

# AOK UI INTRUCTION for HX-P160

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### HMDX Geo

### HX-P160

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## Change History

Issue	Date	Handle by	Comments
00	November-4-2015	Mir xie	First release

## 1. Product setting: buttons, LEDs, Audio sources

2.1 Buttons and switches and Touch, the systems have below buttons:

Button	Power button, MFB, Vol+, Vol- button
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2.2 Connection of Power and audio system, the system has the following connection:

Power port	In	DC jack
	Out	USB out for charging

2.3 Button press Type and Duration. The following table describes how the buttons react and describes timing constraints

Button pressing time	
Press type	Duration(Seconds)
Short press	X<0.5
Long press	2<x<3
Press & hold	-

2.4 Feature List

#	Category	Feature	Value
1	Out of the Box/ After Factory Reset	Total volume level	16 steps
		Default volume level	10 steps (equal to 60% volume)
		Default audio source	BT,
		Duration for volume to change from min to max	<16 seconds
		Remember previous audio source	NO
		Remember previous connected BT devices	Yes, If Aux is not connected, always reconnect

			with last device which connected during power up
		Remember previous volume level	Yes (only if volume <60%, use previous volume, else use 60%) memory in a 10%--70% volume, other recov very to default 60 % volume
2	Power mode	Supports Battery Mode?	Yes
		Charging hour	Within 2 hours
		Playback hour	4 hours at 70% volume
		AC Mode	No
		External charging sourcing	NO
3	Battery mode	Battery management	i. Healthy: X > 10% ii. Low: 5% < X ≤ 10% - Low battery indication available (Red LED flashing warning) - when X > 95% charging Red LED off iii. Critical: X = 5% - DUT off.
4	Connection	Audio input	BT audio
		Audio output	No
		Physical button for audio switch	No special button available
		Auto audio switch feature	BT audio.
5	ERP(Energy related product) compliance	Auto Standby	Yes
		Auto Standby Duration	Without BT connection, after 2 minutes ,it will shut off .  BT connection, but don't play, after 15 minutes, it will shut off.
		Power consumption to meet ERP	<0.3W
		Auto shutoff without paired	2 minutes
6	Reset	Factory Reset	Not
		Hardware Reset	Yes
7	Bluetooth connectivity	Bluetooth naming	HMDX Geo
		Wireless range	10 m
		Supported audio codec	SBC
		Supported profiles	A2DP, AVRCP so on
		# of supported device in pairing list	1 paired device recorded
		Supports Dual devices	NO
		Volume sync	Synchronize volume with iOS
		BT Pairing duration	Within 1 minutes
		BT Reconnect duration	Power up = 10sec  Link lost = 10sec
		BT reconnect method (single device or all devices)	Power up = attempt reconnect to same device.  Link lost = attempt reconnect to same device twice, each time for 10 seconds

8	PC compatibility	Windows version	No information
		Mac version	MacBook (Pro, Air) with OS X 10.8.2 or later
9	Phone device compatibility	Phone model with OS version	iPod touch (2-5 Gen), iPod Nano (7 Gen), iPhone (6, 6s, 7, 8, 3Gs, 3G), iPad (1, 2, 3, 4, mini 1, 2),

#### 2.5 Audio source, Available audio source Input:

#	Audio input	Image
1	Bluetooth	

#### 2.6 Available Audio Source Output: No audio output

##### Sequence & Priority

The audio source switch command shall allow DUT to switch sources using the following priority and sequence:

Priority	Audio input	Sequence	Default	Manual/Automatic switch
1	Bluetooth	BT is 1st	Speaker, is default	NA

