



## GX WEEE Treatment Instructions

<b>Producer:</b>	SMART Technologies ULC
<b>Product Name:</b>	SMART SBID-GX Interactive Flat Panel family
<b>Part/Model Number:</b>	IDGXxx-x
<b>Date of Report:</b>	2022-01-05

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. The IDGX86-1 is shown here. Other sizes and versions of displays in the GX family are similar.

### Materials and Components of Interest Present

<b>Component or Material</b>	<b>Present / Not Present</b>
Capacitors containing polychlorinated biphenyls (PCBs)	Not Present
Batteries	Not 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	<b>Present</b>
Toner cartridges, liquid and paste, as well as colour toner	Not Present
Plastic containing brominated flame retardants weighing > 25 g	Not Present
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	<b>Present</b>
External electric cables	<b>Present</b>
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

## 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

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

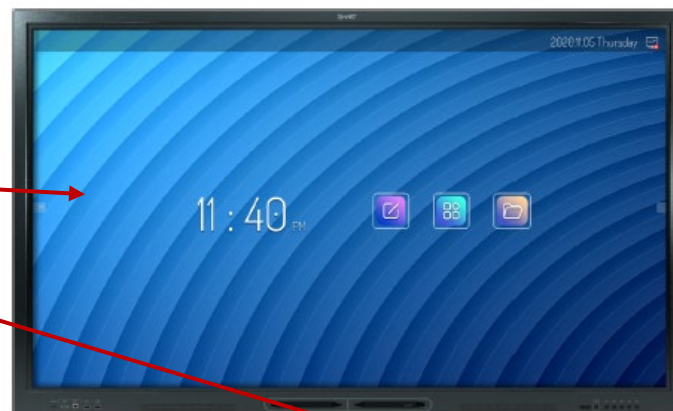
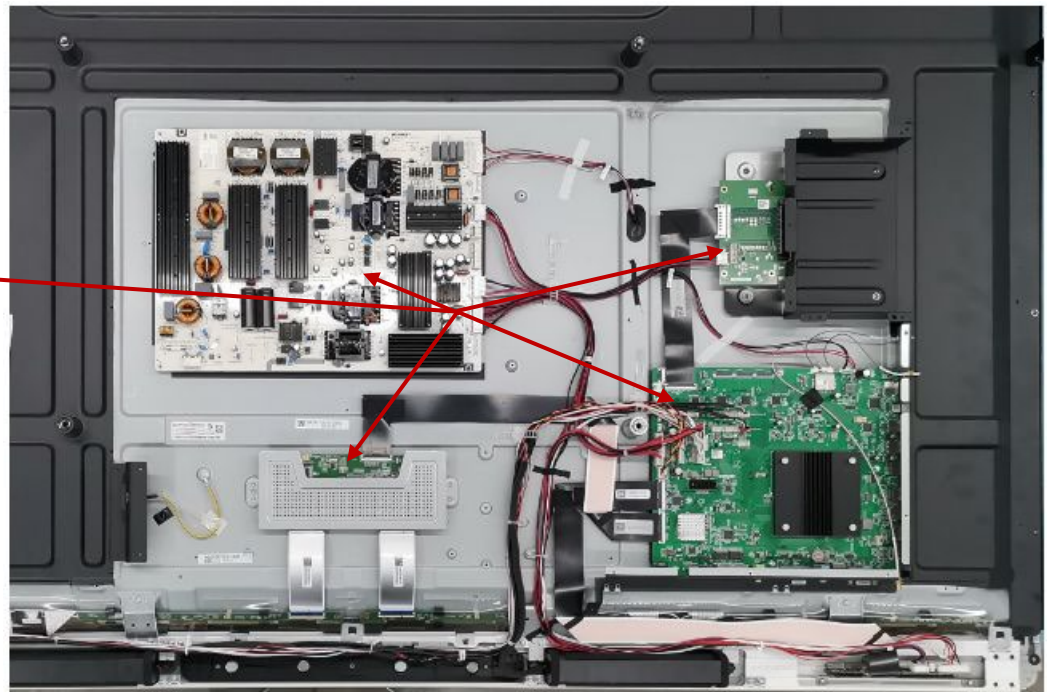
### External electric cables

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.)

