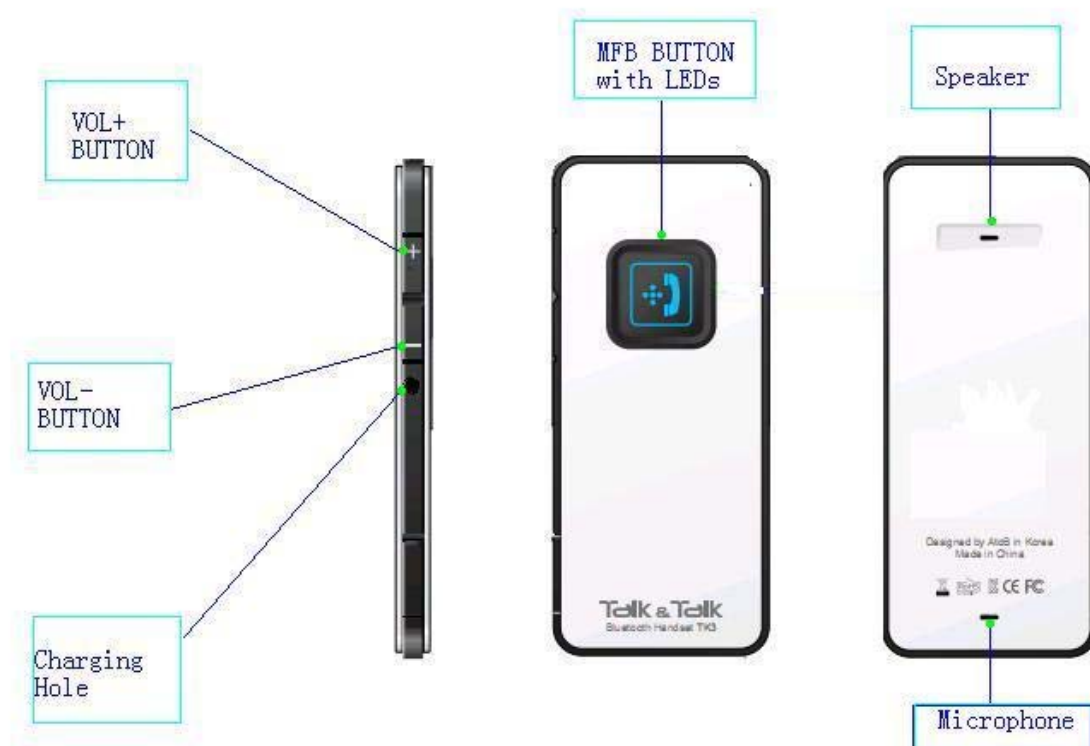

Turning your TK5 ON & OFF--

ON

Press and hold the MFB 📞 Button for 3 seconds, and the Blue LED will light 1 second. The TK5 will automatically connect to the previously paired Bluetooth enabled phone. If the connecting is fail, the Blue LED will flash twice per 5 seconds.

The TK5 will enter Idle mode. And it will automatically turn off if TK5 don't connect to any Bluetooth device in 4 minutes.

OFF

Press the MFB 📞 Button for 4 seconds, and the Red LED will light 1 second.

Pairing--

1. In power Off Mode, Press and hold the MFB 📞 Button until you see the Blue and Red LED alternantly flash. If a Bluetooth enabled phone or others device don't connect to the TK5,then it will automatically turn OFF in 2 minutes.
2. Follow your Bluetooth enabled cell phone's instructions for searching for Bluetooth device.

3. After a successful search the Bluetooth device will be shouwn on your mobile phone,chosse "TALK&TALK TK5" and confirm.
4. Maybe ,your mobile will request for a password,please enter "0000"
5. If it's successful. TK5 will stop flashing Red LED and light 1 time per 5S.

Quick Connect--
Press and realse the MFB button in 1 second. The TK5 will try connect to the previously paired Bluetooth enabled phone. If the connecting is fail, the Blue LED will flash twice per 5 seconds.The TK5 will enter Idle mode.

