# WEEE Treatment Instructions

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|---|---|
| **Producer:** | SMART Technologies ULC |
| **Product Name:** | SMART SBID-MX Interactive Flat Panel family |
| **Part/Model Number:** | IDXxx-x |
| **Date of Report:** | 2024-03-01 |

This sheet is intended to provide instructions to recycling facilities to identify materials, components, and sub-assemblies of interest for the end-of-life treatment in compliance with the WEEE (2012/19/EU) and Batteries (2006/66/EC) Directives and the Ecodesign for Displays (2019/2021) Regulation. There are minor differences between sizes and models within the MX family.

## Materials and Components of Interest Present

| Component or Material | Present / Not Present |
|---|---|
| Capacitors containing polychlorinated biphenyls (PCBs) | Not Present |
| Batteries | **Present** |
| Mercury containing components, such as switches or backlighting lamps | Not Present |
| Printed circuit boards of mobile phones generally, and of other devices if the surface of the printed circuit board is greater than 10 square centimeters | **Present** |
| Toner cartridges, liquid and paste, as well as colour toner | Not Present |
| Plastic containing brominated flame retardants | Present (in parts < 25 g) |
| Asbestos waste and components which contain asbestos | Not Present |
| Cathode ray tubes | Not Present |
| chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC) or hydrofluorocarbons (HFC), hydrocarbons (HC), | Not Present |
| Gas discharge lamps | Not Present |
| Liquid crystal displays (together with their casing where appropriate) of a surface greater than 100 square centimeters and all those back-lighted with gas discharge lamps | **Present** |
| External electric cables | **Present** |
| Refractory ceramic fibers | Not Present |
| Radio-active substances | Not Present |
| Electrolyte capacitors containing substances of concern (height > 25 mm, diameter > 25 mm or proportionately similar volume). | Not Present |
| Stored mechanical or electrical energy (e.g. sources of stored energy in high tension circuits, capacitors and springs in compression or tension.) | Not Present |

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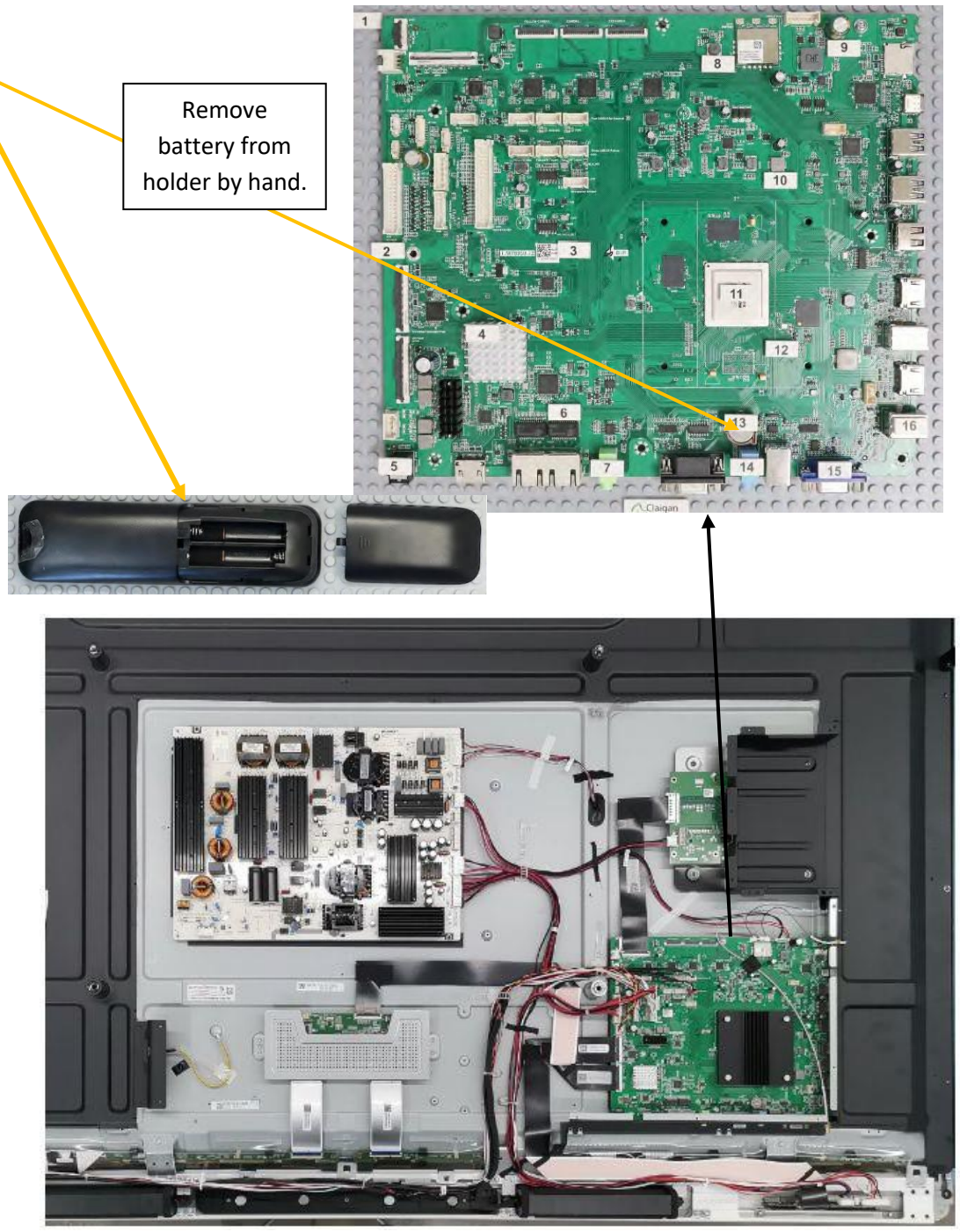
http://www.smarttech.com/kb/171708