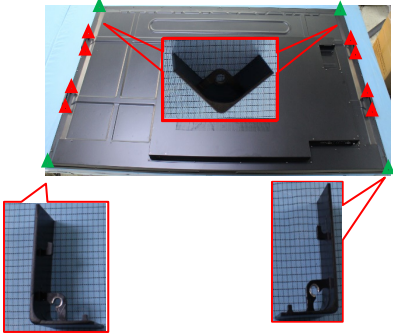

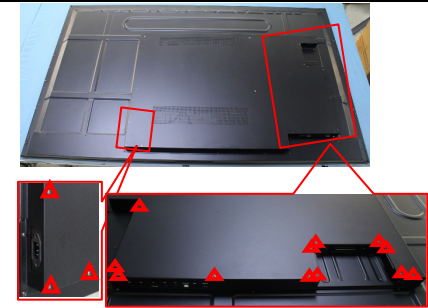


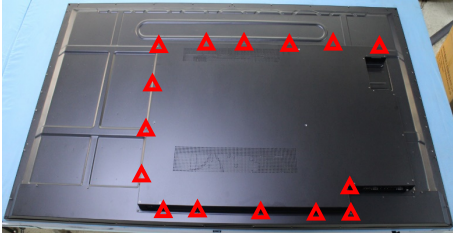
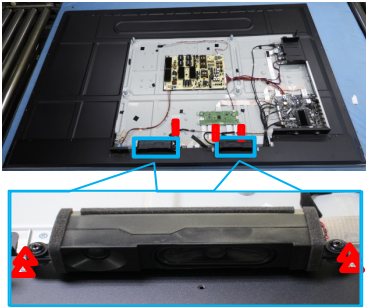
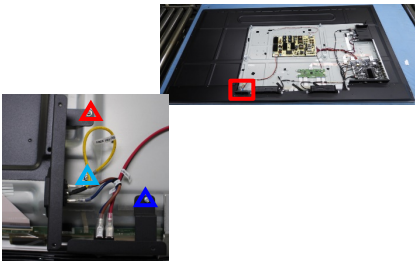
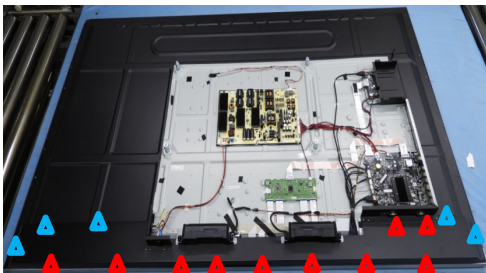
## Disassembly Tools

The following tools are required for WEEE disassembly:

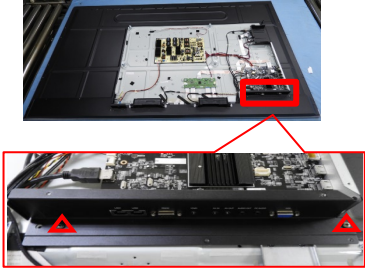
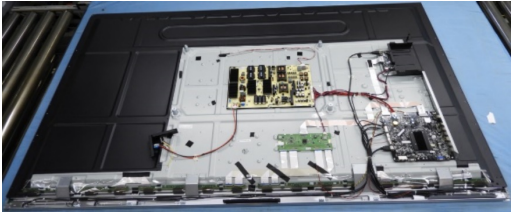
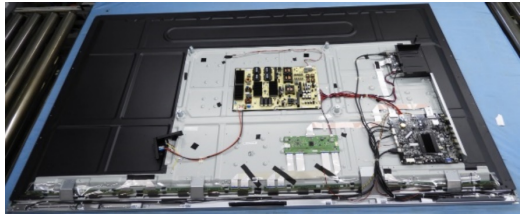
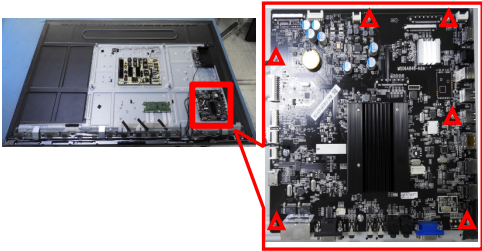
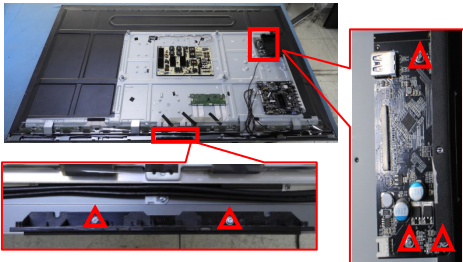
1. Phillips #2 screwdriver
2. Side cutter
3. Pliers