Last Number Redail --
When TK5 is paired with a Bluetooth enabled phone , Quick press twice the MFB button then realese it in 1 second to Redial the previously dialed the phone number on the phone.

Voice Dial ---
When TK5 is paired with a Bluetooth enabled phone , Quick press the MFB button then realese it in 1 second to start-up a voice dial. If you speake a voice tag(for example a personal name) ,the phone will dial out a corresponding phone number.

Answering A CALL---
When there is an incoming call ,press the MFB button then realese it in 1 second to anwer the call.
Reject A CALL---
When there is an incoming call ,press and hold the MFB button for 2 secnods to reject the call.

End A CALL--
When the TK5 is in talking or outgoing call states, press the MFB button then realese it in 1 second to end the call.

Transfer Audio between Phone or TK5--
When the TK5 is in talking states, press and hold the MFB button for 2 seconds to transfer audio between the phone or TK5.

Controlling Volume---

Press the VOL+ or VOL- buttons to adjust the volume .

Charging battery--
Plug the big connector of Micro-USB cable into your USB port of your pc or others. Then plug the small connector of Micro-USB cable into your TK5 charging socket.
When you plug the USB cable for charging ,the TK5 will be Reset. But you can power-on it again in charging state.

Others: It will automatically turn off if TK5 don't connect to any Bluetooth device in 3.5 minutes.

Specifications--

Model Name	*TK5*
Compliant Bluetooth Specification	*V3.0*
Pre-qualified component	*CSR BC6130*
Profile	*HSP,HFP*
Carrier Frequency	*2402 MHz to 2480 MHz*
ModulationMethod	*GFSK,1Mbps,0.5BTGaussian*
Maximum Data Rate	
	Asynchronous : 723.2 kbps / 57.6 kbps
	Synchronous : 433.9 kbps / 433.9 kbps
Bluetooth Class	*Class 2*
Hopping	*1600hops / sec, 1MHz Channel Space*
Transmit Power	*1dBm (typical)*
Coverage Range	*10m*
Receiver Sensitivity	*-82 dBm/ 0.1% BER*
Weight	*52 g*
Dimension (mm)	*39.5mm (W) x 88.5 (L) x 6.9 (T) mm*
Charging Voltage	*DC 5.0 V*
Charging Time	*Less than 2 Hours*
OperatingTemperature	*-10° to+50°C*
StorageTemperature	*-20° to+80°C*

*B*attery…………………………………….Rechargable 3.7V 120mAh Li-PoLy.
Speaker…………………………………….8Ohm/1W.
Microphone……………………………….-42dB/2.2V.
Standby time ………………………………Up to 100 hours.
Talking time……………………………….Up to 5 hours.
Charging time……………………………..Less than 2 hours.
Charging Voltage………………………….5V DC(USB)
Frequency Range…………………………..2402Mhz---2480Mhz.
Operating Temperature……………………..-10------50℃
Storage Temperatur...-20----70℃
Bluetooth Version………………………….BT3.0.
Supported Profiles……………………….HSP,HFP.

Item		min.	Type.	max.	unit	remark
Charging inputvoltage		4.7	5		V	
Operating voltage		3.0	3.7		V	
Current consumsuption	Talking	15	25		mA	
	Stand-by	-	0.655			
Charging time		-	1.8	-	hour	

Bluetooth Spec.	
Bluetooth RF scope	2,402MHz ~ 2,480MHz
Support profile	HSP, HFP
RF spread mode	Hopping Spread Spectrum (FHSS),
Hoping channel	79 channel with 1 MHz-spacing (2,402~2,480 MHz)
RF Modulation mode	Gaussian Frequency Shift Keying (GFSK)
RF output power	-6~4 dBm(Class2)

