# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location Of PCBA &amp; Versions Variation</td>
<td>1-2</td>
</tr>
<tr>
<td>Technical Specification</td>
<td>1-3</td>
</tr>
<tr>
<td>Safety instruction</td>
<td>1-4</td>
</tr>
<tr>
<td>Software upgrade instruction</td>
<td>2</td>
</tr>
<tr>
<td>Trouble Shooting</td>
<td>3</td>
</tr>
<tr>
<td>Dismantling instructions</td>
<td>4</td>
</tr>
<tr>
<td>Block Diagram</td>
<td>5</td>
</tr>
<tr>
<td>Wiring Diagram</td>
<td>6</td>
</tr>
<tr>
<td>MAIN+MP3&amp;USB+SPK+VFD&amp;BT+AUX&amp;OPTICAL PCB(Main unit)</td>
<td>7</td>
</tr>
<tr>
<td>WIRELESS PCB(Main unit)</td>
<td>8</td>
</tr>
<tr>
<td>AMP+LED PCB(Subwoofer)</td>
<td>9</td>
</tr>
<tr>
<td>POWER PCB(Subwoofer)</td>
<td>10</td>
</tr>
<tr>
<td>Mechanical Exploded</td>
<td>11</td>
</tr>
<tr>
<td>Revision List</td>
<td>12</td>
</tr>
</tbody>
</table>
LOCATION OF PCBA

VERSIONS VARIATION:

<table>
<thead>
<tr>
<th>Board in used</th>
<th>Type/Version</th>
<th>HTL3110B</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAIN+MP3&amp;USB+SPK+VFD&amp;BT+AUX&amp;OPTICAL Board</td>
<td>C</td>
<td>/F7</td>
</tr>
<tr>
<td>WIRELESS Board</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>AMP+LED Board</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>POWER Board</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

*M= Module Level Repair
*C = Component Level Repair
Technical Specification

Amplifier
- FTC total output power: 40W
  - Left + Right: 25W (1%THD, 8ohm, 120Hz-20kHz)
  - Subwoofer: 15W (1%THD, 4ohm, 30Hz-80Hz)
- RMS Total output power: 120W RMS (+/-0.5 dB, 10% THD)
- Frequency response: 20 Hz-20 kHz / ±3 dB
- Signal-to-noise ratio: > 65 dB (CCIR) / (A-weighted)
- Input sensitivity:
  - AUX: 900 mV

Audio
- S/PDIF Digital audio input:
  - Coaxial: IEC 60958-3
  - Optical: TOSLINK

USB
- Compatibility: Hi-Speed USB (2.0)
- Class support: USB Mass Storage Class (MSC)
- File system: FAT16, FAT32, NTFS
- Supports MP3 and WMA file formats
- Sampling frequency:
  - MP3: 8 kHz, 11 kHz, 12 kHz, 16 kHz, 22 kHz, 24 kHz, 32 kHz, 44.1 kHz, 48 kHz
  - WMA: 44.1 kHz, 48 kHz
- Constant bit rate:
  - MP3: 8 kbps-320 kbps
  - WMA: 32 kbps-192 kbps
- Version:
  - WMA: V7, V8, V9

Bluetooth
- Bluetooth profiles: A2DP, AVRCP
- Bluetooth version: 3.0 + EDR

Main unit
- Power supply:
  - Model (Philips AC power adapter): DYS602-210309W/AS650-210-AA309
  - Input: 100-240 V~, 50/60 Hz 1.5 A
  - Output: 21V, 3.09A
- Standby power consumption: ≤ 0.5 W
- Speaker impedance
  - Woofer: 8 ohm
  - tweeter: 16 ohm
- Speaker drivers: 2 x (90mm/3.5" x 34mm/1.3") woofer + 2 x 31mm/1.2" tweeter
- Dimensions (WxHxD): 843 x 52 x 60 mm
- Weight: 1.4 kg

Subwoofer
- Power supply: 110-240 V~, 50-60 Hz
- Power consumption: 30 W
- Standby power consumption: ≤ 0.5 W
- Impedance: 4 ohm
- Speaker drivers: 1 x 165 mm (6.5") woofer
- Dimensions (WxHxD): 226 x 251 x 306 mm
- Weight: 3.9 kg

