

ONYX STUDIO



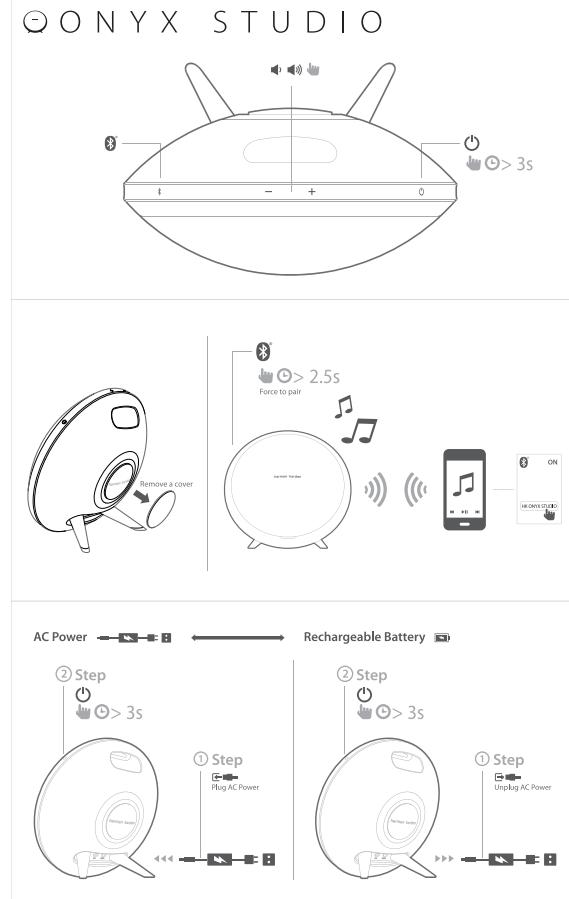
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ONYX STUDIO

Quick Start Guide
Guide de démarrage rapide

EN

- No. of channels: 4
- Transducers: 2 x woofers, 2 x tweeters, 2 x passive radiators
- Bang&Olufsen 4 x 15W
- SPK resistance: 95 dB @ 1 m
- Power requirement: 100 – 240V AC, 50/60Hz
- Power adapter: 19V, 2.0A
- Built-in battery: 3.7V, 2600mAh, Li-Ion Rechargeable Battery
- Power consumption: 38W maximum / 1W standby
- Speaker sensitivity: 90 dB per speaker
- Frequency response: 60 Hz – 20 kHz
- Transmitter power: <4dBm
- Modulation: GFSK / ASK/DPSK/QPSK
- Wireless Bluetooth® 3.0 A2DP v1.3 AVRCP v1.5
- Dimensions (Dia x W x H): 280mm x 161mm x 260mm

FR

- Nbre de canaux: 4
- Transducteurs: 2 x haut-parleurs graves, 2 x haut-parleurs aigus, 2 x radiateurs passifs
- Bang&Olufsen 4 x 15W
- Niveau d'impédance: 95 dB à 1 m
- Requête d'alimentation: 100 – 240V CA, 50/60 Hz
- Adaptateur d'alimentation: 19V, 2.0A
- Batterie intégrée: 3.7V, 2600mAh Lithium
- Consommation d'énergie: 38W maximum / 1W standby
- Impédance des haut-parleurs: 90 dB par haut-parleur
- Réponse en fréquences: 60 Hz à 20 kHz
- Fréquence de transmission: 2402 MHz à 2480 MHz
- Modulation: ASK/GFSK / QPSK/DPSK
- Sans fil Bluetooth® 3.0 A2DP v1.3 AVRCP v1.5
- Dimensions (Dia x P x H): 280mm x 161mm x 260mm

ES

- Nº de canales: 4
- Transductores: 2 woofers, 2 tweeters, 2 radiadores pasivos
- Bang&Olufsen 4 x 15W
- SPK resistencia: 95 dB @ 1 m
- Requerimientos de alimentación: 100 – 240V AC, 50/60 Hz
- Adaptador de alimentación: 19V, 2.0A
- Batería integrada: 3.7V, 2600mAh
- Consumo de energía: 38W máximo / 1W en espera
- Impedancia de los altavoces: 90 dB por altavoz
- Intervalo de frecuencias: 60 Hz a 20 kHz
- Potencia de transmisión: <4dBm
- Modulación: GFSK / ASK/DPSK/QPSK
- Wireless Bluetooth® 3.0 A2DP v1.3 AVRCP v1.5
- Dimensiones (Diámetro x Ancho x Profundidad): 280mm x 161mm x 260mm

PT

- Nº de canais: 4
- Transductores: 2 woofers de 3", 2 x tweeters de 1", 2 x radiadores passivos
- Bang&Olufsen 4 x 15W
- Nível de impedância: 95 dB @ 1 m
- Requisitos de alimentação: 100 – 240V CA, 50/60 Hz
- Transformador: 19V, 2.0A
- Bateria incorporada: 3.7V, 2600mAh
- Consumo de energia: 38W máximo, <1W em espera
- Impedância dos alto-falantes: 90 dB por alto-falante
- Intervalo de frequências: 60 Hz a 20 kHz
- Potência da transmissão: <4dBm
- Modulação: GFSK/ASK/DPSK/QPSK
- Sem fio: Bluetooth® 3.0 A2DP v1.3 AVRCP v1.5
- Dimensões (Diâmetro x L x A): 280mm x 161mm x 260mm

DE

- Antihandler: 4
- Signaldrehwandler: 2 x 3" Woofers, 2 x 1/4" Tweeter, 2 x passiver Radiatoren
- Bildschirm: 4 x 15 W
- Maximal SPL: 95dB @ 1m
- Stromverbrauch: 100-240V AC, 50/60 Hz
- Stromversorgung: 192,20A
- Energiebauteile: 37,7 2600mAh Lithium
- Stromverbrauch: 38W Maximum <1W im Standby
- Lautsprechereigenschaften: 60Hz ~ 20kHz
- Frequenzbereich: 2402 MHz ~ 2480 MHz
- Frequenzbereich: 400Hz ~ 4000Hz
- Modulation: GFSK / n-AQOPSK/B-DPSK
- Bluetooth: Bluetooth 3.0 A2DP v1.3 AVRCP v1.5
- Dimensionen (Durchmesser x Breite x Höhe): 280mm x 161mm x 260mm

IT

- Antihandler: 4
- Trasduttore: 2 x 3" woofers, 2 x 1/4" tweeter, 2 x passivo radiatori
- Bilanciamento: 4 x 15 W
- Massim SPL: 95dB @ 1m
- Consumo: 100-240V AC, 50/60 Hz
- Adattatore: 192,20A
- Batteria: Batteria ricaricabile 37,7 2600mAh Li-Ion
- Consumo di corrente: 38W massimo < 1W standby
- Impedenza del diffusori: 4 ohm per diffusore
- Risposta di frequenza: 60 Hz ~ 20 kHz
- Intervallo di frequenza: 2402 MHz ~ 2480 MHz
- Potenza trasmittente: < 4 dBm
- Modulazione: GFSK/n-AQOPSK/B-DPSK
- Wireless: Bluetooth 3.0 A2DP v1.3 AVRCP v1.5
- Dimensioni (diam. x largh. x alt.): 280mm x 161mm x 260mm

NL

- Aantal kanaal: 4
- Transducenten: 2 x 3" woofers, 2 x 1/4" tweeter, 2 x passieve radiatoren
- Ondersteuning: 4 x 15 W
- Maxim SPL: 95dB @ 1m
- Verbruik vermogen: 100-240V AC, 50/60 Hz
- Adapter: 192,20A
- Ingebouwde batterij: 37,7 2600mAh Lithium
- Stroomverbruik: 38W maximum <1W standby
- Luidspreker eigenschappen: 60Hz ~ 20kHz
- Frequentiebereik: 2402 MHz ~ 2480 MHz
- Frequentiebereik: 400Hz ~ 4000Hz
- Modulatie: GFSK/n-AQOPSK/B-DPSK
- Bluetooth: Bluetooth 3.0 A2DP v1.3 AVRCP v1.5
- Afmetingen (Diameter x B x H): 280mm x 161mm x 260mm

NO

- Aantal kanaler: 4
- Transducenter: 2 x 3" basselementer, 2 x 1/4" diskantelementer, 2 x passiv radiator
- Bilansering: 4 x 15 W
- Maxim SPL: 95dB @ 1m
- Værst: 100-240V AC, 50/60 Hz
- Adapter: 192,20A
- Inbygda batteri: 37,7 2600mAh Lithium
- Strombruk: 38W maksimal <1W standby
- Lydutviklingsenhets: 60Hz ~ 20kHz
- Frekvensomfang: 2402 MHz ~ 2480 MHz
- Frekvensomfang: 400Hz ~ 4000Hz
- Modulering: GFSK/n-AQOPSK/B-DPSK
- Tidsløs: Bluetooth 3.0 A2DP v1.3 AVRCP v1.5
- Dimensjoner (D x B x H): 280mm x 161mm x 260mm

FI

- Kauhannien määrä: 4
- Muuttimetri: 2 x 3" absoluuttokauhannetta, 2 x 1/4" diskantkauhannetta, 2 x passiivista järjestelmistä
- Kauhannien välisuunta: 4 x 15 W
- Max SPL: 95dB @ 1m
- Tohovarauus: 100-240 V AC, 50/60 Hz
- Virtausvaihto: 192,20A
- Sisään lataamiseksi akku: 37,7 2600mAh Lithium
- Viranvaltuus: 38W maksimi <1W valmiustila
- Kauhannien impedianssi: 4 ohm kauhannien kohti
- Taajuusvaihto: 60 Hz ~ 20 kHz
- Tohovarauus: 2402 MHz ~ 2480 MHz
- Lähetinvoima: < 4 dBm
- Modulointi: GFSK/n-AQOPSK/B-DPSK
- Laitteen ulko: Bluetooth 3.0 A2DP v1.3 AVRCP v1.5
- Mitat (Paks. x Leveys x Korkeus): 280mm x 161mm x 260mm

RU

- Количество каналов: 4
- Преобразователи: 2 x 3"-абсолютоконтура, 2 x 1/4"-дискантконтура, 2 x пассивных элементов
- Диапазон усиления: 4 x 15 Вт
- Макс. уровень: 95dB @ 1м
- Стабилизатор: 100-240 В AC, 50/60 Гц
- Адаптер: 192,20A
- Встроенный аккумулятор: 37,7 2600 мАч, литий
- Потребление тока: 38W максимум <1W в режиме ожидания
- Погрешность индуктивности: 4 Ома на диапазон
- Частотные характеристики: 60 Гц ~ 20 кГц
- Лицензионный частотный диапазон: 2402 МГц ~ 2480 МГц
- Мощность излучения: < 4 дБм
- Модуляция: GFSK/n-AQOPSK/B-DPSK
- Беспроводные интерфейсы: Bluetooth 3.0 A2DP v1.3 AVRCP v1.5
- Габариты (Длина x Ширина x Высота): 280mm x 161mm x 260mm

SV

- Antihandler: 4
- Omvarvande: 2 x 3" woofers, 2 x 1/4" tweeter, 2 x passiva element
- Bilansering: 4 x 15 W
- Max SPL: 95dB @ 1m
- Stromförderung: 100-240V AC, 50/60 Hz
- Stromquelle: 192,20A
- Ingebauter Akku: 37,7 2600mAh Lithium
- Stromförderung: 38W max <1 W standby
- Högtalareigenschaften: 60Hz ~ 20kHz
- Frekvensomfang: 2402 MHz ~ 2480 MHz
- Frekvensomfang: 400Hz ~ 4000Hz
- Modulering: GFSK/n-AQOPSK/B-DPSK
- Tidsløs: Bluetooth 3.0 A2DP v1.3 AVRCP v1.5
- Dimensioner (Diam x B x H): 280mm x 161mm x 260mm

DA

- Antihandler: 4
- Transducer: 2 x 3" subwoofer, 2 x 1/4" tweeter, 2 x passive radiator
- Bilanzierung: 4 x 15 W
- Maks. SPL: 95 dB ved 1 m
- Stromforsyning: 100-240 V AC, 50/60 Hz
- Stromadapter: 192,20A
- Inbyggd batteri: 37,7 2600mAh Lithium
- Stromförsörjning: 38W maks. <1 W standby
- Högtalareigenskaper: 60 Hz ~ 20 kHz
- Frekvensområde: 2402 MHz ~ 2480 MHz
- Frekvensområde: 400 Hz ~ 4000 Hz
- Modulering: GFSK/n-AQOPSK/B-DPSK
- Tidsløs: Bluetooth 3.0 A2DP v1.3 AVRCP v1.5
- Mål (D x B x H): 280mm x 161mm x 260mm

JP

- チャンネル数: 4
- 音声ドライバー: サウンドバー: 2-way 3" Woofer + 1-way Tweeter + 1-way バシッジ・ドライバー x 2
- 双方の周波数帯域: 4 x 15 W
- 最大SPL: 95dB @ 1m
- 電源要求: 100-240V AC, 50/60 Hz
- 電源供給: 192,20A
- 内蔵バッテリー: 37,7 2600mAh、3.7V Li-ion
- 消費電力: 約38W、待機電力: <1W
- スピーカー: 3-way 3" Woofer + 1-way Tweeter + 1-way Bass Reflex Driver
- 再生周波数帯域: 60Hz ~ 20kHz
- トランシミッタ出力: 離れたところでも4dB未満
- 変調: GFSK/n-AQOPSK/B-DPSK (モード切替機能切替可能) / DPSK (自動切替機能切替可能)
- ワイヤレス: Bluetooth 3.0 A2DP v1.3 AVRCP v1.5
- 寸法 (幅×高さ×奥行き): 280mm x 161mm x 260mm

KO

- 채널 번호: 4
- 별도 스피커: 2-way 3" 우퍼, 1-way 트위터, 2-way 브이저, 라디에이터 x 2
- 비전트리거(Bearing Rotation): 4 x 15 W
- 최대 SPL: 95dB @ 1m
- 전원 요구: 100-240V AC, 50/60 Hz
- 전원 공급: 192,20A
- 내장 배터리: 37,7 2600mAh 리튬
- 전력 소비: 38W, 대기 소비: <1W
- 스피커 드라이버: 3-way 3" Woofer + 1-way Tweeter + 1-way Bass Reflex Driver
- 주파수 응답 범위: 60Hz ~ 20kHz
- 전송 출력: 2402MHz ~ 2480MHz
- 전송 출력: <4dBm
- 변조: GFSK/n-AQOPSK/B-DPSK
- 무선: Bluetooth 3.0 A2DP v1.3 AVRCP v1.5
- 사이즈 (폭 x 높이 x 깊이): 280mm x 161mm x 260mm

