AOK UI INTRUCTION for HX-P270

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Change History

Issue	Date	Handle by	Comments
00	July-30-2015	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 switch button, MFB, Vol+, Vol-, LED display functional button

2.2 Connection of Power and audio system, the system has the following connection:

Audio port	In	Aux-in
	Out	-
Data port		-
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%)
2	Power mode	Supports Battery Mode?	Yes
		Charging hour	Within 2 hours
		Playback hour	4.2 hours at 70% volume without LED lighting 2.5 hours at 70% volume with LED lighting
		AC Mode	No
		External charging sourcing	Yes (USB, Power bank, etc.)
3	Battery mode	Battery management	i. Healthy: X > 10% ii. Low: 0 < X ≤ 10% - Low battery indication available (Red LED flashing warning) -when X>95% charging Red LED off iii. Critical: X = 0% - DUT off.
4	Connection	Audio input	Aux in, BT audio
		Audio output	No
		Physical button for audio switch	No special button available
		Auto audio switch feature	Aux-in audio source priority to BT audio.
5	ERP(Energy related product) compliance	Auto Standby	No
		Auto Standby Duration	No
		Power consumption to meet ERP	<0.3W
		Auto shut off without paired	NO
6	Reset	Factory Reset	Not
		Hardware Reset	Yes
7	Bluetooth connectivity	Bluetooth naming	HX-P270
		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	No
		BT Pairing duration	Within 1 minutes
		BT Reconnect duration	Power up = 2sec 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 (6,5, 4s, 4, 3Gs, 3G), iPad (1, 2, 3, 4, mini 1, 2),

2.5 Audio source, Available audio source Input:

#	Audio input	Image
1	Line (3.5mm) In	
2	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	Line (3.5mm) In	Line in is 1st	For Speaker is default.	NA
2	Bluetooth	BT is 2nd	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	Switch on	Provide by HMDX
2	Power down	using or Switch off	No
3	Auto power off	No Bluetooth connection and Audio input	No
4	Low battery warning	The batter low 3.5 Volts	No
5	BT Pairing started	Blue LED flashing	No
6	BT pairing successfully	Blue LED stable	Provided by HMDX
7	BT pairing timeout	Blue LED flashing	No
8	BT disconnect manually	After pressing PP button and then enter into paring status	Provided by HMDX
9	BT disconnect – link lost	Entering into paring status	No
10	BT reconnect successful	As pairing successful	Provided by HMDX
11	BT reconnect timeout	Entering into paring 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
Aux audio source	Product LED	●	Aux as active audio source
BT audio source	Product LED	●	1. At Re-connect or Pairing mode, Product LED flashing 2. After paired, product LED lighting stable

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 not active	Product LED	●	Aux as active audio source.
BT pairing	Product LED	●	**Speaker:** Blue LED Slow flashing (0.2sec on, 0.2sec off) for 2min or until paired successfully.
BT connected	Product LED	●	**Speaker:** Blue LED stable on
BT disconnecting	Product LED	●	**Pressing Vol+ and Vol-** simultaneously for 5 seconds, disconnect current BT device, enter into pairing mode **Speaker:** Blue LED flashing 0.2sec on, 0.2sec off until paired successfully.

Factory Reset

indicator	color	Description
Product LED	null	Unknown

3. Product status

State	Description
Off	**Details**: When device is Off without USB connected or Power button switch off (MCU off, Amp off, charging off, BT off,) **To Enter:** Removed USB cable and battery off **To Exit**: Insert USB cable charging
On	**Details**: Device is on (MCU on, Amp on, charging on, BT on – connectable) **To Enter:** Power on **To Exit**: Power off
BT on	**Details**: Device is on (MCU on, Amp on, charging on, BT on – discoverable, connected, connecting) **To Enter:** BT activity in progress **To Exit**: 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)
Off	Try me	No response
On	Play or pause	No response
On-aux inserted	Play or pause	No response.
BT on power up reconnect	No response, Continue BT re-connecting	No response
BT on pairing	No response. Continue BT Pairing	No response.
BT on connected	Play/pause	No response

Brightness control

States vs Press type	SP (<0.5)	LP >2~3s)
Off	No response	No response
On	Change Brightness in turn	No response.
On-aux inserted	Change Brightness in turn	No response
BT on power up reconnect	Change Brightness in turn	No response
BT on pairing	Change Brightness in turn	No response
BT on connected	Change Brightness in turn	No response

<Vol+> or <Vol->

States vs Press type	SP (<0.5)	LP >2~3s)
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. UI

Refer to "SPC-0028 - HMDX Controls Logic Specification - Bluetooth Loudspeakers(D)" for the UI flow chart

5. 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 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.

To assure continued compliance, any changes or modifications not expressly approved by the party.

Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).

This equipment 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.

RF warning statement:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

IC Statement

- English: "

This device complies with Industry Canada licenceexempt

RSS standard(s). Operation is subject

to the following two conditions: (1) this device may not cause interferenc

e, and (2) this device

must accept any interference, including interference that may cause und

esired operation of the device."

- French:"

Le présent appareil est conforme aux CNR d'Industrie Canada applicable

s aux appareils radio

exempts de licence. L'exploitation est autorisée aux deux conditions suiv

antes : (1) l'appareil ne

doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accept

er tout brouillage

radioélectrique subi, même si le brouillage est susceptible d'en comprom

ettre le fonctionnement."