

#### VENDOR PRODUCT NOTIFICATION

SUBJECT: Defective Lot of Kortek Monitors DATE: 31 Jan 2018

PRODUCT: Kortek LCD Displays MODEL: See Models in Table 1

#### **REASON FOR VPN REVISION:**

Revision C – Release to Primary Contact Information Update

#### **APPLICABLE AREAS:**

All gaming jurisdictions.

# **SYMPTOM(S):**

LCD display may intermittently fail to display video and black out.

### **CAUSE(S):**

The A/D board may have a defect which can cause the LCD display to prematurely fail and not display any video. The affected units bear Kortek serial numbers 1602xxxxx through 1605xxxxx.

### **SOLUTION(S):**

When the monitor is blacked out, inspect the machines with blacked out displays to determine if displays from the affected batch are in use. If an affected unit is identified, contact Kortek for a replacement A/D board. Replaced A/D boards should be marked with a check mark to identify that the unit has been updated with a new A/D boards. Any defective A/D boards should be labeled with the serial number of the monitor from which it was removed and returned to Kortek.

#### SCOPE OF SOLUTION:

This solution applies to machines with monitors and serial number range listed in Table 1.

| Size      | IGT part number | KORTEK Model Name          | Serial Number         |
|-----------|-----------------|----------------------------|-----------------------|
|           | 81510804        | KTB101DNIxx<br>KTB101DPIxx |                       |
| 10.1" DPP | 91162400        |                            |                       |
|           | 6551950x        |                            |                       |
| 21.5"     | 69974805        | KTL215DP-xx                |                       |
| 21.3      | 91485500        | KTK215DGIxx                | 1602XXXXX ~ 1605XXXXX |
| 23"       | 6997490x        | KTL230DP-xx<br>KTL230S-xx  |                       |
|           | 6997500x        |                            |                       |
|           | 69970145        |                            |                       |
|           | 69970225        |                            |                       |
|           | 69970255        |                            |                       |
| 27"       | 69976501        | KTS270DPI01                |                       |
|           | KTS270DGI01     |                            |                       |

[Table 1]

# **PARTS REQUIRED:** One AD Board of a Defective Monitor.

This solution applies to machines with monitors and AD Board PN listed in Table 2.

| Size      | IGT part number | AD Board PN      | AD Board PN  |  |
|-----------|-----------------|------------------|--|--|
| 10.1" DPP | 81510804        |                  | Ex) IGT Parts No. 69974805 - AD Board Parts No. : 300437 |  |
|           | 91162400        | 300738           |  |  |
|           | 6551950x        |                  | AD Board St 300437 16180589                              |  |
| 21.5"     | 69974805        | 300437 & 300950  |  |  |
|           | 91485500        | 30043 / & 300930 |  |  |
| 23"       | 6997490x        | 300437 & 300950  |  |  |
|           | 6997500x        | 30043 / & 300930 |  |  |
|           | 69970145        |                  |  |  |
|           | 69970225        | 300051           |  |  |
|           | 69970255        |                  |  |  |
| 27"       | 69976501        | 300602           |  |  |
|           | 69975405        | 300002           |  |  |

# [ Table 2 ]

# To obtain parts, contact Kortek directly at:

# **Primary Contact Information:**

Kortek (USA)

250 Vista Blvd. #104, Sparks, NV 89434

Phone Number: (775) 527-4241 Email: whlee@kortek.co.kr

# **Secondary Contact Information:**

Kortek (Korea)

(22011) 26, Venture-ro24beon-gil, Yeonsu-go, Incheon, Republic of Korea

Phone Number: +82-32-860-3136

Email: jmso@kortek.co.kr

**Europe Contact Information** 

Kortek (EU) Service

European Technical Centre

Unit G, Stafford Park 12, Telford Shropshire, TF3 3BJ, United Kingdom

Phone Number: +44 (0)1952 237000 Email: kortekservice@emea.nec.com

# **DATE PARTS AVAILABLE:**

Parts are available now.

# **TOOLS REQUIRED:**

# Screw driver (Screw Size: M3\*6EA & M4\*8EA)

# Nut driver (Nut Size: M4PI)

# Black Sharpie marker



# **Revision History:**

 $\#\:A \to B$  : Kortek(EU) Service Phone Number & E-Mail Change

 $\# B \to C$ : Kortek(USA) address Change

### PROCEDURE:

NOTE: Follow proper ESD protection guidelines when working on equipment

### I. 10.1" monitor

1. Open the machine main door, power off the machine, and locate the monitor model name and serial number. Verify the affected monitor model name and serial number. See Figure 1.



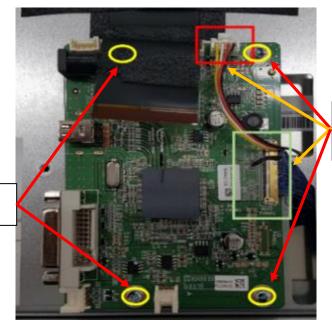
Figure 1

2. In case of 10.1" monitor (Refer to Appendix A for detail A/D board replacement procedure)

IGT part number: 81510804, 91162400, 65519501 Kortek model: KTB101DNIxx & KTB101DPIxx

1) Remove the cover

2) Locate the A/D board as shown in Figure 2.



Disconnect the LVDS Cable and harness. Remove the Two screws.

Remove the Foam Tape Remove the two screws.

Figure 2.

- 3) Remove four screws mounting the A/D board to the chassis.
- 4) Disconnect the LVDS and converter harnesses from the A/D board and remove the four screws securing the A/D board to the monitor assembly. Retain the screws for later use. See Figure 2.