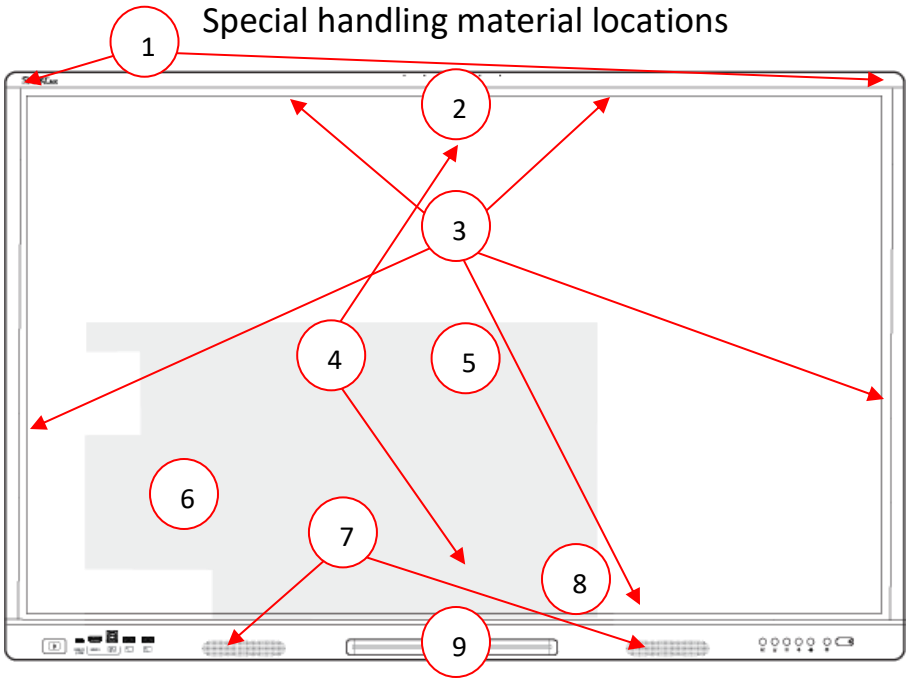
## Materials and Components of Interest Locations

- Capacitors containing polychlorinated biphenyls (PCBs)
- Batteries
- Mercury containing components, such as switches or backlighting lamps
- Printed circuit boards of mobile phones generally, and of other devices if the surface of the printed circuit board is greater than 10 square centimeters (see page 4)
- Toner cartridges, liquid and paste, as well as colour toner
- Plastic containing brominated flame retardants > 25 grams
- Asbestos waste and components which contain asbestos
- Cathode ray tubes
- chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC) or hydrofluorocarbons (HFC), hydrocarbons (HC),
- Gas discharge lamps
- Liquid crystal displays (together with their casing where appropriate) of a surface greater than 100 square centimeters and all those back-lighted with gas discharge lamps
- External electric cables
- Refractory ceramic fibers
- Radio-active substances
- Electrolyte capacitors containing substances of concern (height > 25 mm, diameter > 25 mm or proportionately similar volume).
- Stored mechanical or electrical energy (e.g. sources of stored energy in high tension circuits, capacitors and springs in compression or tension.)