CHS

- 声道数: 4
- 扬声器单元数: 2个(3" 低音扬声器+2个1/4" 高音扬声器+2个低频辐射器)
- 双功放: 4个, 每个15W
- 最大SPL: 95dB @ 1m
- 电源需求: 100-240V AC, 50/60 Hz
- 电源配给: 192,20A
- 内置电池: 37,7 2600mAh 锂电池
- 功耗: 最大约38W, 待机功耗:<1W
- 扬声器阻抗: 每个扬声器4 ohm
- 频率响应: 60 Hz ~ 20 kHz
- 频率范围: 2402 MHz ~ 2480 MHz
- 发射功率: < 4 dBm
- 调制: GFSK/n-AQOPSK/B-DPSK
- 无线: 蓝牙 3.0 A2DP v1.3 AVRCP v1.5
- 尺寸 (宽 x 高 x 厚): 280mm x 161mm x 260mm

CHT

- 频道数: 4
- 扬声器单元数: 2个(3" 低音扬声器+2个1/4" 高音扬声器+2个低频辐射器)
- 双功放: 4 x 15 W
- 最大 SPL: 95dB @ 1m
- 电源需求: 100-240V AC, 50/60 Hz
- 电源配给: 192,20A
- 内置电池: 37,7 2600mAh 锂电池
- 功耗: 最大约38W, 待机功耗:<1瓦
- 扬声器阻抗: 每个扬声器4 ohm
- 频率响应: 60 Hz ~ 20 kHz
- 频率范围: 2402 MHz ~ 2480 MHz
- 发射功率: <4 dBm
- 调制: GFSK/n-AQOPSK/B-DPSK
- 无线: Bluetooth 3.0 A2DP v1.3 AVRCP v1.5
- 尺寸 (宽度 x 高 x 厚度): 280mm x 161mm x 260mm

IND

- Nomor saluran: 4
- Transducent: 2 x 3" woofer, 2 x 1/4" tweeter, 2 x radiator pasif
- Bi-amp: 4 x 15W
- SPL Maksimum: 95dB@1m
- Kebutuhan daya: 100-240V AC, 50/60Hz
- Adaptor: 192,20A
- Baterai bawaan: 37,7 2600mAh Lithium
- Konsumsi daya: Maksimum 38W & stand by <1W
- Impedansi Speaker: 4 ohm per speaker
- Respons frekuensi: 60Hz ~ 20kHz
- Frekuensi: 2402MHz ~ 2480MHz
- Transmisi: <4dBm
- Modulasi: GFSK/n-AQOPSK/B-DPSK
- Wireless: Bluetooth 3.0 A2DP v1.3 AVRCP v1.5
- Dimensi (DxLxT): 280mm x 161mm x 260mm



Agência Nacional de Telecomunicações

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

Este produto está homologado pela ANATEL, de acordo com os procedimentos regulamentados pelo Decreto 2.955, de 1997. Preenchido o Censo 2020/2021, e atende aos requisitos técnicos aplicáveis.

Para maiores informações, consulte o site da ANATEL - www.anatel.gov.br

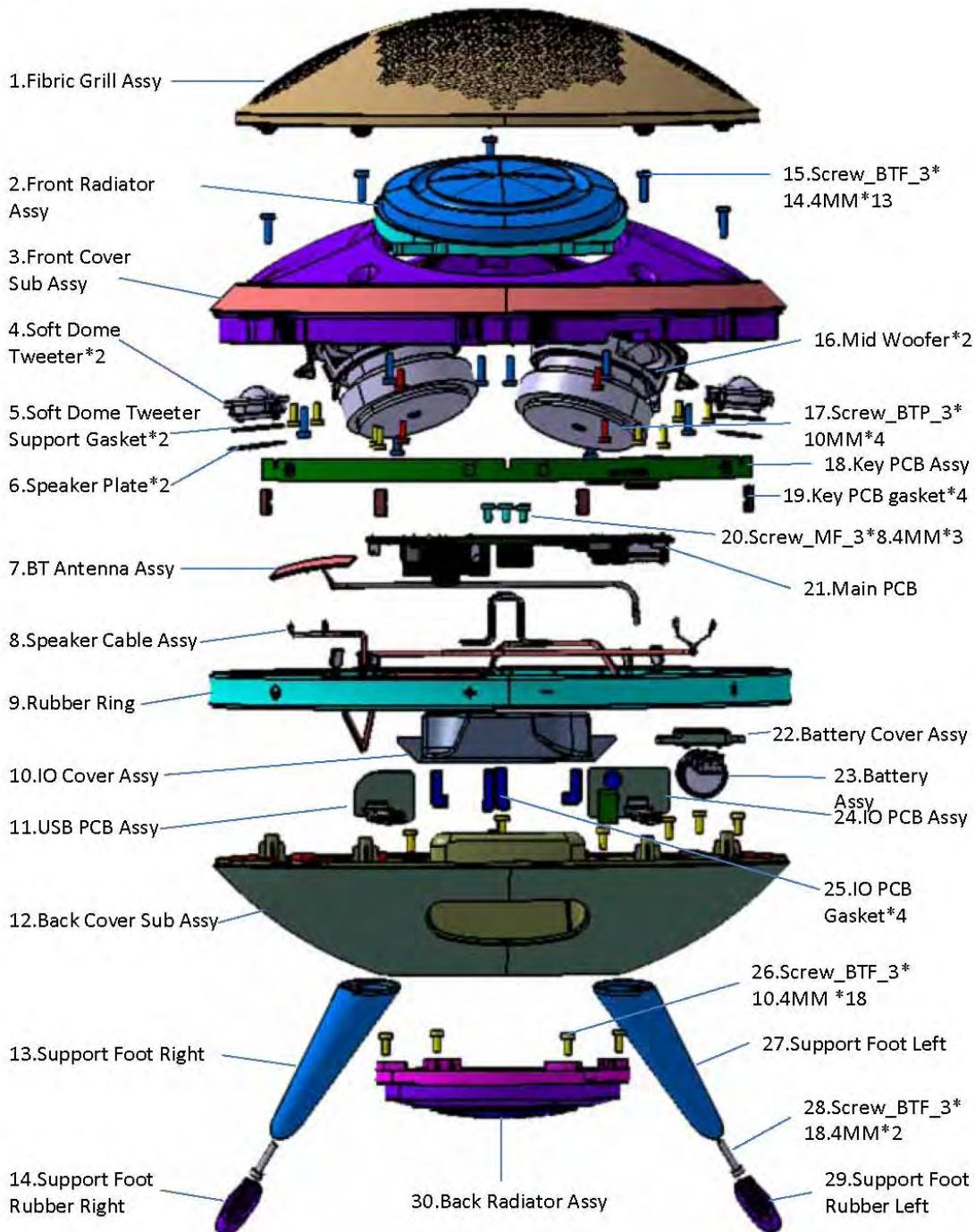


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00000000000000000000000000000000

Onyx P3 Explode View

V1.0



Component	Description	Drawing No
MEOY261009A	Fabric Grill Assy	1
MEOY261011A	Front Radiator Assy	2
MEOY261001A	Front Cover Sub Assy	3
SOS23001000	Soft Dome Tweeter	4
MEOY233003A	Soft Dome Tweeter Support Gasket	5
MEOY252002A	Speaker Plate	6
SOA03180000	BT Antenna Assy	7
MEOY240004A	Speaker Cable Assy	8
MEOY273002A	Rubber Ring(Laser)	9
MEOY261007A	IO Cover Assy	10
31OY2A1000A	USB PCB Assy	11
MEOY261004A	Back Cover Sub Assy	12
MEOY201005A	Support Foot Right	13
MEOY273004A	Support Foot Rubber Right	14
W0000301411	Screw_BTF_3*14.4MM	15
SOS00096000	Mid Woofer	16
W0003301011	Screw_BTP_3*10MM	17
31OY2K1000A	Key PCB Assy	18
MEOY233024A	Key PCB Gasket	19
W6000308410	Screw_MF_3*8.4MM	20
31OY2M1000A	Main PCB	21
MEOY261006A	Battery Cover Assy	22
BPOY2LG001B	Battery Assy	23
31OY2A2000A	IO PCB Assy	24
MEOY233020A	IO PCB Gasket	25
W0000301011	Screw_BTF_3*10.4MM	26
MEOY201004A	Support Foot Left	27
W0000301811	Screw_BTF_3*18.4MM	28
MEOY273003A	Support Foot Rubber Left	29
MEOY261012A	Back Radiator Assy	30

Harman Kardon Onyx Studio

Disassembly manual



General	Output: 15Wx4 @Adaptor mode
Speaker	Passive Radiator:Φ120.5 mm Woofers: Φ78mm; Tweeter: Φ31.6mm
Audio	Frequency response: 20Hz – 20KHz +/-1dB (EQ setting disabled); Impedance: 4Ω Ohms Woofers SPL: 83 dB 1W / 1m Tweeter SPL: 88 dB 1W / 1m
Connectivity	Bluetooth 3.0 + EDR
I/O Input	DC Jack (battery charging, power supply) MicroUSB (for firmware upgrade only)
Power	DC 19V/2A
Other Features	Tactile Power buttons, volume up/down buttons and BT pairing button; Front/Rear passive radiators; Battery 2500mAh (min.)

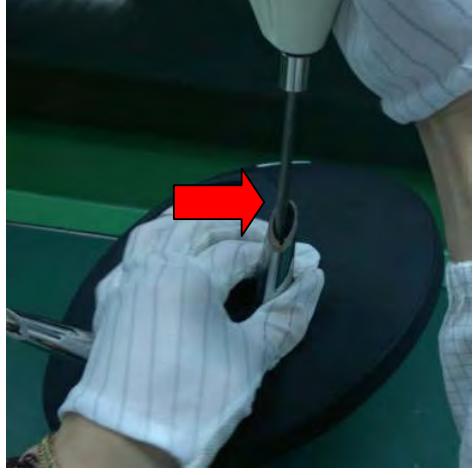
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1. SERVICE DEVICES 維修工具

	
ESD-wristband 防靜電手環	ESD-gloves 防靜電手套
	
T10 Screwdriver T10 螺絲起子	Plastic Plate 塑膠棒

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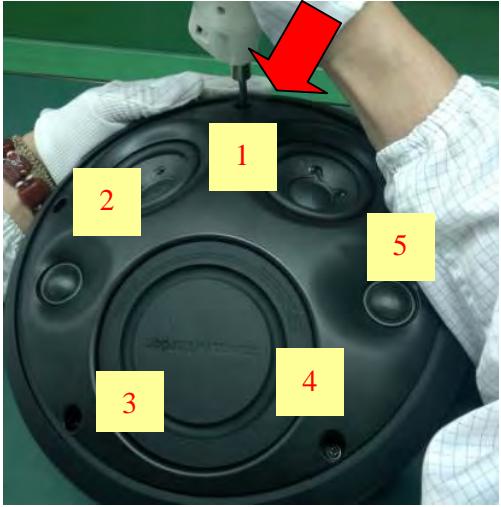
2. DISASSEMBLY INSTRUCTION 拆說明

	
<p>1.把设备正面平放在工作台上 Put the device on the table as shown in the figure.</p>	<p>2.用手取出 rubber support Left&Right. Remove the rubber support Left and support Right.</p>
	
<p>3.用螺丝刀取出右脚螺丝 Loosen the right screw_BB_3*18.2 by screwdriver.</p>	<p>4.用螺丝刀取出左脚螺丝 Loosen the left screw_BB_3*18.2 by screwdriver.</p>

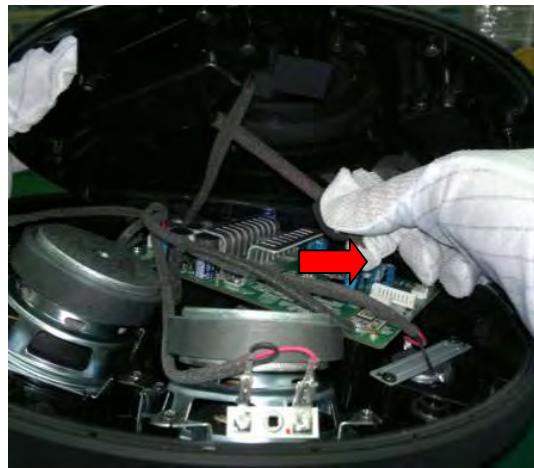
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<p>5.取下右支架 Remove the right foot support.</p>	<p>6.取下左支架 Remove the left foot support.</p>
<p>7.用手或者工具从缺口位置掰开 Insert the tool into the gap as shown in the figure and open it.</p>	<p>8.取下前網紗蓋 Remove the front cover.</p>

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<p>9.用螺丝刀取出前盖螺丝*5 Loosen the 5 screws (BB_3*14.2mm) by screwdriver.</p>	<p>10.从后面掰开后盖组件 Open the housing from the back cover.</p>
	
<p>11.打开上下壳 Open the housing.</p>	<p>12.拔下 DC-Connector Release the DC-Connector.</p>

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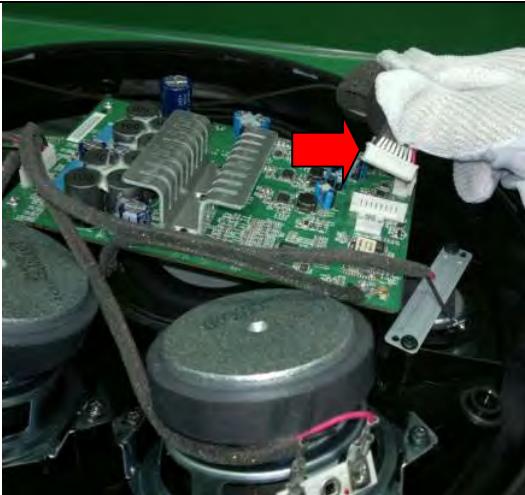


13.拔下 battery Connector

Release the battery connector.