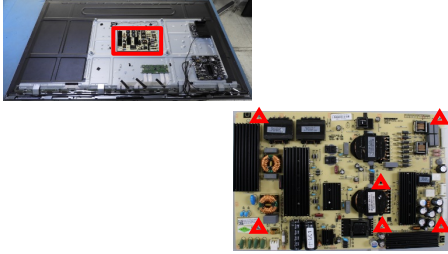
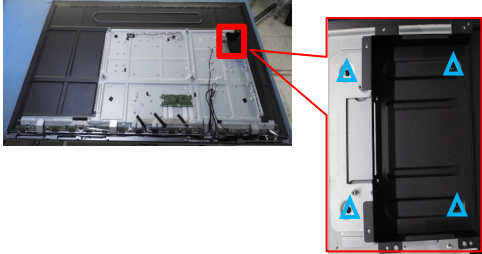
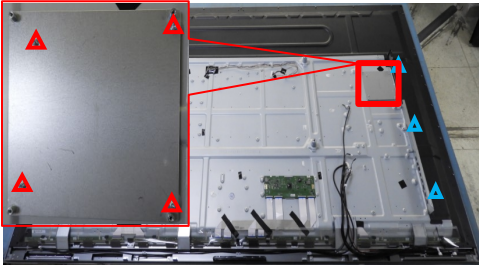
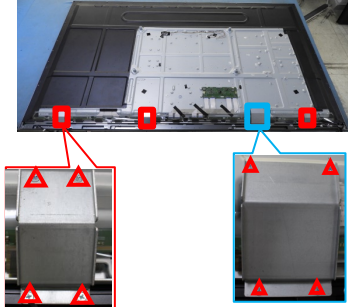
## Disassembly Steps

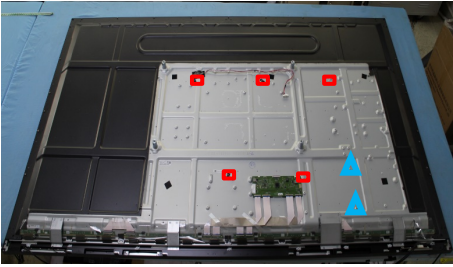
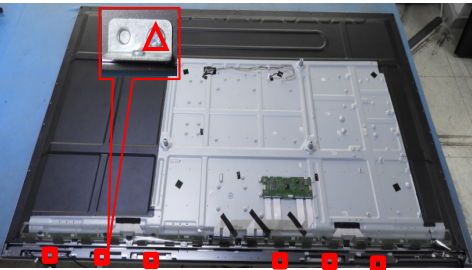
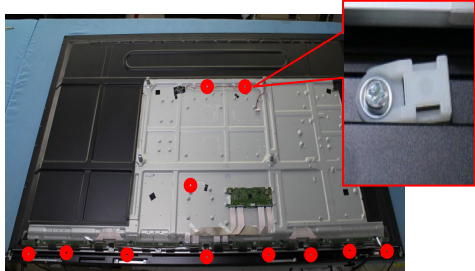
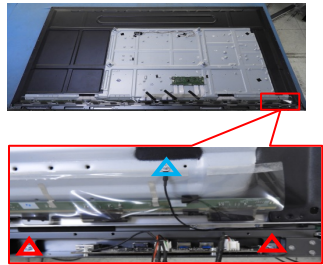
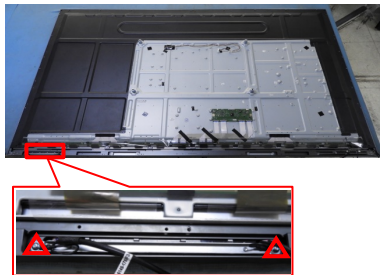
Step	Picture	Operation	Tools
1		<ol style="list-style-type: none"> <li>1. Remove 8 handle screws</li> <li>2. Remove 4 handles</li> <li>3. Remove 4 bezel corner screws</li> <li>4. Remove 4 bezel corners</li> </ol>	Screwdriver
2		<ol style="list-style-type: none"> <li>1. Remove 21 M4x6mm screws</li> </ol>	Screwdriver
3		<ol style="list-style-type: none"> <li>1. Remove 15 M3x6mm screws</li> </ol>	Screwdriver