| |
|---|
| Capacitors containing polychlorinated biphenyls (PCBs) |
| Batteries |
| Mercury containing components, such as switches or backlighting lamps |
| Printed circuit boards of mobile phones generally, and of other devices if the surface of the printed circuit board is greater than 10 square centimeters |
| Toner cartridges, liquid and paste, as well as colour toner |
| Plastic containing brominated flame retardants > 25 grams |
| Asbestos waste and components which contain asbestos |
| Cathode ray tubes |
| chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC) or hydrofluorocarbons (HFC), hydrocarbons (HC), |
| Gas discharge lamps |
| Liquid crystal displays (together with their casing where appropriate) of a surface greater than 100 square centimeters and all those back-lighted with gas discharge lamps |
| External electric cables |
| Refractory ceramic fibers |
| Radio-active substances |
| Electrolyte capacitors containing substances of concern (height > 25 mm, diameter > 25 mm or proportionately similar volume). |
| Stored mechanical or electrical energy (e.g. sources of stored energy in high tension circuits, capacitors and springs in compression or tension.) |

## Special handling material locations



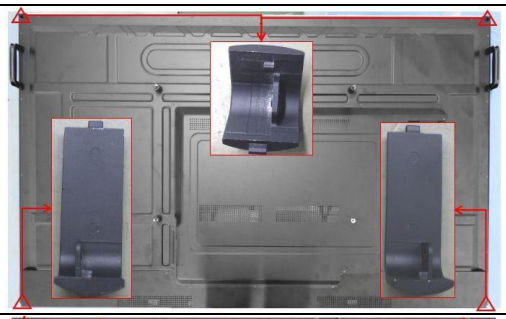
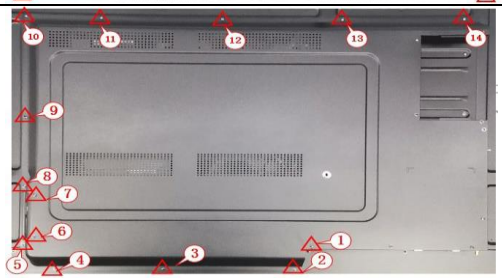
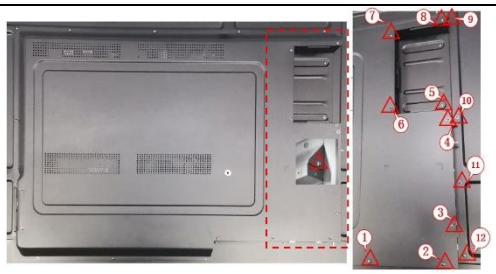

| No. | Type | Location | Quantity |
|---|---|---|---|
| 1 | Br in plastic | Top corners | 2 |
| 2 | Br in plastic | Behind microphone on the top frame (behind cover) | 1-3 |
| 3 | PCB | Bezel around the screen | 10-12 |
| 4 | Br in plastic | Centerline middle of the display, near the top and bottom | 6 |
| 5 | Br in plastic | Middle of the display | 1 |
| 6 | PCB | Back of the IFP (behind cover) | 5 |
| 7 | PCB | Behind speakers | 2 |
| 8 | Br in plastic | AC connector housing and switch | 1 |
| 9 | PCB | Bottom frame | 3-4 |

## Disassembly Tools

The following tools are required for WEEE disassembly:

1. Phillips #2 screwdriver
2. Side cutter
3. Pliers

## Disassembly Steps

| No | Picture | Operation | Tool |
|---|---|---|---|
| 1 |  | 1.Remove 4 M3×28mm screws<br>2 Remove 4 bezel corners | Screwdriver |
| 2 |  | 1. Remove 14 M3x6mm screws | Screwdriver |
| 3 |  | 1. Remove 12 M3x6mm screws<br>2. Remove rear cover | Screwdriver |