14.拔下 USB Connector

Release the USB connector.



15.拔下 key PCB Connector

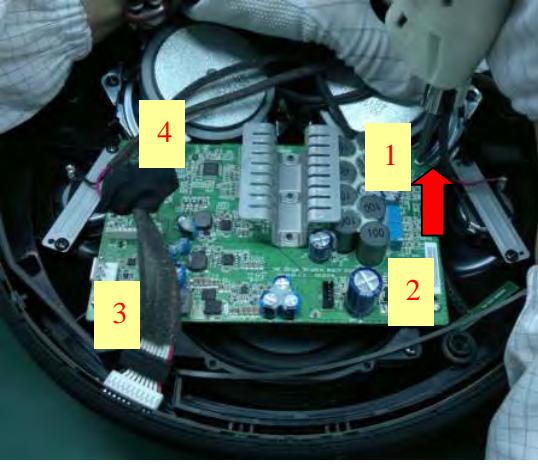
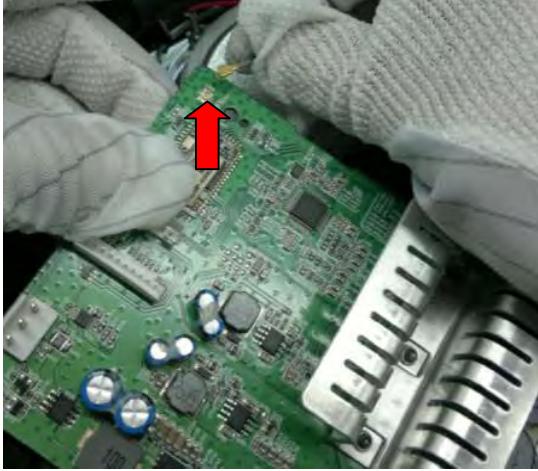
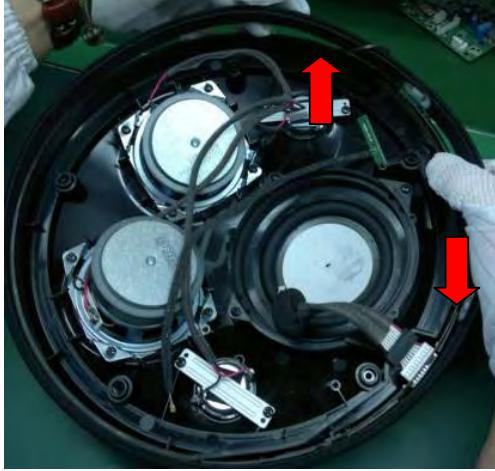
Release the key PCB connector.



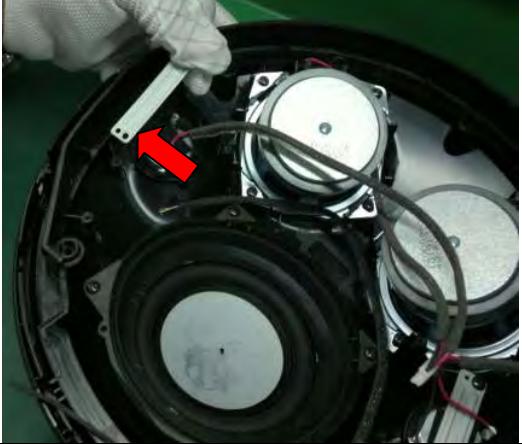
16.拔下 Speaker Connector

Release the speaker connector.

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<p>17.用螺丝刀取下主板螺丝*4 Loosen the 4 screws (BB_3*8.2mm) by screwdriver.</p>	<p>18.取出主板 Remove PCBA.</p>
	
<p>19.拔出 Antenna Connector Release the Antenna Connector.</p>	<p>20.取下 Rubber Ring Release the rubber ring.</p>

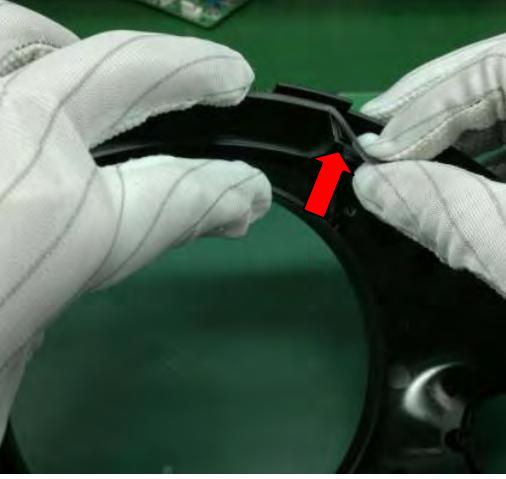
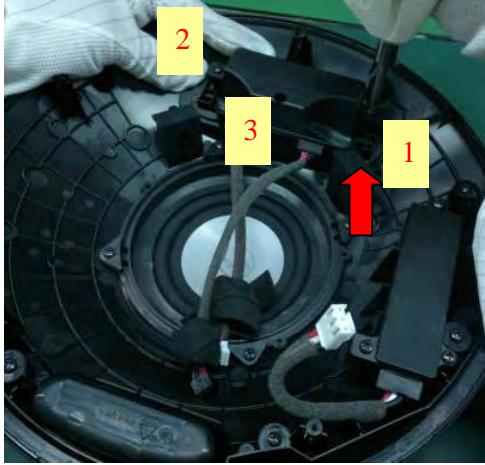
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<p>21.取下 Key PCB Release the key PCB.</p>	<p>22.用螺丝刀拆掉 Soft Dome Tweeter 螺丝*4 Loosen the 4 screws (BB_3*10.2mm) of Soft Dome Tweeter by screwdriver.</p>
	
<p>23.取下 Speaker Plate*2 Release 2 Speaker Plates.</p>	<p>24.取出 Soft Dome Tweeter*2 Release 2 Soft Dome Tweeters.</p>

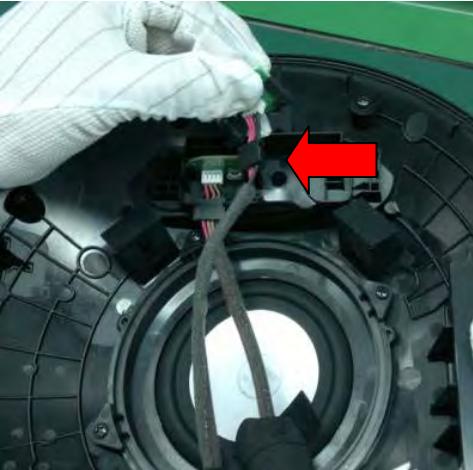
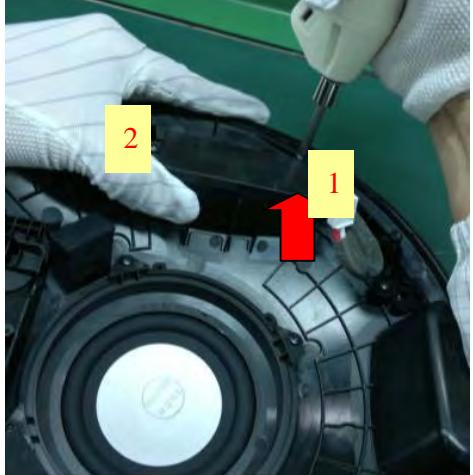
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<p>25.用螺丝刀拆掉 Mid Woofer 螺丝*8 Loosen the each 4 screws (BB_3*14.2mm) of 2 Mid Woofer by screwdriver.</p>	<p>26.取出 Mid Woofer*2 Release 2 Mid Woofers.</p>
<p>27.拆下 BT Antenna Remove BT Antenna.</p>	<p>28.用螺丝刀拆掉 Front Radiator Assy 螺丝*4 Loosen the 4 screws (BB_3*14.2mm) of Front Radiator Assy by screwdriver.</p>

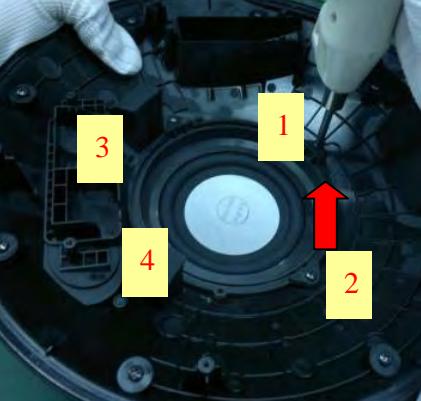
Harman Kardon Onyx Studio Disassembly manual

	
<p>29.取出 Front Radiator Assy Remove Front Radiator Assy.</p>	<p>30.整理 Sponge Main Sealing 到凹槽内 Put the Sponge Main Sealing into the gap as shown in the figure.</p>
	
<p>31.用螺丝刀拆掉 IO Cover Assy 螺丝*3 Loosen the 3 screws (BB_3*10.2mm) of IO Cover Assy by screwdriver.</p>	<p>32.取下 IO Cover Assy Remove IO Cover Assy.</p>

Harman Kardon Onyx Studio Disassembly manual

	
33.取出 DC Jack PCB Remove DC Jack PCB.	34.取出 USB PCB Remove USB PCB.
	
35.用螺丝刀拆掉 Battery Cover 螺丝*2 Loosen the 2 screws (BB_3*10.2mm) of Battery Cover by screwdriver.	36.取下 Battery Cover Remove Battery Cover.

Harman Kardon Onyx Studio Disassembly manual

	
<p>37.取出 Battery Remove the Battery.</p>	<p>38.用螺丝刀拆掉 Back Radiator Assy 螺丝*4 Loosen the 4 screws (BB_3*10.2mm) of Back Radiator Assy by screwdriver.</p>
	
<p>39.取出 Back Radiator Assy Remove Back Radiator Assy.</p>	<p>40. 用螺丝刀拆掉 Rear Cover 螺丝*8 Loosen the 8 screws (BB_3*10.4mm) of Rear Cover by screwdriver.</p>

**Harman Kardon Onyx Studio
Disassembly manual**



41. 取下 Rear Cover
Remove the Rear Cover.

Harman Kardon Onyx Studio Assembly procedure



General	Output: 15Wx4 @Adaptor mode
Speaker	Passive Radiator:Φ120.5 mm Woofers: Φ78mm; Tweeter: Φ31.6mm
Audio	Frequency response: 20Hz – 20KHz +/-1dB (EQ setting disabled); Impedance: 4Ω Ohms Woofers SPL: 83 dB 1W / 1m Tweeter SPL: 88 dB 1W / 1m
Connectivity	Bluetooth 3.0 + EDR
I/O Input	DC Jack (battery charging, power supply) MicroUSB (for firmware upgrade only)
Power	DC 19V/2A
Other Features	Tactile Power buttons, volume up/down buttons and BT pairing button; Front/Rear passive radiators; Battery 2500mAh (min.)

Harman Kardon Onyx Studio

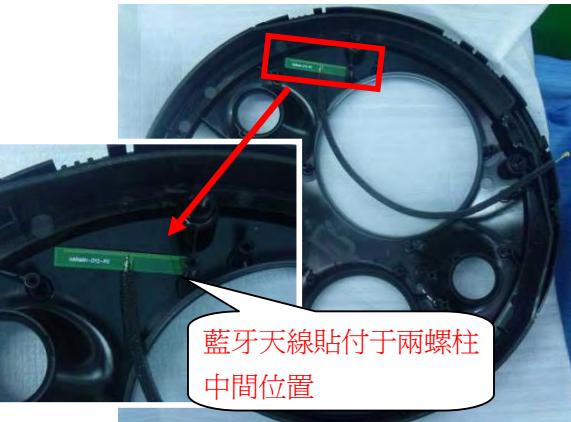
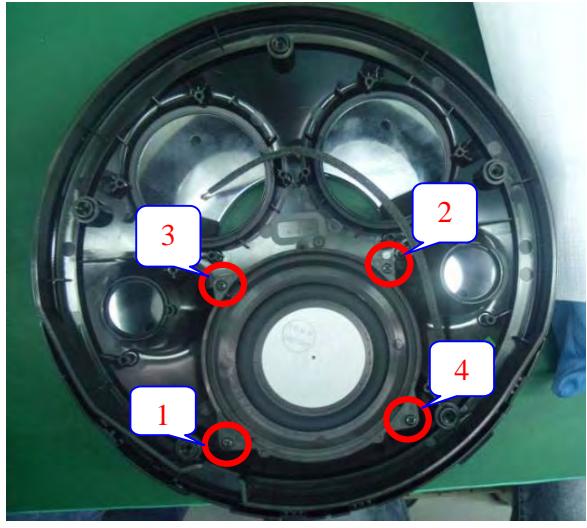
Assembly procedure