## 2. SYSTEM FEEDBACK

#### 3.1 The system has the following indicators, list of Audio Indications. (Prompt tone)

#	Indicator	Description	File Name
1	Power on	Hold down the power button 3 seconds	Provide by HMDX
2	Power down	Hold down the power button 3 seconds	Provide by HMDX
3	Auto power off	No Bluetooth connection and Audio input	Provide by HMDX
4	Low battery warning	The battery low 3.5 Volts	No
5	BT Pairing started	Blue LED flashing	Provide by HMDX
6	BT pairing successfully	BT quickly flash 5s once	Provided by HMDX
7	BT pairing timeout	Blue LED flashing	No
8	BT disconnect manually	After pressing Vol+ button and Vol- button 5 seconds, then enter into pairing status	Provided by HMDX
9	BT disconnect – link lost	Entering into pairing status	No
10	BT reconnect successful	As pairing successful	Provided by HMDX
11	BT reconnect timeout	Entering into pairing status	No
12	Max volume reached	Reminder	Provided by HMDX
13	Min volume reached	no	No

#### 3.2 List of Physical Visual Indications

Product off, USB connected

Indicator	color	Description
Product LED	null	off
Charging LED	●	Solid as long as charging. Off when charging complete

Power off and USB not connected

Indicator	color	Description
Product LED	null	off
Charging LED	null	off

Powering up

Indicator	color	Description
Product LED	●	On

Powering down

Indicator	color	Description
Product LED	null	off

Product on

Event	Indicator	color	Description
BT audio source	Product LED	●	1. At Re-connect or Pairing mode, Product LED flashing 2. After paired, 蓝灯5秒闪一次 Blue LED 5s once

Charging mode

Event	Indicator	color	Description
Charging	Charging LED	●	Solid as long as charging. Off when charging complete.

Battery mode

Event	Indicator	color	Description
Battery healthy	Charging LED	null	Charging LED off, not required
Battery low	Product LED	●	Flashing 1 sec on, 1 sec off until USB cable is inserted or battery died.
Battery critical	All LEDs	null	Off device is off

BT activity (The Flashing LED 0.2 seconds on and 0.2 seconds off)

Event	Indicator	color	Description

BT pairing	Product LED		<b>Speaker:</b> Blue LED Sbw flashing (0.2sec on, 0.2sec off) for 2min or until paired successfully. Blue lights flash until the pairing is successful
BT connected	Product LED		<b>Speaker:</b> Blue LED stable on, Blue lights flash once five seconds
BT disconnecting	Product LED		<b>Pressing Vol+ and Vol-</b> simultaneously for 5 seconds, disconnect current BT device, enter into pairing mode

#### Factory Reset

Indicator	color	Description
Product LED	null	Unknown

### 3. Product status

State	Description
Off	<b>Details:</b> When device is Off without USB connected or Power off (MCU off, Amp off, charging off, BT off,) <b>To Enter:</b> Removed USB cable and battery off <b>To Exit:</b> Insert USB cable charging
On	<b>Details:</b> Device is on (MCU on, Amp on, charging on, BT on – connectable) <b>To Enter:</b> Power on <b>To Exit:</b> Power off
BT on	<b>Details:</b> Device is on (MCU on, Amp on, charging on, BT on – discoverable, connected, connecting) <b>To Enter:</b> BT activity in progress <b>To Exit:</b> Power off

#### Key Assignment

##### Power switch

States vs Press type	On position	Off position
On	Power on	/
Off	/	Power off

##### Play/Pause

States vs Press type	SP (<0.5)	LP >2~3s)
On	Play or pause	No response
On-aux inserted	Play or pause	No response.
BT on power up reconnect	No response	No response

BT on pairing	No response	No response.
BT on connected	Play/pause	No response

<Vol+> or <Vol->

States vs Press type	SP (<0.5)	LP (>2~5s)
Off	No response	No response
On	Change volume by 1 step.	No response
On-aux inserted	Change volume by 1 step	Change volume continuously.
BT on power up re-connect	Change volume by 1 step.	No response
BT on pairing	Change volume by 1 step.	No response
BT on connected	Change volume by 1 step.	next or previous
Vol+ and Vol- pressing at the same time	No response	Disconnect current BT, enter into pairing mode.

#### 4. FCC Statement

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

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses 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 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