2.4.2 Bluetooth RF Char.

항목		Test condition					min	max	unit
		Test mode	Hopping	Packet type	Payload	No. of Packet			
Average power		TX	on	DH1	PRBS9	5	-6	4	dBm
Modulation	Δf1 avg	TX	off	DH1	BS55 BS0F	5	140	175	khz
	Δf2 avg						115		khz
	Δf1 avg/ Δf2 avg						0.8		
ICFT		TX	on		PRBS9	5	-65	65	khz
Carrier frequency drift		TX	on	DH5	BS55	5	-30	30	khz
sensitivity	Single slot	Loop back	Off	DH1	PRBS9		-82	---	dBm
	Multi slot	Loop back	Off	DH5	PRBS9		-82	---	

Button functionality		
Funtionalities	Status	Action
Pairing	Power Off	Ultra Long Press MFB
Pick Up	Receive a ingcoming Call	Short Click MFB
Hang Up	In-Call Mode	Short Click MFB
Reject Call	Receive a incoming Call	Long Press MFB
Last Number Redial	Standby Mode	Double Click MFB
Transfer Audio Between TK5 and Phone	Talking mode	Long Press MFB
Voice Dial	Standby Mode	Short Click MFB
Voice Dial Cancel	Voice Dial	Short Click MFB
Volume Up	In-Call Mode	Short Click VOL+ BUTTON
Volume Down	In-Call Mode	Short Click VOL- BUTTON
Clear Paired Phone List	Standby	Short Click VOL-,VOL+ and MFB

mark:
*MFB= Multi-Function Button
*Short Click: Click and release less than 1 second
*Long Press: Press and hold the key for 2 seconds
*Ultra Long Press: Press and hold the key for more than 5 seconds
*Double Click: Click twice within 0.5 second

LED flash pattern	
. TK5 STATES	LED status.
1. Power-On.	Blue LED flash 1 second
2. Idle(no link phone)	Blue LED flash 2 times per 5 second
3.Pairing mode	Blue&Red LED alternantly flash 1 time per 1 second
4. connected mode	Blue LED flash 1 time per 5 second
5. Talking mode	Blued LED flash 1 time per 5 second
6. Low Power	Red LED flash 1 time per 2 second
7 Clear paired phone list	Red LED and Blue LED flash 3 times in 1 second

Tone Pattern

No.	Event or Status	Tone	Remark
1	Power On	Long Dee	
2	Power Off	Long Beep	
3	Pairing successful	Short Beep	
4	Connected to Phone	Very Long Beep	
5	Pairing fail	Long Doo	
6	Enter Pairing Mode	2 Beep	
7	Last nuber redai out	Short Beep	
8	Incoming call	Ring tone	
9	Answer a call	2 Beep	
10	Reject a call	2 Doo	
11	End a call	Short Beep	
12	Clear paired phone list	2 Doo	
13	Transfer Audio between phone or TK5	Short Beep	
14	Voice dial	Short Beep	
15	MAX volume	Long Beep	
16	MIN volume	Long Doo	
17	Battery voltage low	5 short Beep	
18	Disconnected to phone	2 short Beep	
19	Incoming call from the 2nd phone	1 Beep	
20	Ingcoming call waiting	1 Beep	
End			