1. SERVICE DEVICES 維修工具

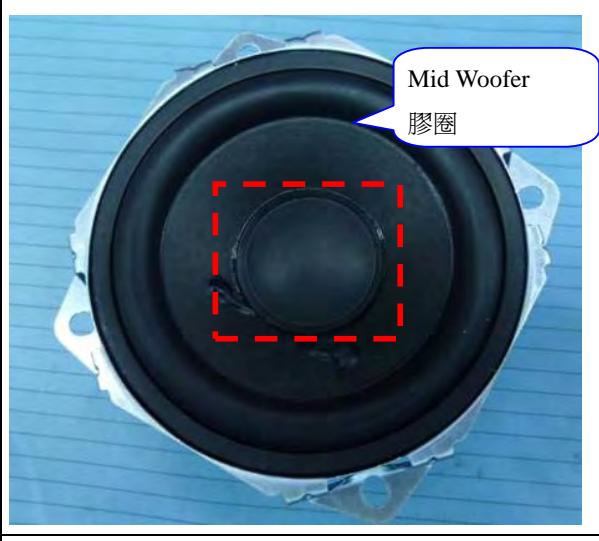
		
ESD-wristband 防靜電手環	ESD-gloves 防靜電手套	
		
T10 Screwdriver T10 螺絲起子	Tweezers 鑷子	Plastic Plate 塑膠棒

Harman Kardon Onyx Studio Assembly procedure

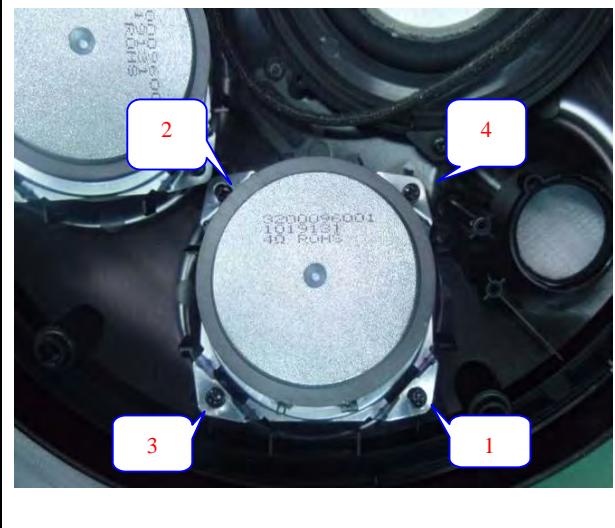
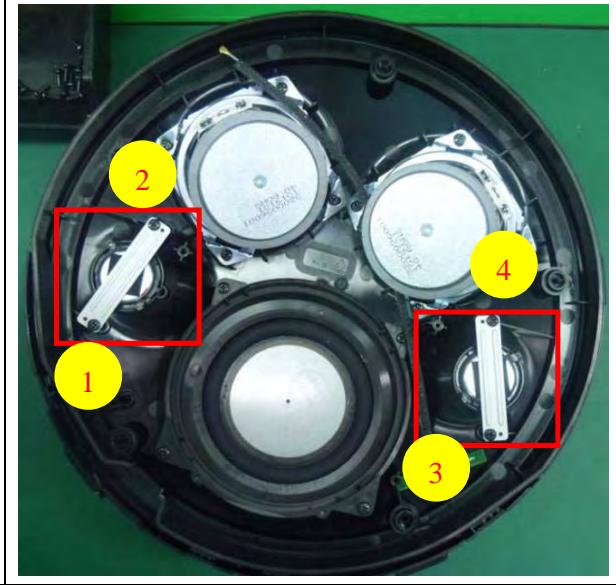
2. ASSEMBLY INSTRUCTION 裝說明

 <p>藍牙天線貼付于兩螺柱中間位置</p>	
<p>1. 取藍牙小板 BT Antenna, 使用鑷子, 撕除藍牙小板離型紙, 把藍牙小板貼入前殼對應位置(注意：藍牙天線需壓緊) Tears off liner of adhesive from BT Antenna Assy and stick on the front cover by pressing as shown in the figure. Note: Please use the pressing fixture for this assembly.</p>	<p>注意：密封圈勿折疊, 密封圈勿脫出 Attention: Do not bent the rubber ring and let it out of the gap.</p>
	 <p>1 2 3 4</p>
<p>2.1 把 Front Radiator 裝在前殼對應位置(Front Radiator 安裝位置有防呆設計)</p>	<p>2.2 使用螺絲起子，依次鎖付 4PCs 螺絲 (3*10.2MM)</p>

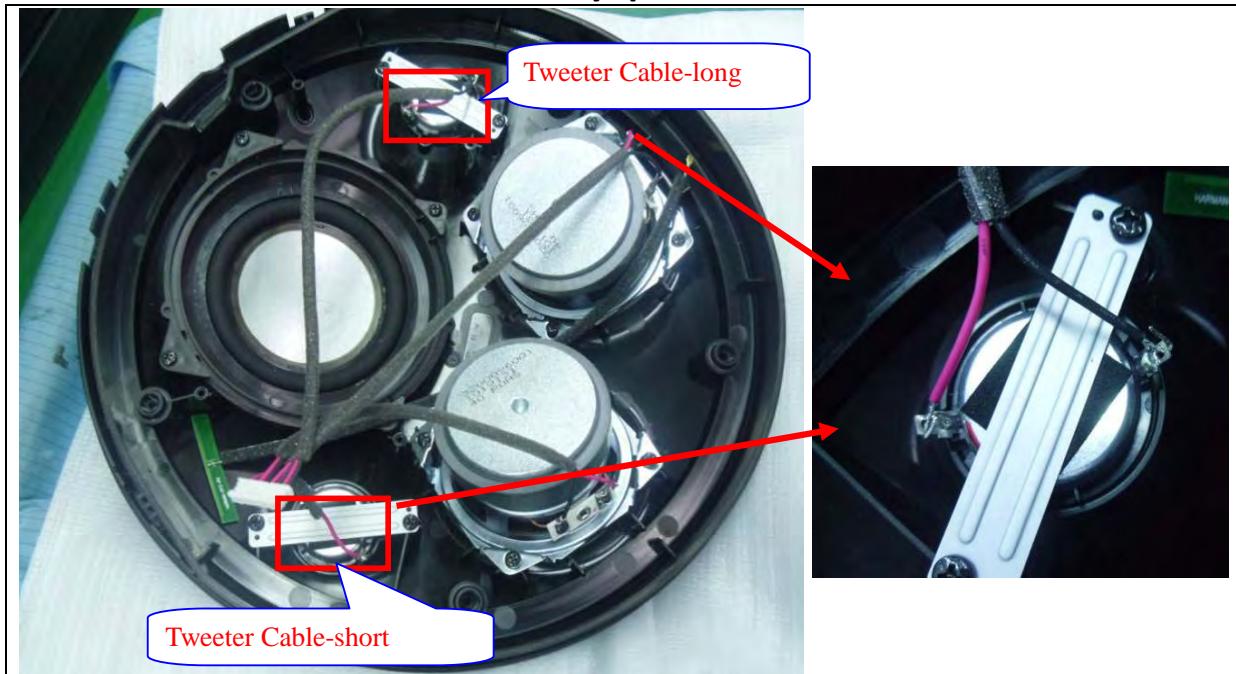
Harman Kardon Onyx Studio Assembly procedure

<p>注意 : Front Radiator 不可壓到藍牙天線 Assemble the Front Radiator to the front cover. Note: Do not press the BT Antenna Assy shown as in the figure.</p>	<p>Tightens 4 screws by using the T10 screwdriver.</p>
	
<p>3. 放置 Woofer 在前殼對應位置 注意 : Mid Woofer“接頭”朝面框外側位置 Place the Woofer fix on the front cover. Note: Let the connector of Mid Woofer outward shown as in the figure.</p>	<p>3.1 使用螺絲起子,依次鎖付 Mid Woofer 4PCs 螺絲(3*14.2MM) Tightens 4 screws by using the T10 screwdriver.</p>
	
<p>3.2 注意: Mid woofer 正面鼓膜不可觸碰、撞傷 Note: Do not damage and touch the Mid woofer</p>	<p>4. 放置 Mid Woofer 在前殼對應位置 注意 : Mid Woofer“接頭”朝面框外側位置 Place the Woofer fix on the front cover. Note: Let the connector of Mid Woofer outward shown as the figure</p>

Harman Kardon Onyx Studio Assembly procedure

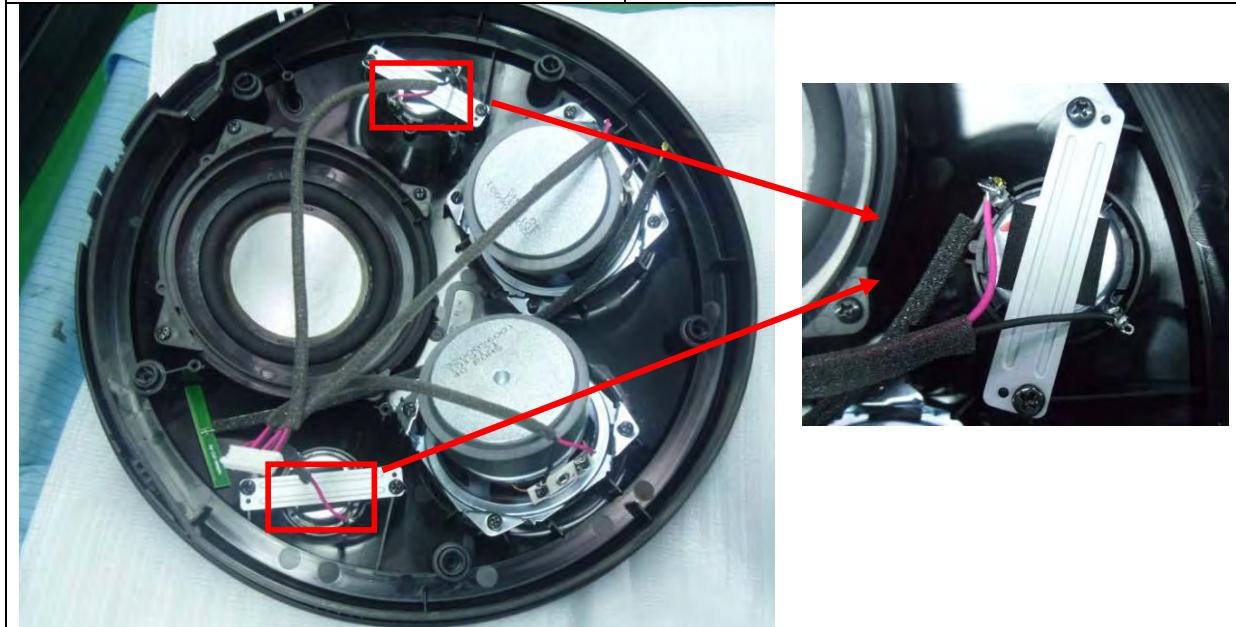
	
<p>4.1 使用螺絲起子，依次鎖付 Mid Woofer 4PCs 螺絲(3*14.2MM)</p> <p>Tightens 4 screws by using the T10 screwdriver.</p>	<p>4.2 注意: Mid woofer 正面鼓膜不可觸碰、撞傷</p> <p>Note: Do not damage and touch the Mid woofer</p>
	
<p>5. 撕除 Gasket 離型紙，貼付在 Soft Dome Tweeter 背面磁鐵上，居中貼付；</p> <p>注意：Soft Dome Tweeter“耳朵”對準缺口處</p> <p>Tears off liner of adhesive from gasket and stick on the back of Soft Dome Tweeter.</p>	<p>6. 取 Speaker Plate 裝在 Soft Dome Tweeter 上，使用螺絲起子，依次鎖付 4PCs 螺絲(3*10.2MM)</p> <p>注意：Speaker Plate 小孔為定位孔，大孔為螺絲孔</p> <p>Assemble Speaker Plate on the Soft Dome Tweeter and tightens 4 screws by using the T10 screwdriver.</p>

Harman Kardon Onyx Studio Assembly procedure



7. 把 Tweeter Cable-long 和 Tweeter Cable-short 連接到對應的 Tweeter 上
Connect the Tweeter Cable-long and Tweeter Cable-short to the Tweeter shown in the figure.

注意：Tweeter Cable-long 和 Tweeter Cable-short 不可接錯,不可接反;紅色 Tweeter Cable 對應 Tweeter 紅色打點標示端，黑色 Tweeter Cable 對應另一端
Note: Be carefully the direction of Tweeter Cable-long and Tweeter Cable-short.



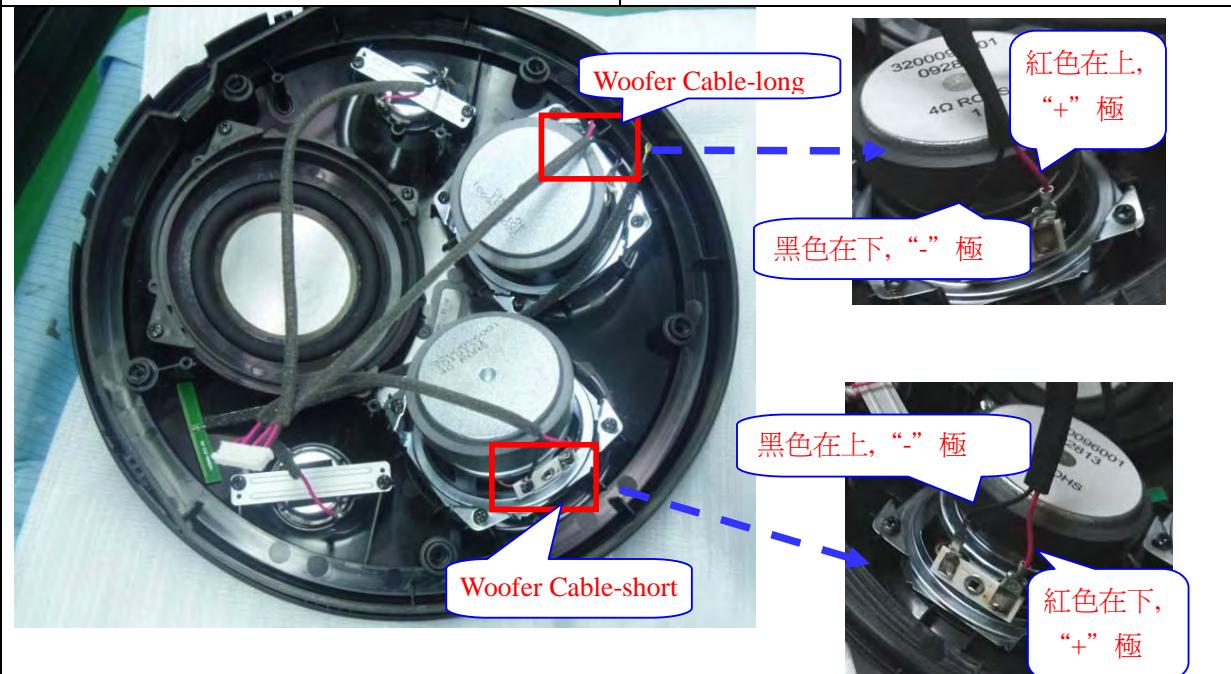
8. 取電烙鐵及無鉛錫絲焊接固定 Tweeter Cable-long；完成后，焊接固定 Tweeter Cable-short

注意：烙鐵接觸接口時間不能超過 5s，防止接口脫落
注意：焊接處需圓滑飽滿，連接牢固

Harman Kardon Onyx Studio Assembly procedure

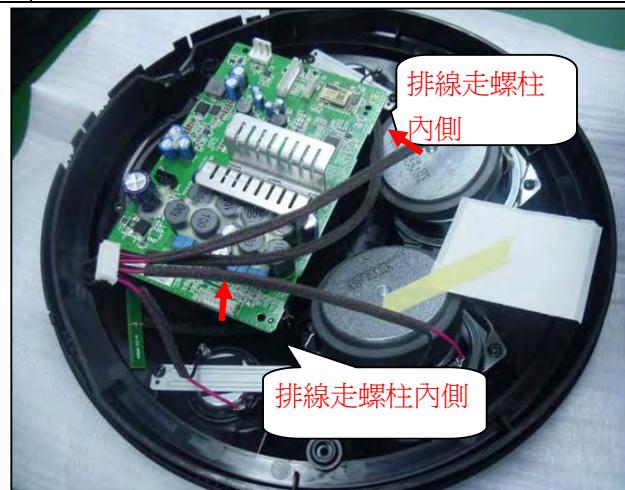
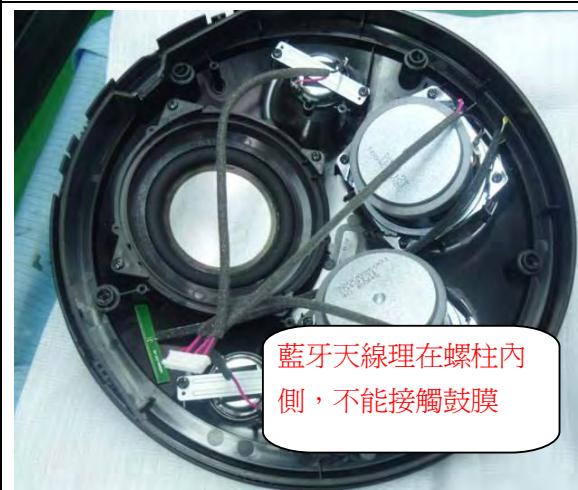
Soldering and fixing Tweeter Cable-long and Tweeter Cable-short by sequence.