Remote control batteries
- 1 x AAA-R03-1.5 V
Important safety instructions

- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Unplug this apparatus during lightning storm or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- Battery usage CAUTION - To prevent battery leakage which may result in bodily injury, property damage, or damage to the unit:
  - Do not mix batteries (old and new or carbon and alkaline, etc.).
  - Remove batteries when the unit is not used for a long time.
  - The batteries shall not be exposed to excessive heat such as sunshine, fire, or the like.
  - Perchlorate Material - special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate.
  - The product/remote control may contain a coin/button type battery, which can be swallowed. Keep the battery out of reach of children at all times! If swallowed, the battery can cause serious injury or death. Severe internal burns can occur within two hours of ingestion. Keep the battery out of reach of children and an adult leaning, pulling, standing or climbing on it. A falling apparatus can cause serious injury or even death.
  - This apparatus should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided. Make sure to leave a space of 7.8 inches (20cm) or more around this apparatus.

Care for your product

- Use only microfiber cloth to clean the product.

Care of the environment

Your product is designed and manufactured with high quality materials and components, which can be recycled and reused. Please visit www.recycle.philips.com for additional information on a recycling center in your area.

Never dispose of your product with other household waste. Please inform yourself about the local rules on the separate collection of electrical and electronic products and batteries. The correct disposal of these products helps prevent potentially negative consequences on the environment and human health. The batteries supplied do not contain the heavy metals mercury and cadmium. Nevertheless, in many areas batteries may not be disposed of with your household waste. Please ensure you dispose of batteries according to local regulations.

For perchlorate material, special handling may apply. Visit www.dtsc.ca.gov/hazardouswaste/perchlorate.

This symbol indicates that the unit has a double insulation system.

This bolt of lightning indicates uninsulated material within your unit may cause an electrical shock. For the safety of everyone in your household, please do not remove the product covering.

WARNING: To reduce the risk of fire or electric shock, this apparatus should not be exposed to rain or moisture and objects filled with liquids, such as vases, should not be placed on this apparatus.

CAUTION: To prevent electric shock, match wide blade of plug to wide slot, fully insert.
Software upgrade instruction

1) Restore factory setting

a) In Aux mode, within three seconds, press < - (Volume), BASS - and TREBLE - > to reset the default settings programmed at the factory.

   »» When the factory settings restore is complete, the product automatically switches off and restarts.

2) Check software version

a) In any source mode, press < TREBLE -, BASS- and - (Volume) > on the remote control.

3) Software Upgrade via USB

a) Check the latest software version on www.philips.com/support.
   • Search for your model and click on "Software and drivers".
b) Download the software into a USB storage device.
   1. Unzip the download if zipped, and make sure that the unzipped file is named "HTL3110.BIN".
   2. Put the "HTL3110.BIN" file in the root directory.
c) Connect the USB storage device to the USB connector on this product.
d) Switch this product to the HDMI ARC source, and switch your TV to the HDMI source.
e) On the remote control, within 6 seconds press < Mute > twice, and < VOL + > once, then hold down < SURROUND ON >.
f) Press < Mute > button on R/C to start the update.
g) Wait until the update is completed.
   • If the update is complete, this product automatically turns off and on again.
MAIN UNIT REPAIR CHART 2/2

**F**
Wireless No Output
- Check MD401 Pin 4 approx +3.3V
  - OK or No
  - Check CN401 CN402 and connect part
- Check CN401 CN402 connect jack INT or no
  - OK
  - NO
  - OK
  - No
  - OK

**G**
Optical & COAXIAL IN No Output
- Check JK304 RB301 CN301 INT or No
  - INT
  - OK
  - No
  - OK
  - No
  - OK
  - OK
  - No
  - OK