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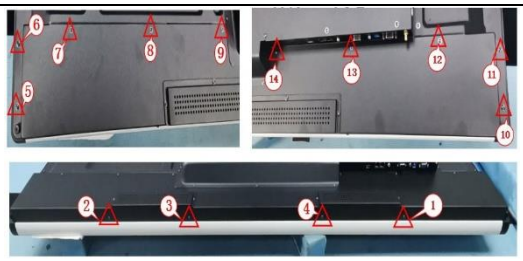
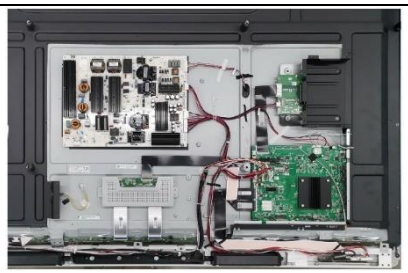
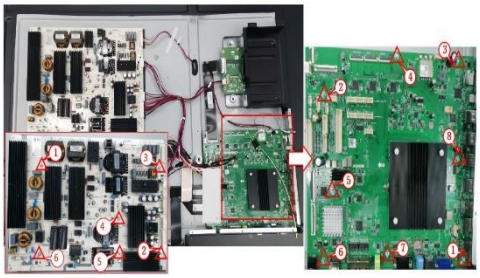
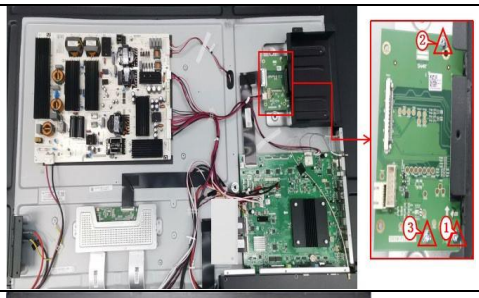
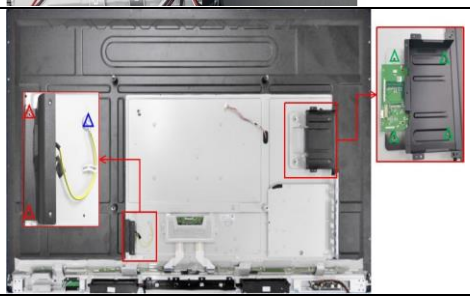
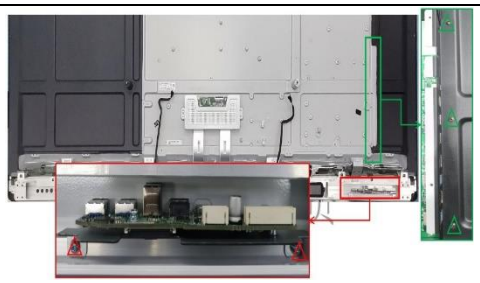
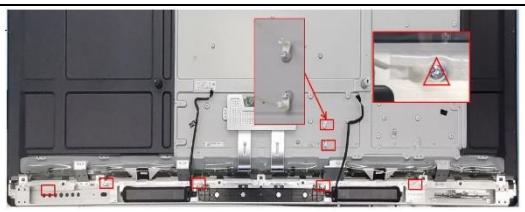
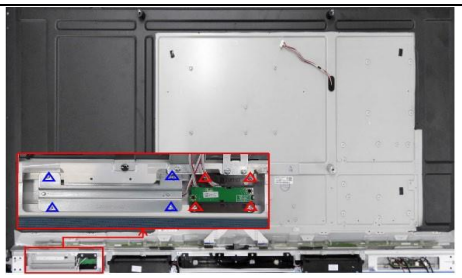
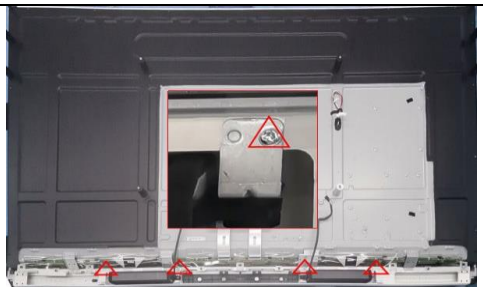
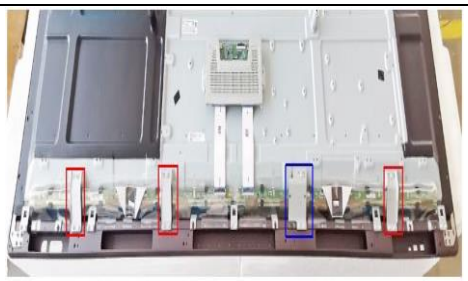
|---|---|---|---|
| 4 |  | 1. Remove 13 M3x6mm screws<br>2. Remove lower rear cover | Screwdriver |
| 5 |  | 1. Remove all tapes, cable ties and wires | Side cutter |
| 6 |  | 1. Remove 14 M3x6mm screws<br>2. Remove the power board and motherboard | Screwdriver |
| 6a | | 1. Remove battery from holder. | |
| 7 |  | 1. Remove 3 M3x6mm screws<br>2. Remove the OPS adapter board | Screwdriver |
| 8 |  | 1. Remove 1 M4x5mm screw<br>2. Remove 6 M3x4mm screws<br>2. Remove the AC switch bracket and OPS adapter bracket | Screwdriver |