Note: Do not over 5s for the soldering, and make sure the soldering quality and tightness.



9. 取 Speaker Cable 按正負極連接到 Mid Woofer 對應位置
Connect the Speaker Cable to the Mid Woofer.

注意：紅“+”黑“-”，紅色 Cable 線對應 Mid Woofer “+”極，黑色 Cable 線對應 Mid Woofer “-”極；Woofer Cable-long 和 Woofer Cable-short 不可接反
Note: Red “+” Cable with Mid Woofer “+” Black “-” with Mid Woofer “-”, please make sure the direction of Woofer Cable-long and Woofer Cable-short.

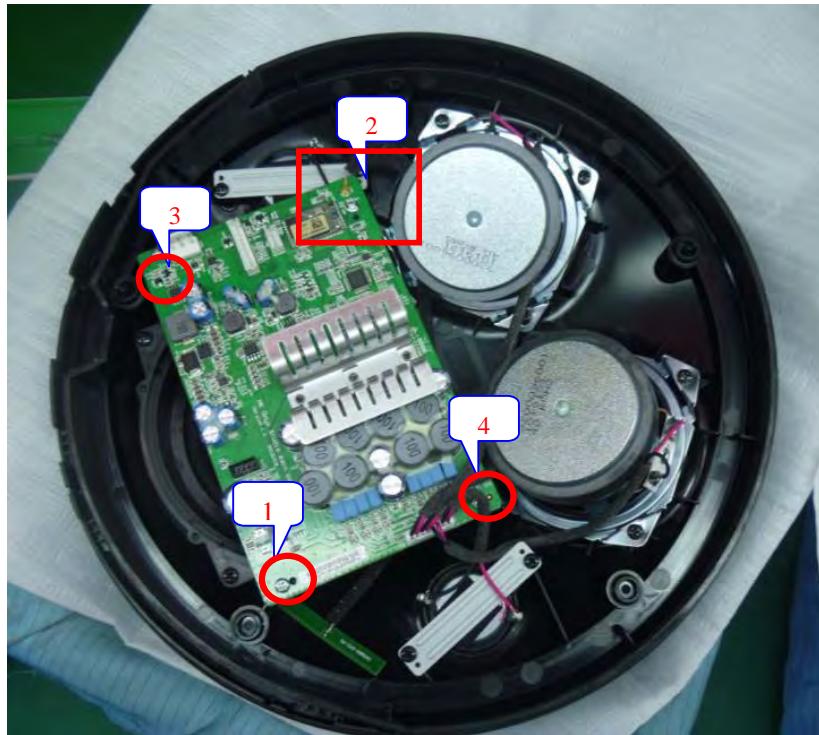


10. 將主板對準面框螺柱，注意藍牙天線走主
板下側經過，不能接觸鼓膜

注意：主板定位孔需對到位
Note: Position the MB hole shown as the figure.

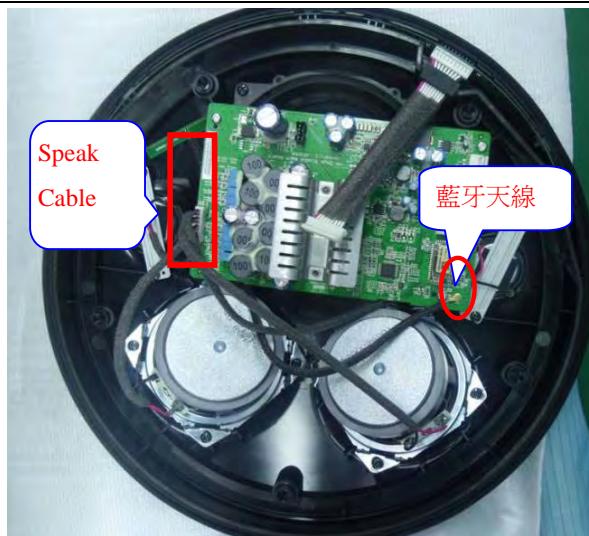
Harman Kardon Onyx Studio Assembly procedure

Assemble the MB to the post and let the BT A Antenna under the MB, and do not touch Mid woofer.



11. 使用螺絲起子，依次鎖付 4PCs 螺絲 (3*8.2MM)固定主板
Tightens 4 screws by using the T10 screwdriver.

注意：主板定位孔需對到位
Note: Position the MB hole shown as the figure.

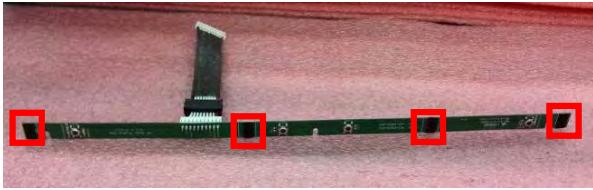
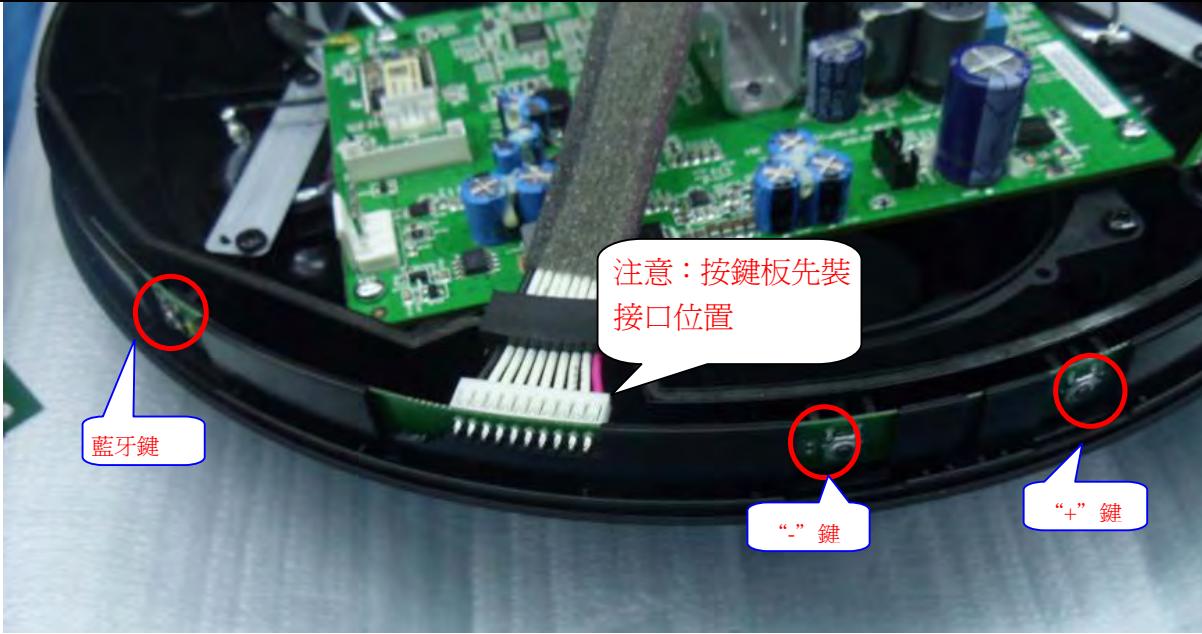


12. 將 Speak Cable 連接到主板指定接口；將天線連接到主板對應位置，注意扣合到位
Assemble the Speak Cable and BT Antenna to

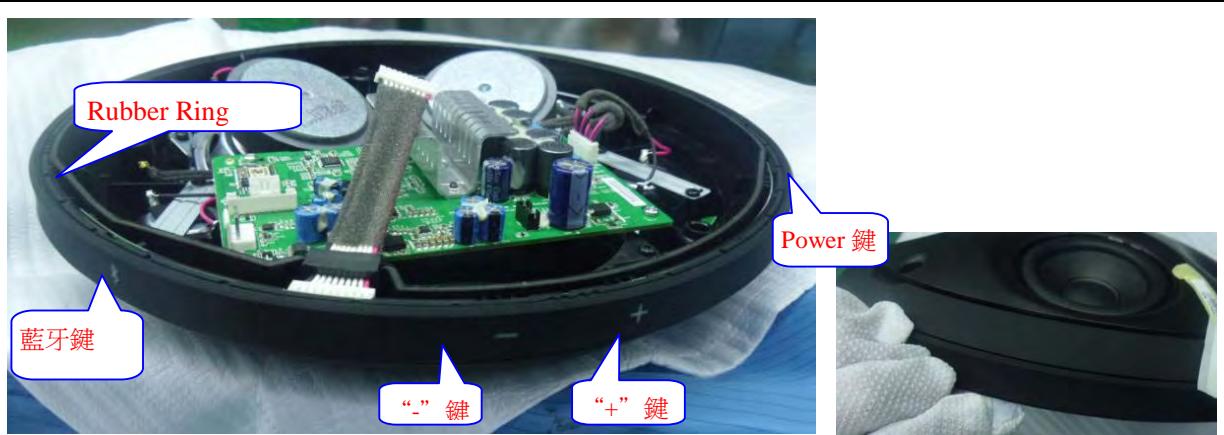


12.1 將喇叭排線理到喇叭側下邊經過，不能在螺絲上方經過
Arrange the Speak Cable under the Speaker and

Harman Kardon Onyx Studio Assembly procedure

the MB shown in the figure.	it shouldn't pass by the upper screw.
	
<p>13. 取 4PCs 泡棉粘貼到按鍵板指定位置 Assemble 4 sponges to the switches shown in the figure.</p>	<p>注意：泡棉粘貼在白線中間位置，兩側靠末端粘貼，長於部份朝缺口側粘貼 Note: If the length is longer, please stick near the gap.</p>
	<p>注意：按鍵板先裝 接口位置</p>
<p>14. 將按鍵板從排線接口位置開始組裝，再依次左右兩側卡入面框 Assemble the Cable first and then assemble the both sides of the keys.</p>	<p>注意：按鍵板需注意組裝方法，防止折斷按鍵板 Note: Do not bend the key PCB.</p>

Harman Kardon Onyx Studio Assembly procedure

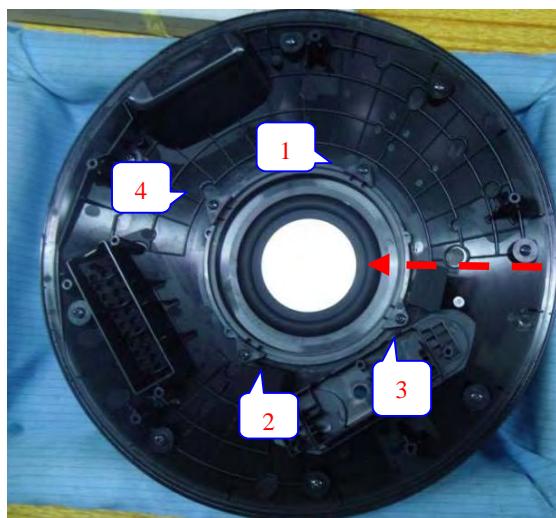


15. 取 Rubber Ring 對準按鍵處依次往面框側組裝

Assemble the rubber ring and align the keys by sequence.

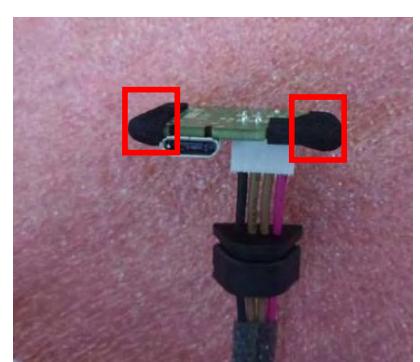
注意：Rubber Ring 需注意組裝方法，需卡到位

Note: Take care the assembly method and its position.