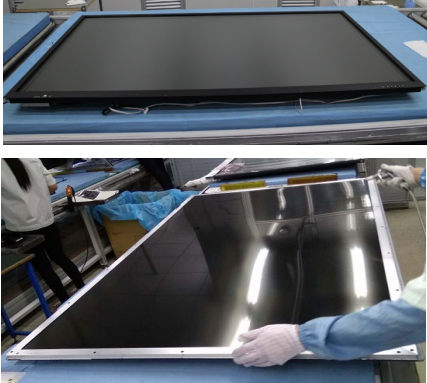
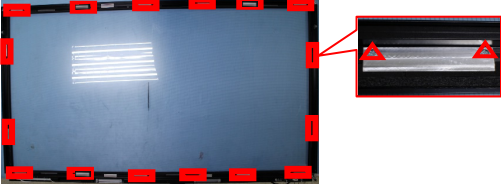
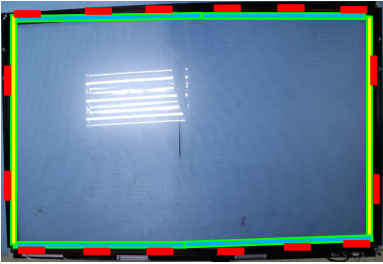
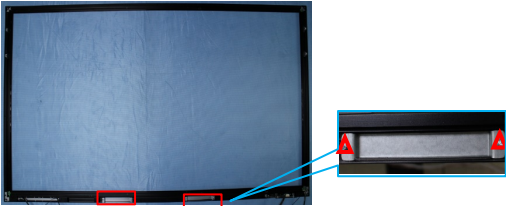
Step	Picture	Operation	Tools
4		<ol style="list-style-type: none"> <li>1. Remove 15 M4x6mm screws</li> <li>2. Remove outer rear cover</li> </ol>	Screwdriver
5		<ol style="list-style-type: none"> <li>1. Remove speaker cables</li> <li>2. Remove 8 M3x6mm screws</li> <li>3. Remove speakers</li> </ol>	Screwdriver
6		<ol style="list-style-type: none"> <li>1. Remove 1 M4x6mm screw</li> <li>2. Remove 1 M4x5mm screw</li> <li>3. Remove 1 M3x6mm screw</li> <li>4. Remove switch bracket</li> </ol>	Screwdriver
7		<ol style="list-style-type: none"> <li>1. Remove 10 M3x6mm screws</li> <li>2. Remove 5 M4x6mm screws</li> <li>3. Remove lower rear cover</li> </ol>	Screwdriver



Step	Picture	Operation	Tools
8		<ol style="list-style-type: none"> <li>1. Remove 2 M4x6mm screws</li> <li>2. Remove connector faceplate</li> </ol>	Screwdriver
9		<ol style="list-style-type: none"> <li>1. Remove cable ties and clamps</li> </ol>	Side cutters
10		<ol style="list-style-type: none"> <li>1. Unplug all wires</li> </ol>	
11		<ol style="list-style-type: none"> <li>1. Remove 6 M3x6mm screws</li> <li>2. Remove main board</li> </ol>	Screwdriver
12		<ol style="list-style-type: none"> <li>1. Remove 5 M3x6mm screws</li> <li>2. Remove OPS adapter plate and WiFi board fixed bracket</li> </ol>	Screwdriver

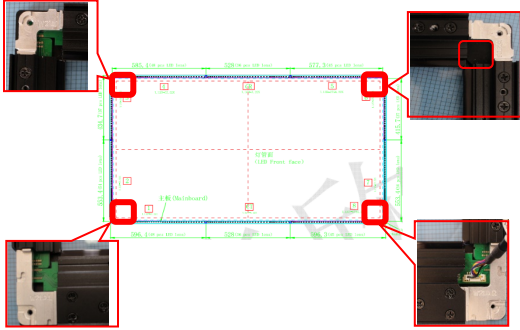
Step	Picture	Operation	Tools
13		<ol style="list-style-type: none"> <li>1. Remove 6 M3x6mm screws</li> <li>2. Remove power supply board</li> </ol>	Screwdriver
14		<ol style="list-style-type: none"> <li>1. Remove 4 M3x6mm screws</li> <li>2. Remove OPS guide bracket</li> </ol>	Screwdriver
15		<ol style="list-style-type: none"> <li>1. Remove 4 M3x6mm screws</li> <li>2. Remove 3 M4x6mm screws</li> <li>3. Remove OPS mounting bracket and side connector faceplate</li> </ol>	Screwdriver
16		<ol style="list-style-type: none"> <li>1. Remove 16 M4x5mm screws</li> <li>2. Remove LCM brackets</li> </ol>	Screwdriver