| | | | |
|---|---|---|---|
| 9 |  | 1. Remove 5 M3x6mm screws<br>2. Remove board bracket and side IO faceplate | Screwdriver |
| 10 |  | 1. Remove 7 M3x6mm screws<br>2. Remove cable tie | Screwdriver |
| 11 |  | 1. Remove 4 M3x6mm screws<br>2. Remove 4 M3x7mm screws<br>3. Remove button board bracket and remote control board bracket | Screwdriver |
| 12 |  | 1. Remove 4 M3x6mm screws<br>2. Remove speaker bracket | Screwdriver |
| 13 |  | 1. Remove 4x4 M3x5mm screws<br>2. Remove speaker brackets | Screwdriver |

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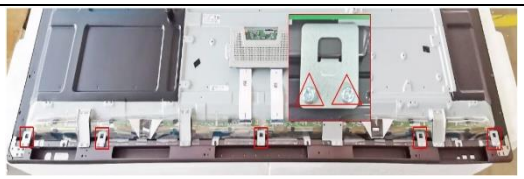
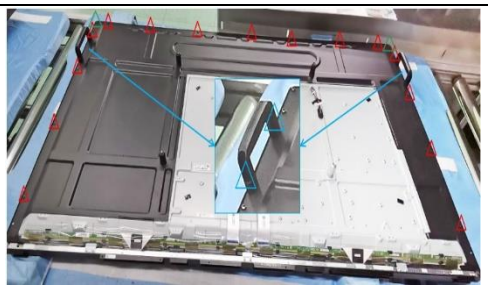
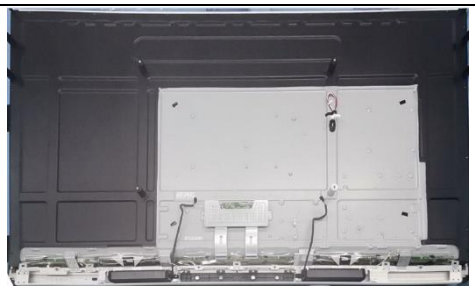
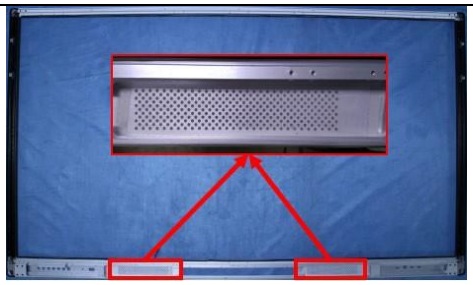
|---|---|---|---|
| 14 |  | 1. Remove 10 M3x6mm screws<br>2. Remove screen hold-down brackets | Screwdriver |
| 15 |  | 1. Remove 15 M3x5mm screws<br>2. Remove 4 M3x7mm screws<br>3. Remove 2 handles | Screwdriver |
| 16 |  | 1. Turn display face-up<br>2. Lift bezel assembly to separate it from screen | |
| 17 |  | 1. Remove the front adapter plate bracket and side IO faceplate<br>2. Pull off speaker covers | |
| 18 |  | 1. Remove 14 M3x4mm screws<br>2. Remove 4 M4x4.5mm screws<br>3. Remove glass wedges | Screwdriver |