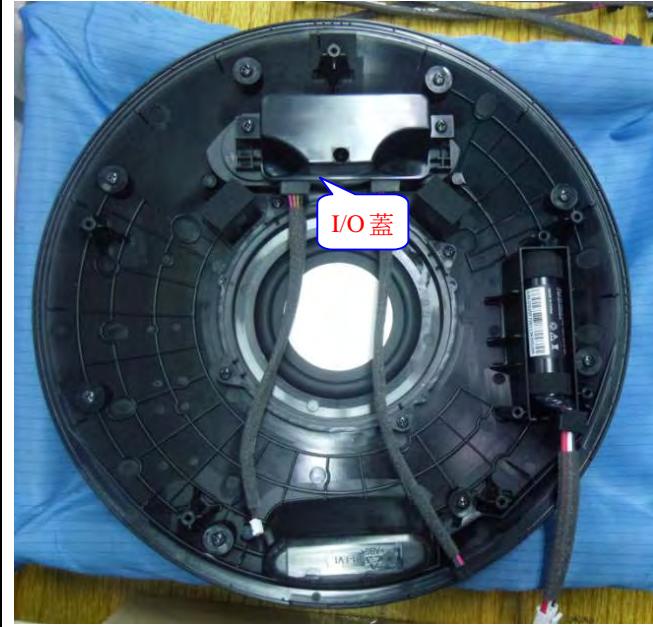
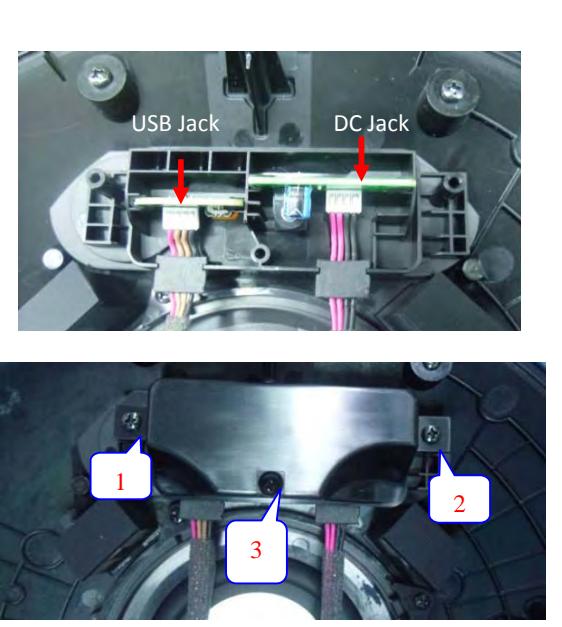
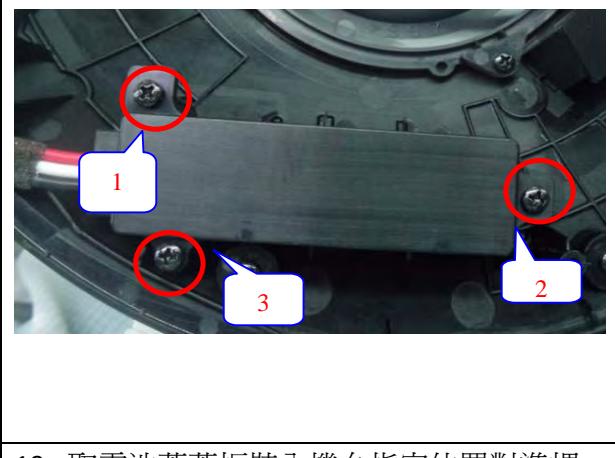
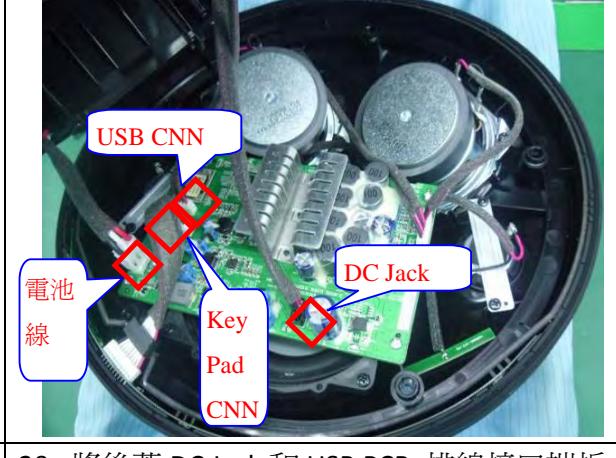


16. 把 Back Radiator 組裝到後殼對應位置
(Front Radiator 安裝位置有防呆設計)；取螺絲起子，依次鎖付 4PCs 螺絲(3*10.2MM)

Assemble the Back Radiator to the back of back cover shown in the figure. Tightens 4 screws by using the T10 screwdriver.



Harman Kardon Onyx Studio Assembly procedure

<p>17. 取 USB PCB 1PC，貼付 Gasket 2PCs Assemble 2 gaskets on USB PCB shown in the figure.</p>	<p>17-1 取 DC Jack 1PC，貼付 Gasket 2PCs Assemble 2 gaskets on DC jack shown in the figure.</p>
	
<p>18. 把 DC Jack 和 USB PCB 安裝至後殼對應位置，把 DC Jack 線和 USB PCB 線卡入卡槽，如圖 注意：DC Jack 線和 USB PCB 線需卡到底，排線橡膠需卡入卡槽 Assemble DC Jack and USB PCB on the back cover and put the cables into the gap shown in the figure. Note: Make sure the cables completely inside the gap.</p>	<p>18-1 取 I/O Cover 裝在後殼對應位置，如圖使用螺絲起子，依次鎖付 3PCs 螺絲 (3*10.2MM) Place the I/O cover on the back cover shown in the figure, and tightens 3 screws by using the T10 screwdriver.</p>
	
<p>19. 取電池蓋蓋板裝入機台指定位置對準螺</p>	<p>20. 將後蓋 DC Jack 和 USB PCB 排線接口端折</p>

Harman Kardon Onyx Studio Assembly procedure

<p>絲孔；使用螺絲起子，依次鎖付 3PCs 螺絲 (3*10.2MM)</p> <p>Place the battery cover shown as in the figure, and tightens 3 screws by using the T10 screwdriver.</p>	<p>疊一下；分別把 USB/DC 接口排線,電池排線 /Key Pad 線插在主板對應位置</p> <p>Arrange the cables of DC Jack and USB PCB on the back cover, and then connect USB/DC/battery/Key pad cables shown in the figure.</p>
<p>21. 確認排線插入到位后，將後蓋從治具中拿出，蓋到前蓋上，要求後蓋的把手對準前蓋開關接口后，盒蓋卡緊</p> <p>Take the back cover and assemble to the front cover, make sure the cover has been completely closed.</p>	<p>22. 取螺絲起子，鎖付螺絲 5PCs(3*14.2MM)</p> <p>Tightens 5 screws by using the T10 screwdriver.</p>
<p>23. 取 Screw_BB_3*18.2 分別將左、右支架鎖緊</p>	<p>24. 將前殼保護殼支架組裝到位</p> <p>注意：要保護殼支架對準音響上的缺口</p>

Harman Kardon Onyx Studio Assembly procedure

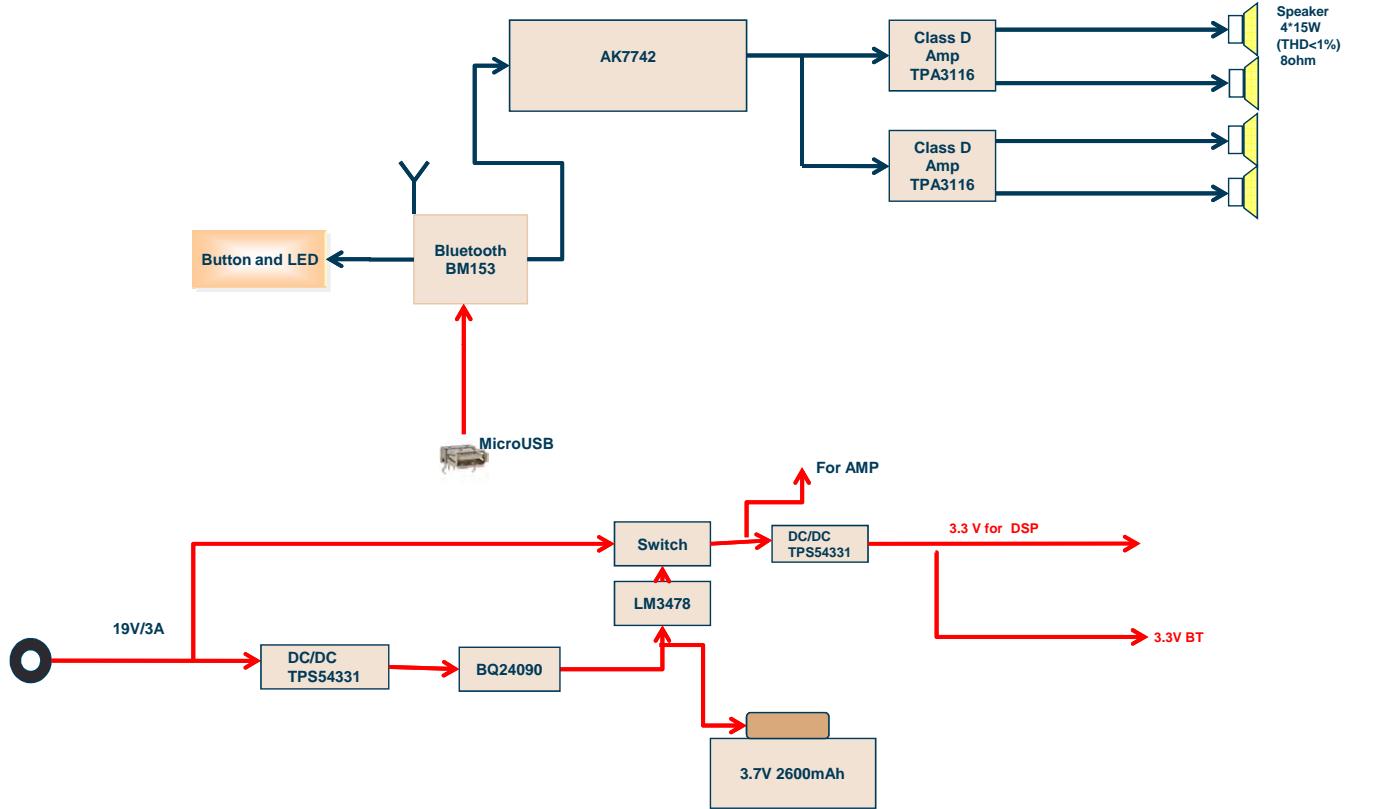
Assemble 2 Support Foot Rubber and tightens 2 screws by using the T10 screwdriver shown in the figure.

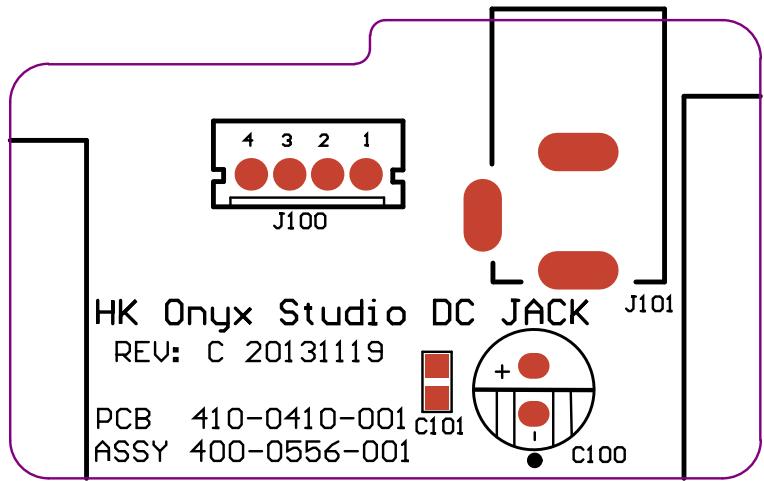
Assemble the Fibric Grill Assy to the right position.

Note: Make sure the hooks have been completely assembled.