**H**
Audio line IN No Output
- Check CN302 RB302 JK306 INT or No
  - INT
  - OK
  - NO
  - OK
  - NO
  - OK

**I**
USB No Output
- Check JK305 INT or No
  - INT
  - OK
  - NO
  - OK
  - NO
  - OK

**J**
Bluetooth No Output
- Check BT401 INT or No
  - INT
  - OK
  - NO
  - OK
  - NO
  - OK

**K**
ARC No Output
- Check JK201 INT or No
  - INT
  - OK
  - NO
  - OK
  - NO
  - OK

**L**
Check IC201 Pin 10 +5V
  - NO
  - INT
  - Yes or No

**Trouble Shooting (main unit)**
Dismantling of the SPK_L/R assembly
1) Loosen 2*2 screws “A” at both side of SPK_L/R as shown in figure 1.

Note: In some service positions the components or copper patterns of one board may risk touching its neighbouring pc boards or metallic parts. To prevent such short-circuit use a piece of hard paper or other insulating material between them.

Dismantling of the SPK_L/R Boards
1) Loosen 2*2 screws “B” at both side of SPK_L/R to remove the rear Housing as shown in figure 2.

Dismantling of the Bottom cover
1) Loosen 4 screws “C” at the bottom cover as shown in figure 3.

Dismantling of the AUX & OPTICAL Board
1) Loosen 2 screws “D” & “E” to remove the bracket as shown in figure 4 and figure 5.
3) Loosen 1 screws “F” at the bracket to remove the AUX & OPTICAL board as shown in figure 6.

Dismantling of the VFD+BT Boards
1) Loosen 2 screws “F” on the top of VFD+BT board as shown in figure 7.

Dismantling of the MAIN Boards
1) Loosen 4 screws “G” on the top of Main Board as shown in figure 8.

Dismantling of the MP3&USB Boards
1) Loosen 2 screws “I” on the top of MP3&USB Board as shown in figure 9.
Dismantling of the WIRELESS Boards assembly

1) Loosen 1 screws "J" on the top of WIRELESS Board as shown in figure 10.

Dismantling Instructions (SUBWOOFER)

Dismantling of BACK panel assembly

1) Loosen 8 screws "K" to remove the back panel as shown in figure 12.

Dismantling of TOUCH Boards assembly

1) Remove the top lens to take the TOUCH Board out as shown in figure 11.

Dismantling of AMP&LED Boards

1) Loosen 4 screws "L" on the top of AMP&LED Boards as shown in figure 13.

Dismantling of POWER Boards

1) Loosen 4 screws "M" on the top of POWER Boards as shown in figure 14.
Wireless subwoofer RX Unit Part of HTL3110 60W
WIRING Diagram(subwoofer)

PSU PCB
LCP110930-0001

AMP PCB
LFM110941-0201
TABLE OF CONTENTS
Internal IC Diagram ................................................................. 7-1
Circuit Diagram........................................................................... 7-2
Component Layout_Top View........................................................ 7-3
Component Layout_Bottom View.................................................. 7-4

IC302 INTERNAL IC DIAGRAM - CS5343-CZZ

IC303 INTERNAL IC DIAGRAM - CD4052BM
TABLE OF CONTENTS
Circuit Diagram .......................................................... 8-2
Component Layout_Top View ........................................... 8-3
Component Layout_Bottom View ...................................... 8-4
**AMP & LED BOARD**

**TABLE OF CONTENTS**
- Internal IC Diagram ................................................................. 9-1
- Circuit Diagram ........................................................................ 9-2
- Component Layout_Top View .................................................. 9-3
- Component Layout_Bottom View .............................................. 9-4

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IC501 INTERNAL IC DIAGRAM - TAS5715PHRR

![IC501 Internal IC Diagram](image-url)
POWER BOARD

TABLE OF CONTENTS
Internal IC Diagram.................................................................10-1
Circuit Diagram ........................................................................10-2
Component Layout_Top View.....................................................10-3
Component Layout_Bottom View..............................................10-4
Note: A1 = 8 + 10 + 17 + 19 + 20 + 26 + 30
Mechanical Exploded View (subwoofer)

Note: B1 = SW11 + SW13

Power Cord
REVISION LIST

Version 1.0
*Initial release