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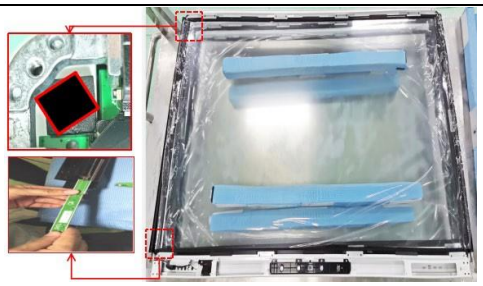
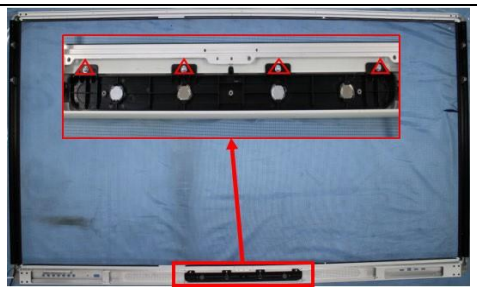
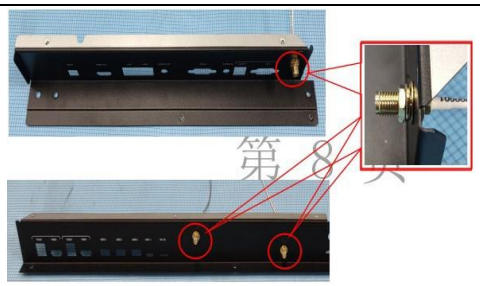
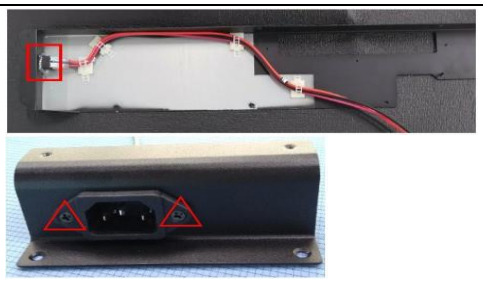
|---|---|---|---|
| 19 |  | 1. Remove touch kit circuit boards | |
| 20 |  | 1. Remove 4 M3x6mm screws<br>2. Remove pen tray | Screwdriver |
| 21 |  | 1. Remove WiFi antenna | Pliers |
| 22 |  | 1. Remove 2 M3x6mm screws<br>2. Remove switch, AC cord connector and wire | Screwdriver |
| 23 |  | 1. Remove 3 M3x6mm screws<br>2. Remove signal connector board | Screwdriver |

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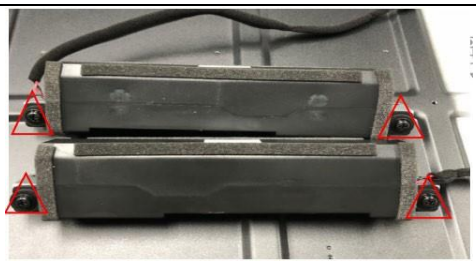
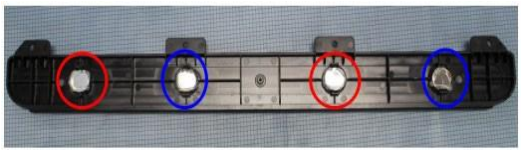
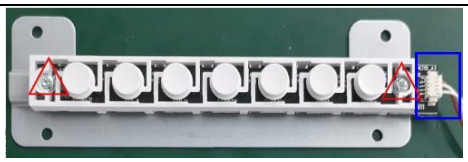
|---|---|---|---|
| 24 |  | 1. Remove 4 M5x8mm screws<br>2. Remove speaker brackets | Screwdriver |
| 25 |  | 1. Remove pen holder magnets | Pliers |
| 26 |  | 1. Remove 2 M4x6mm screws<br>2. Remove buttons and button board bracket | Screwdriver |
| 27 |  | 1. Remove status indicator bracket and board<br>2. Remove cables from status indicator board | Pliers |

## WEEE Assessment

Materials used in the IDX065-3 are shown in Table 1.

| Category | Mass (g) | Percentage |
|---|---|---|
| Plastic | 67 | 0.17% |
| Metal | 10,259 | 25.48% |
| Glass | 10,100 | 25.09% |
| Rubber | 0 | 0.00% |
| Other | 576 | 1.43% |
| *Annex VII* | | |
| Battery | 3 | 0.01% |
| Cables | 336 | 0.84% |
| PCBA | 1,948 | 4.84% |
| LCD | 16,967 | 42.15% |
| **Total** | 40,256 | 100.00% |

*Table 1: Materials*

Material ratios in other sizes and generations are comparable.

An assessment of recyclability is shown in Table 2.

| **Recylability Classification** | **Mass（g）** | **Per cent** |
|---|---|---|
| Reuse(A) | 0 | 0% |
| Recycled(B) | 39,680 | 99% |
| Energy Recovery(C) | 0 | 0% |
| Disposal(D)=(E)-[(A)+(B)+(C)] | 576 | 1% |
| Product Weight(E) | 40,256 | 100% |
| R1:Reuse&Recycled=(A)+(B) | 39,680 | **99%** |
| R2:Recovery=(A)+(B)+(C) | 39,680 | **99%** |

*Table 2: Recyclability*