HARMAN

Block Diagram





COMPANY: HARMAN LIFESTYLE

DATE: 19-11-2013

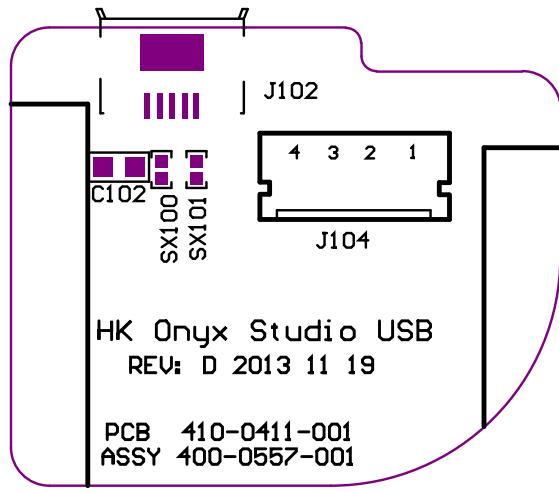
PART NUMBER: 410-0410-001

REV: C

LAYER: SILKSCREEN TOP

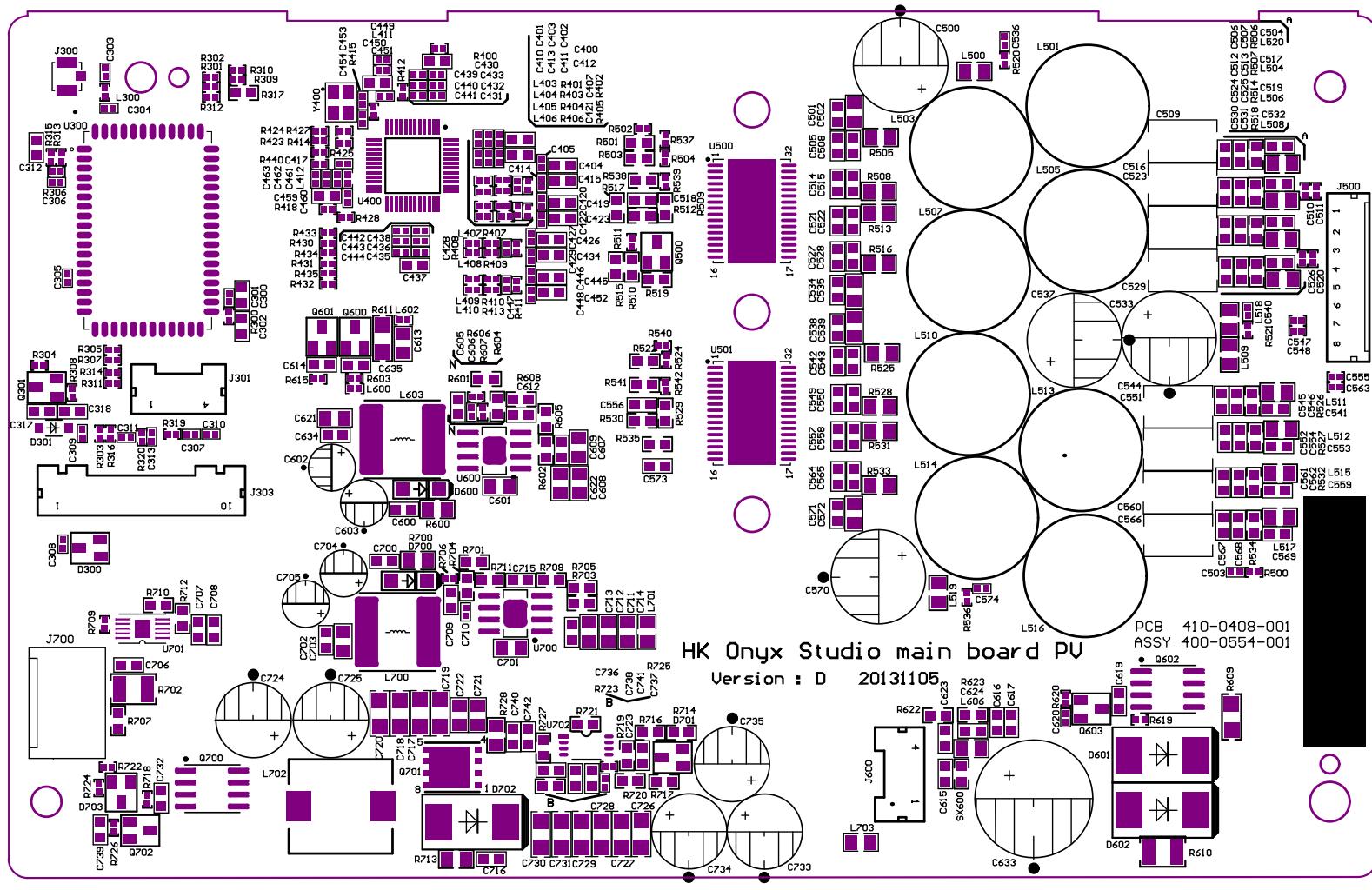
EE:

ME:



COMPANY: HARMAN LIFESTYLE	DATE: 19-11-2013
PART NUMBER: 400-0557-001	REV: D
LAYER: SILKSCREEN TOP	
EE:	ME:

410-0411-001



COMPANY: HARMAN LIFESTYLE

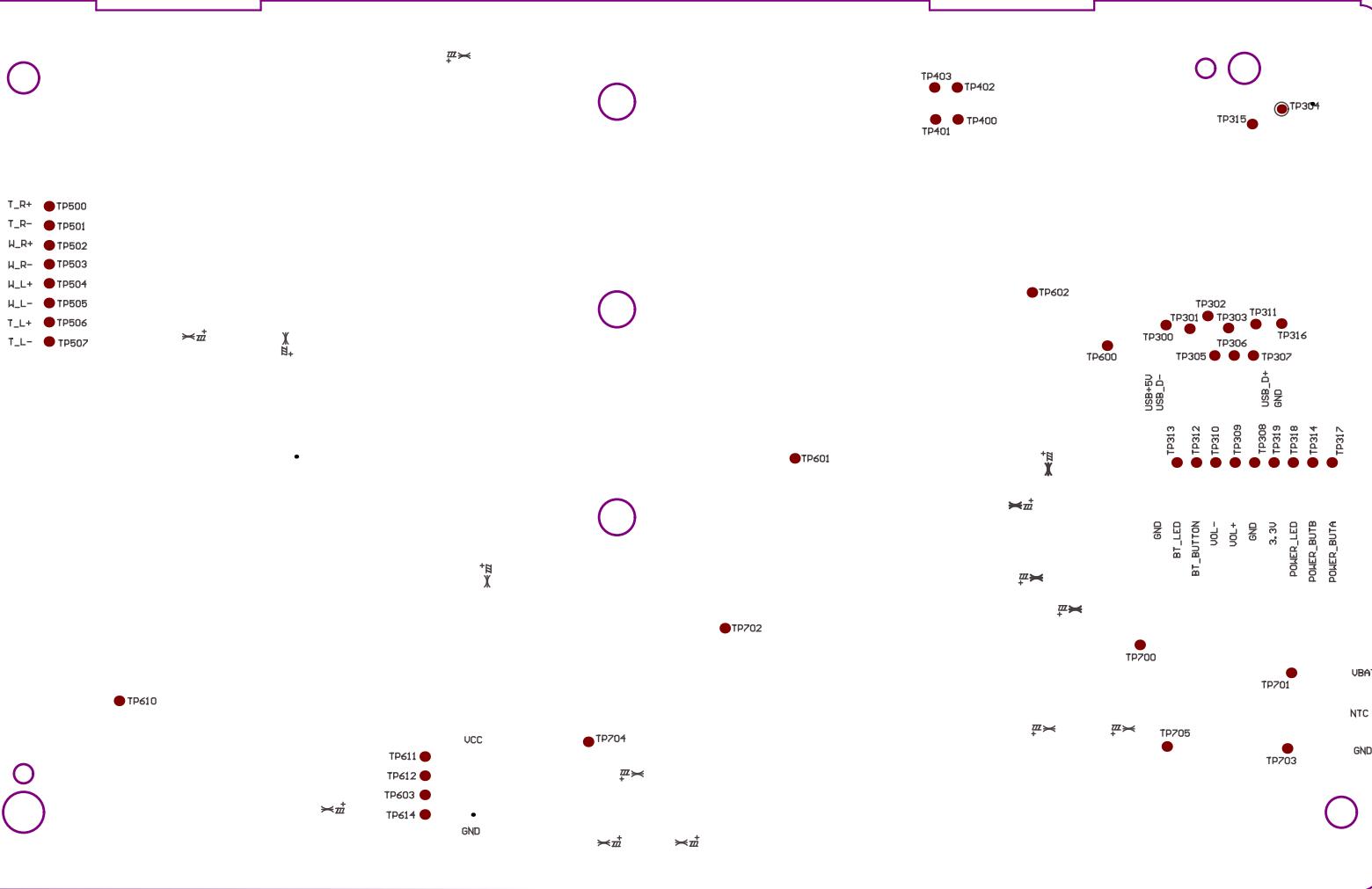
DATE: 05-11-2013

PART NUMBER: 410-0408-001

REV: D

LAYER: SILKSCREEN TOP

|EE: ME:



EE: ME: LAYER: SILKSCREEN BOTTOM
PART NUMBER: 410-0408-001 REV: D
COMPANY: HARMAN LIFESTYLE DATE: 06-11-2013

A small diagram showing a central circle with two vertical lines extending downwards, surrounded by four purple squares. The labels C2001, D200, R200, and SH200 are positioned around the top and bottom of the central circle.

PCB 410-0409-001
ASSY 400-0555-001

SH201

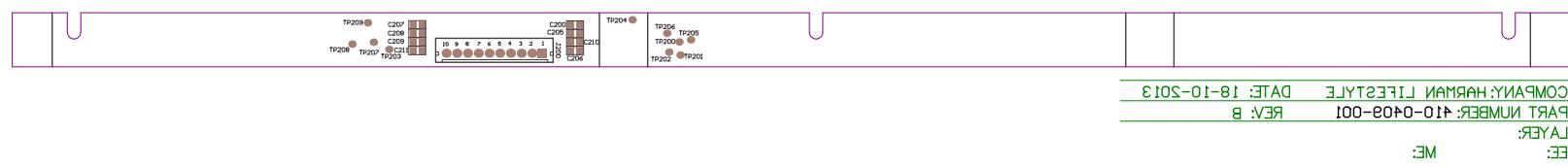
C203
SH202

POWER_BTN
POWER_BTN
POWER_BTN
POWER_BTN
2.3V
GND
VOL+
VOL-
BT_BUTTON
BT_LED

HK Onyx Studio Key
REV: B 20131017

A schematic diagram of a three-terminal bidirectional switch component. It features a central rectangular box with two diagonal ports. Each port has a small circle with a vertical line through it, indicating a diode or unidirectional switch. On the left side, there is a vertical line with a downward-pointing arrow, representing a terminal. To the left of this terminal is the label "D202" above "R202". On the right side, there is another vertical line with an upward-pointing arrow, representing a terminal. To the right of this terminal is the label "D203" above "R203". Below the central box, the label "SW203" is centered.

COMPANY: HARMAN LIFESTYLE DATE: 18-10-2013
PART NUMBER: 410-0409-001 REV: B
LAYER: SILKSCREEN TOP
EE: ME:



4

3

2

1

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REVISION HISTORY			
REV	ECO	CHECKED	DATE

D

C

B

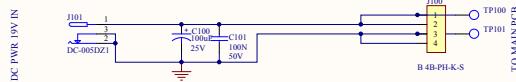
A

D

C

B

A



Change list from REV A to REV B:

Change C100 package

HARMAN INTERNATIONAL			Harman Consumer Group Shenzhen, Guangdong, China	
CREATED	NAME	DATE	TITLE	
CHECKED			HK Onyx Studio DC Jack Board	
			SIZE	DRAWING NO.
SCALE:	CAD FILE:			REV. B

4

3

2

1

4

3

2

1

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REVISION HISTORY			
REV	ECO	CHECKED	DATE

D

D

C

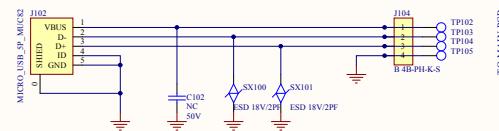
C

B

B

A

A



Change list from REV A to REV B:

Change J102 package

C:\m\02\Harmansig\02\Harmansig.sch			Harman Consumer Group Shenzhen, Guangdong, China		
HARMAN INTERNATIONAL			TITLE HK Onyx Studio USB Board		
CREATED	NAME	DATE			
CHECKED			SIZE	DRAWING NO.	REV. B
SCALE:			CAD FILE:		SHEET 1 OF 1

4

3

2

1

4

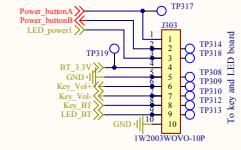
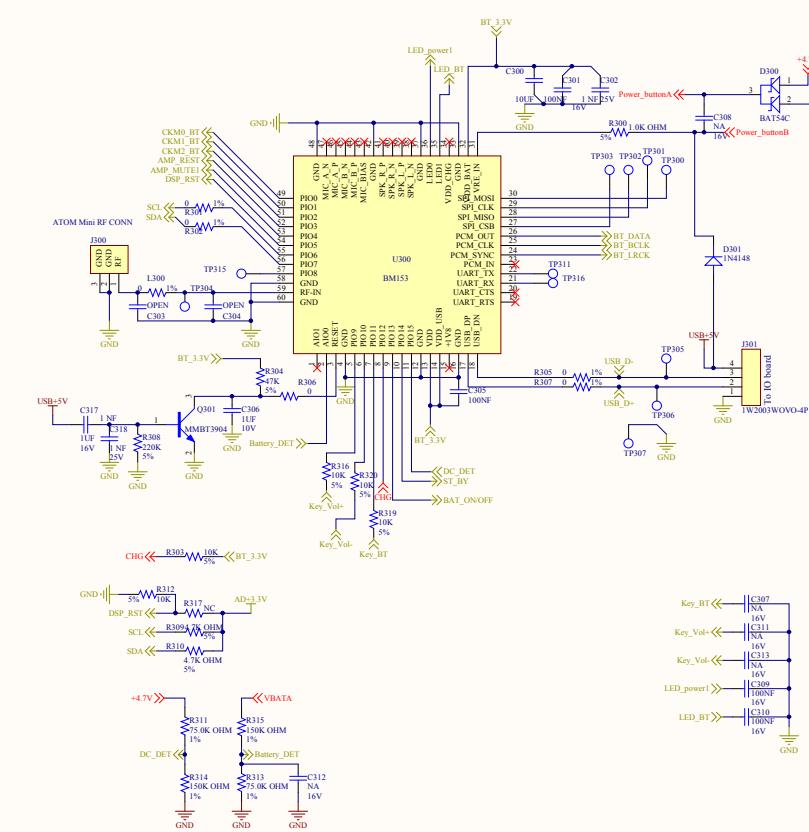
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REVISION HISTORY			
REV	ECO	CHECKED	DATE
B-1	1.Add D301 IN4148WS 2.Remove C308		

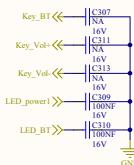


B version change to C version change list

- 1.Remove C308/C307/C311/C313
- 2.Add D301
- 3.Add C312, but open
- 4.Change connect R312 to GND;Add R317 open(Set DSP default mode is RST)

C version change to D version change list

- 1.Change package for J301 and J303



HARMAN INTERNATIONAL			Harman Consumer Group Shenzhen, Guangdong, China		
CREATED	NAME	DATE	TITLE	DRAWING NO.	
	Hansen Ma	20131 22	HK Onyx Studio	070-0404	
CHECKED				SIZE	REV.
				B	E
SCALE:	CAD FILE:			SHEET OF	

