

AOK UI INSTRUCTION for HX-P280

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Change History

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

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 |
|---------------|--------------------------------------|

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 | Total volume level | 16 steps |
| | Factory Reset | 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%) Volume at 10-70% memory, otherwise revert to the default 60% |
| 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 | Yes (USB, Power bank, etc.) |
| 3 | Battery mode | Battery management | i. Healthy: $X > 10\%$ ii. Low: $5\% < X \leq 10\%$ - 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 | 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 | 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 | Jam Tag-A-Long |
| | | 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, 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 1 st | For Speaker is default. | NA |
| 2 | Bluetooth | BT is 2 nd | 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 | Blue lights flash once five seconds | 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 |
|------------------|-------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| 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, Blue lights flash once five seconds |

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 | ProductLED |  | 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 | ProductLED |  | Aux as active audio source. |
| BT pairing | ProductLED |  | Speaker: Blue LED Slow flashing (0.2sec on, 0.2sec off) for 2min or until paired successfully. Blue lights flash until the pairing is successful |
| BT connected | ProductLED |  | Speaker: Blue LED stable on. Blue lights flash once five seconds |
| BT disconnecting | ProductLED |  | Pressing Vol+ and Vol- 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 | Details: When device is Off without USB connected or Power 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 |
|--------------------------|---------------|--------------|
| 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 | transfer other language | 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

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