BLOG   DIAGRAM

Antenna

1.8V

MFB

Balun
Filter

Bluetooth
RF

RAM

MCU

I/O

Vol+

Vol-

LED0

LED1

145mAh
Battery

5V adapter

ROM

Bias

Crystal
26MHz
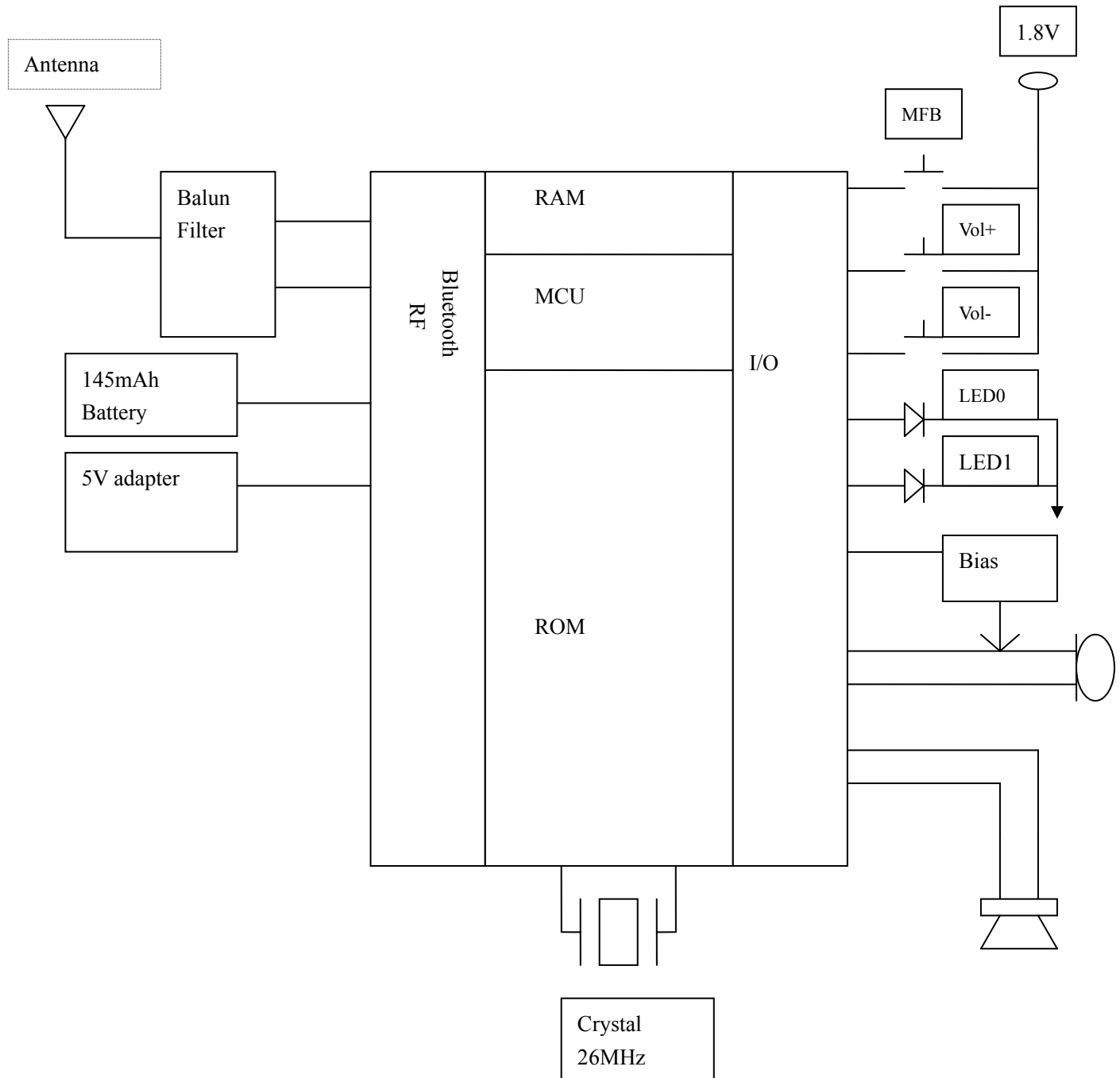
FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

● Reorient or relocate the receiving antenna.
● Increase the separation between the equipment and receiver.
● Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
● Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of 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.

Warning: Changes or modifications made to this device not expressly approved by HongKong AtoB Co. Ltd. may void the FCC authorization to operate this device.

Note: Use the product in the environment with the temperature between 0 ℃ to 25 ℃

The device complies with standards as follow:
EN 300 328 V 1.7.1
EN 301 489-1 V 1.9.2
EN 301 489-17 V 2.1.1
EN 60950-1:2006+A11:2009+A1:2010+A12:2011
EN 50371: 2002

The product shall only be connected to a USB interface of version USB2.0 or higher and that the connection to a power USB is prohibited.

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