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REVISION HISTORY

REV	ECO	CHECKED	DATE

D

C

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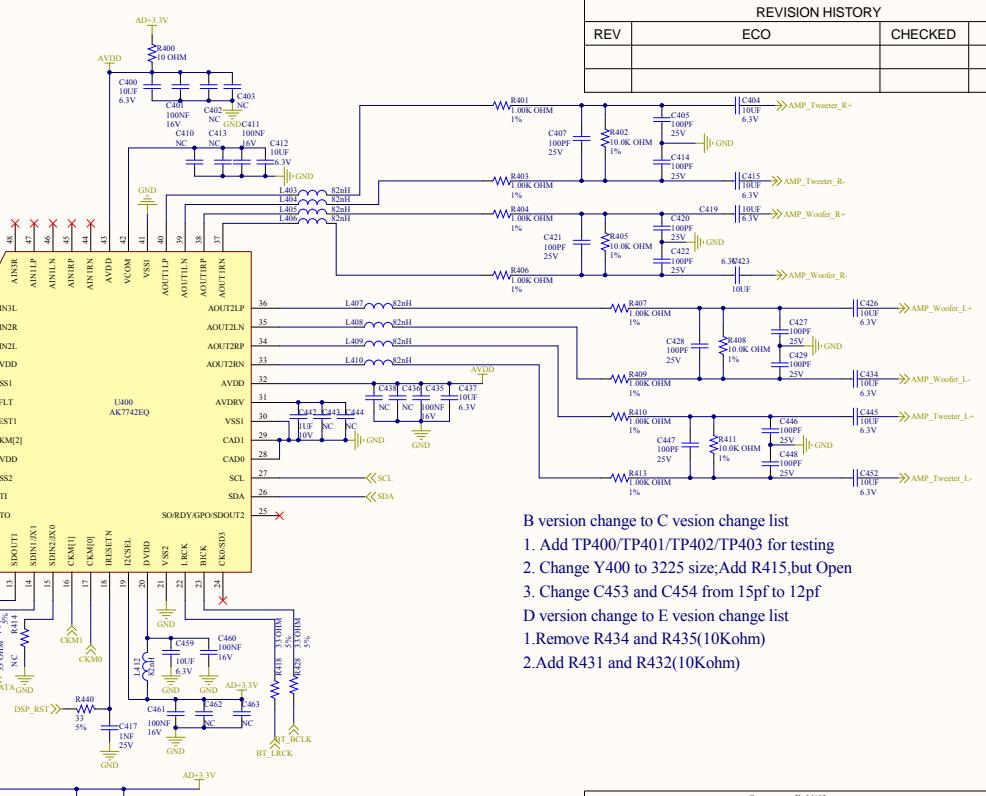
A

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B version change to C version change list

1. Add TP400/TP401/TP402/TP403 for testing
2. Change Y400 to 3225 size; Add R415, but Open
3. Change C453 and C454 from 15pf to 12pf

D version change to E version change list

1. Remove R434 and R435(10Kohm)
2. Add R431 and R432(10Kohm)

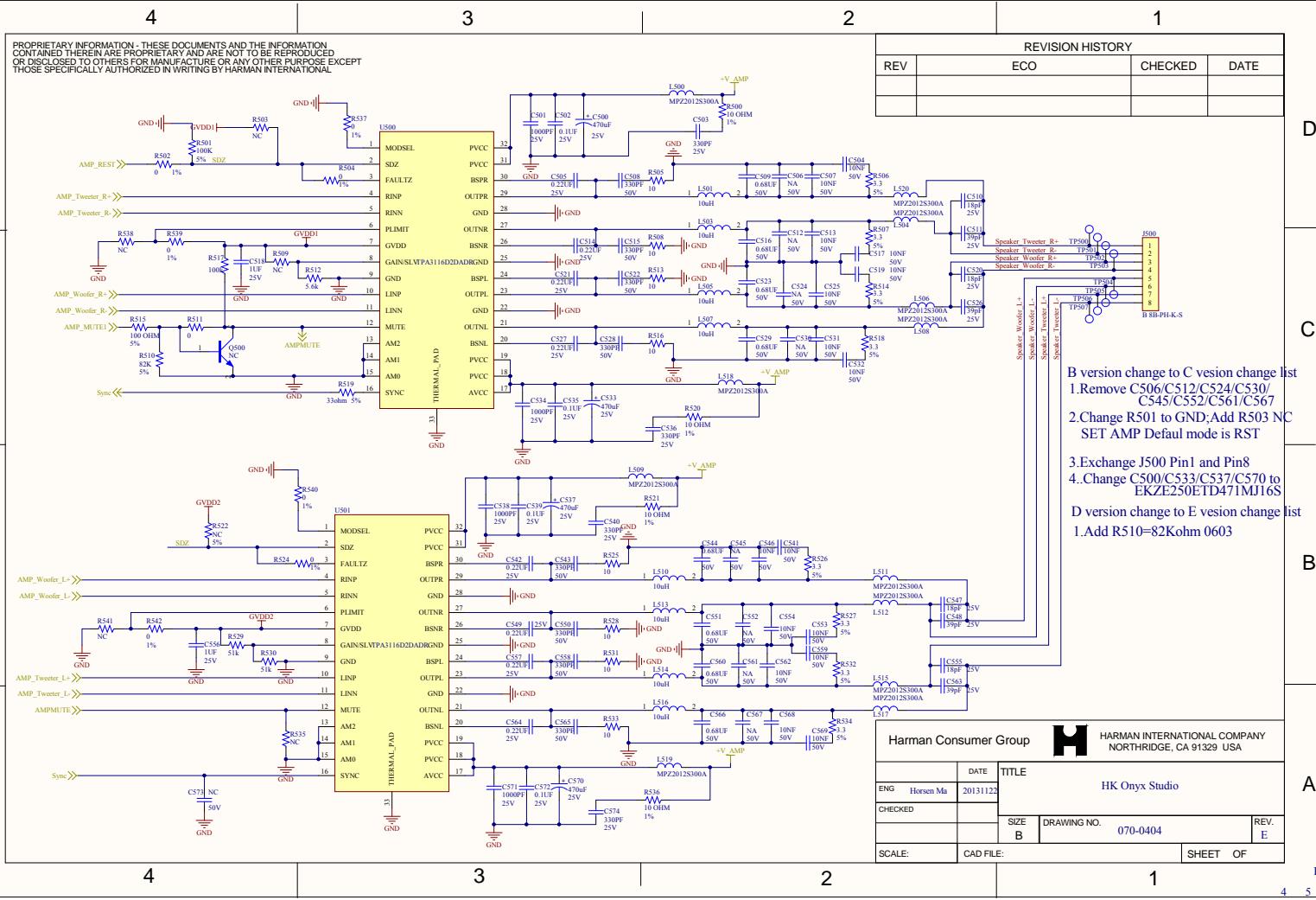
HARMAN INTERNATIONAL			Harman Consumer Group Shenzhen, Guangdong, China		
NAME	DATE	TITLE	Can not open file M-02 Department 19 1.0.2_Electronics PCB/Temp late-Sch template J & Honey Controlled Issues		
CREATED	Horsten M	20131122	HK Onyx Studio		
CHECKED			SIZE	DRAWING NO.	REV.
			B	070-0404	E
SCALE:	CAD FILE:		SHEET OF		

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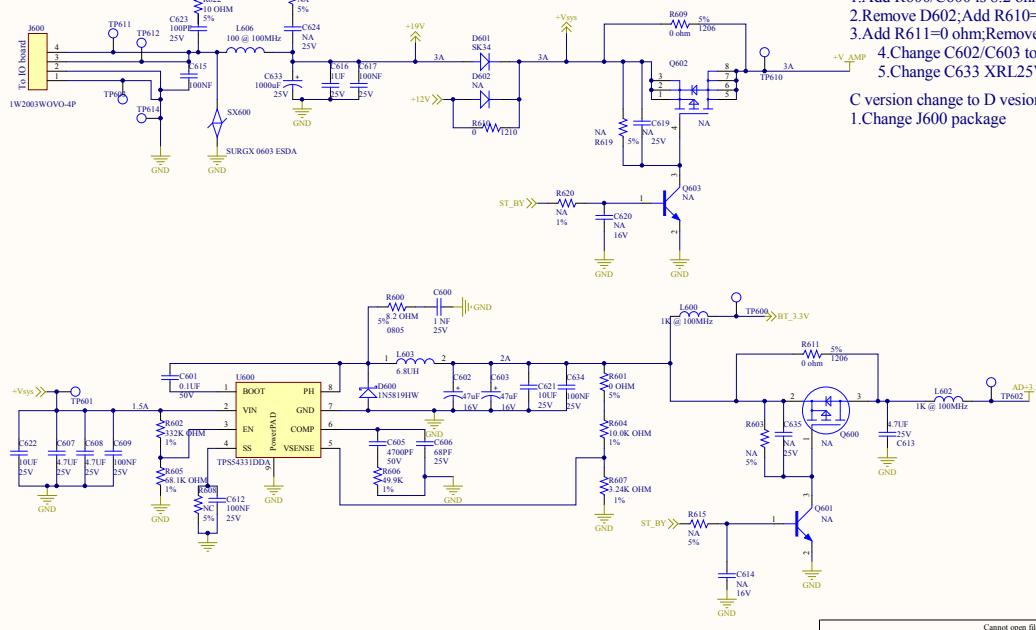
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REVISION HISTORY			
REV	ECO	CHECKED	DATE

D



B version change to C version change list

- 1.Add R600/C600 is 8.2 ohm/1nf
 - 2.Remove D602;Add R610=0 ohm
 - 3.Add R611=0 ohm;Remove R603/R615/C614/C633/Q600/Q601
 - 4.Change C602/C603 to MLRL16V47U
 - 5.Change C633 XRL25V1000U
- C version change to D version change list
- 1.Change J600 package

C

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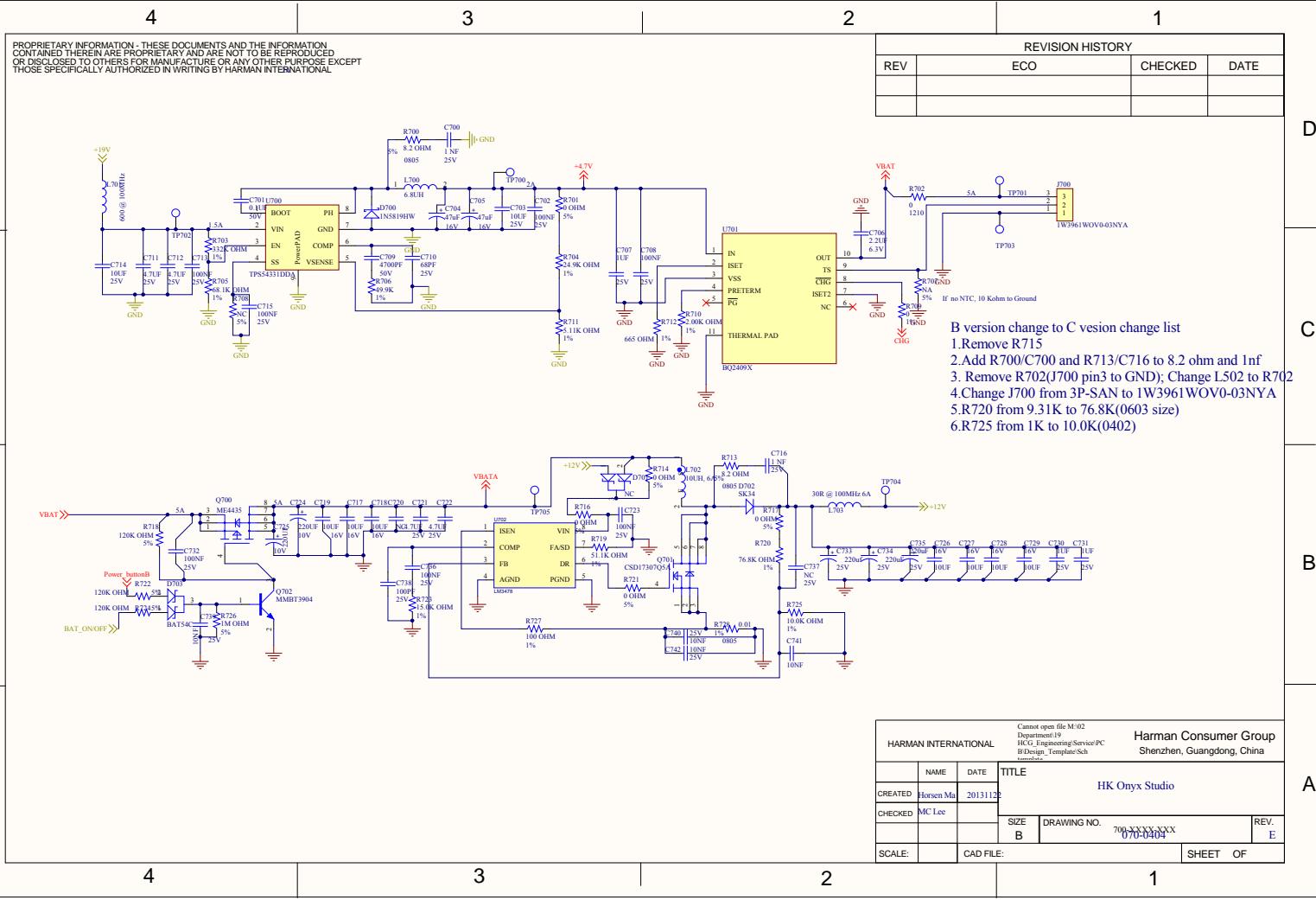
HARMAN INTERNATIONAL		Harman Consumer Group Shenzhen, Guangdong, China	
CREATED	Forsten Ma	DATE	TITLE
		20131122	HK Onyx Studio
CHECKED			SIZE B DRAWING NO. 700-XXXX-XXX REV. E
SCALE:		CAD FILE:	SHEET OF 1

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REVISION HISTORY			
REV	ECO	CHECKED	DATE

D

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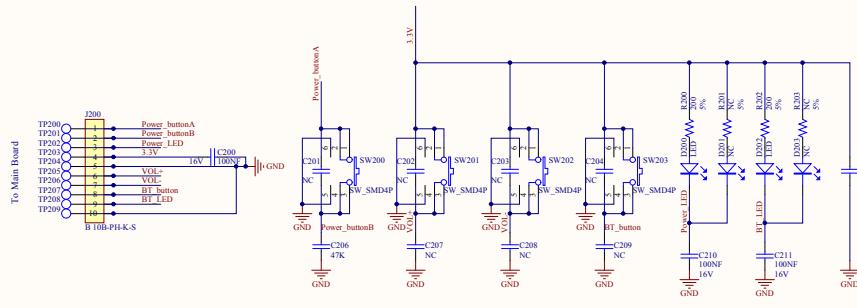
A

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C

B

A



Change list from REV A to REV B:
Remove C201, C202, C203, C204, C205, C206, C207, C208, C209

HARMAN INTERNATIONAL			Harman Consumer Group Shenzhen, Guangdong, China		
CREATED	NAME	DATE	TITLE		
CHECKED			HK Onyx Studio Key Board		
			SIZE	DRAWING NO.	REV.
SCALE:		CAD FILE:	B		C
					SHEET 1 OF 1

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