Step	Picture	Operation	Tools
17		<ol style="list-style-type: none"> <li>1. Remove 2 M3x6mm screws</li> <li>2. Remove 5 pieces of BoPET tape</li> </ol>	Screwdriver
18		<ol style="list-style-type: none"> <li>1. Remove 6 M3x6mm screws</li> <li>2. Remove rear cover supports</li> </ol>	Screwdriver
19		<ol style="list-style-type: none"> <li>1. Remove 11 M3x6mm screws</li> <li>2. Remove cable clamps</li> </ol>	Screwdriver
20		<ol style="list-style-type: none"> <li>1. Remove 2 M3x6mm screws</li> <li>2. Remove 1 M4x5mm grounding screw</li> <li>3. Remove connector plate support</li> </ol>	Screwdriver
21		<ol style="list-style-type: none"> <li>1. Remove 2 M3x6mm screws</li> <li>2. Remove button panel support</li> </ol>	Pliers

Step	Picture	Operation	Tools
22		<ol style="list-style-type: none"> <li>1. Turn display face-up</li> <li>2. Remove the touchscreen glass</li> </ol>	
23		<ol style="list-style-type: none"> <li>1. Remove 32 M3x3.3mm screws</li> <li>2. Remove glass brackets</li> </ol>	Screwdriver
24		<ol style="list-style-type: none"> <li>1. Remove EVA pad</li> </ol>	
25		<ol style="list-style-type: none"> <li>1. Remove 4 M3x6mm screws</li> <li>2. Remove pen wells</li> </ol>	Screwdriver



Step	Picture	Operation	Tools
26		<ol style="list-style-type: none"> <li>1. Remove 2 M3x6mm screws</li> <li>2. Separate buttons from keypad</li> <li>3. Separate light guide from buttons</li> </ol>	Screwdriver
27		<ol style="list-style-type: none"> <li>1. Remove 4 M3x6mm screws</li> <li>2. Separate adapter plate from bracket</li> </ol>	Screwdriver
28		<ol style="list-style-type: none"> <li>1. Remove 4 M5x8mm screws</li> <li>2. Separate speakers from speaker holders</li> </ol>	Screwdriver
29		<ol style="list-style-type: none"> <li>1. Remove 2 M3x6mm screws</li> <li>2. Remove wires from switch bracket</li> </ol>	Screwdriver
30		<ol style="list-style-type: none"> <li>1. Remove screws from bezel corner plates</li> <li>2. Remove corner plates from bezel</li> </ol>	Screwdriver

Step	Picture	Operation	Tools
31		3. Remove touch PCBAs from bezel	



## WEEE Assessment

Materials used in the IDGX65-1 are shown in Table 1.

Category	Mass (g)	Percentage
Plastic	62	0.08%
Metal	19,010	24.69%
Glass	17,299	22.47%
Rubber	0	0.00%
Other	503	0.65%
<i>Annex VII</i>		
Cables	314	0.41%
PCBA	2,312	3.00%
LCD	37,500	48.70%
<b>Total</b>	<b>77,003</b>	<b>100.00%</b>

*Table 1: Materials*

Material ratios in other sizes and generations are comparable.

An assessment of recyclability is shown in Table 2.

Recyclability Classification	Mass (g)	Per cent
Reuse(A)	0	0%
Recycle(B)	76,500	99%
Energy Recovery(C)	0	0%
Disposal(D)=(E)-[(A)+(B)+(C)]	503	1%
Product Weight(E)	77,003	100%
R1:Reuse&Recycled=(A)+(B)	76,500	<b>99%</b>
R2:Recovery=(A)+(B)+(C)	76,500	<b>99%</b>

*Table 2: Recyclability*