- 5) Install the new A/D board PN 300738 with the four screws removed in Step 4 and reconnect the LVDS and converter harnesses. See Figure 2.
- 6) Attach the new A/D board to the chassis using four screws removed in Step 3.
- 7) Reinstall the electronics cover with screws removed in Step 1.
- 8) Use the black Sharpie marker to mark the manufacturer label with a check mark next to the serial number to indicate the defective A/D board has been replaced. See Figure 3.



Figure 3.

#### **□**. 21.5" monitor

1. Open the machine main door, power off the machine, and locate the monitor model name and serial number. Verify the affected monitor model name and serial number. See Figure 4.

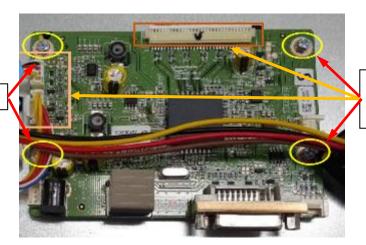


Figure 4

2. In case of 21.5" monitor (Refer to Appendix B for detail A/D board replacement procedure) IGT part number: 69974805, 91485500

Kortek model: KTL215DP-xx, KTK215DGIxx

- 1) Remove the cover
- 2) Locate the A/D board as shown in Figure 5.



Disconnect the LVDS Cable and harness. Remove the Two screws.

Figure 5.

- 3) Remove four screws mounting the A/D board to the chassis.
- 4) Disconnect the LVDS and converter harnesses from the A/D board and remove the four screws securing the A/D board to the monitor assembly. Retain the screws for later use. See Figure 5.
- 5) Install the new A/D board PN 300437 & 300950 with the four screws removed in Step 4 and reconnect the LVDS and converter harnesses. See Figure 5.
- 6) Attach the new A/D board to the chassis using four screws removed in Step 3.
- 7) Reinstall the electronics cover with screws removed in Step 1.
- 8) Use the black Sharpie marker to mark the manufacturer label with a check mark next to the serial number to indicate the defective A/D board has been replaced. See Figure 6.



Figure 6.

#### **Ⅲ.** 23" monitor

Remove the two screws.

1. Open the machine main door, power off the machine, and locate the monitor model name and serial number. Verify the affected monitor model name and serial number. See Figure 7.

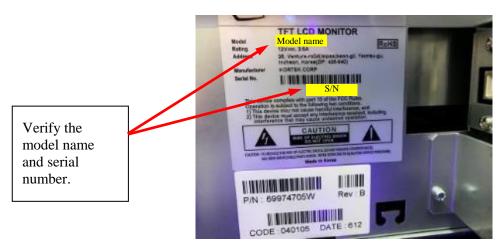


Figure 7

2. In case of 23" monitor (Refer to Appendix C for detail A/D board replacement procedure) IGT part number: 6997500x, 6997490x, 69976605, 69970145, 69970225, 69970255

Kortek model: KTL230DP-xx, KTL230S-xx

1) Remove the cover

2) Locate the A/D board as shown in Figure 8, 9

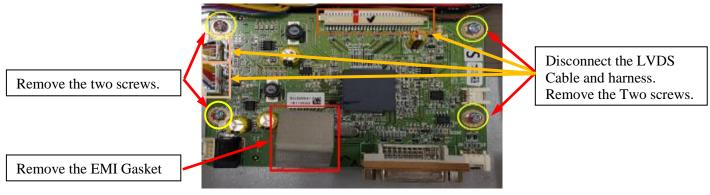


Figure 8. (69974805/KTL230DP-0x)

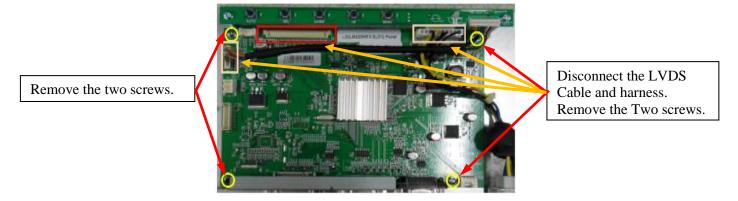


Figure 9. (91485500/KTL230S-05)

- 3) Remove four screws mounting the A/D board to the chassis.
- 4) Disconnect the LVDS and converter harnesses from the A/D board and remove the four screws securing the A/D board to the monitor assembly. Retain the screws for later use. See Figure 9.

- 5) Install the new A/D board with the four screws removed in Step 4 and reconnect the LVDS and converter harnesses. See Figure 8, 9.
- 6) Attach the new A/D board to the chassis using four screws removed in Step 3.
- 7) Reinstall the electronics cover with screws removed in Step 1.
- 8) Use the black Sharpie marker to mark the manufacturer label with a check mark next to the serial number to indicate the defective A/D board has been replaced. See Figure 10



Figure 10

### IV. 27" monitor

1. Open the machine main door, power off the machine, and locate the monitor model name and serial number. Verify the affected monitor model name and serial number. See Figure 11.



Figure 11

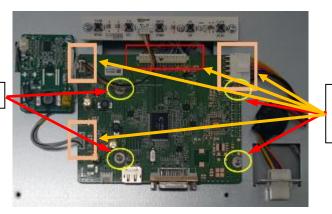
2. In case of 27" monitor (Refer to Appendix D for detail A/D board replacement procedure)

IGT part number: 69976501, 69975405

Kortek model: KTS270DPI01, KTS270DGI01

1) Remove the cover

2) Locate the A/D board as shown in Figure 12, 13

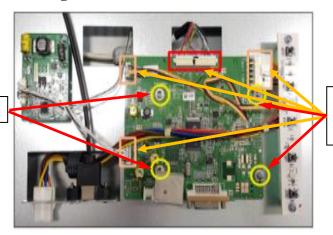


Remove the two screws.

Remove the two screws.

Disconnect the LVDS Cable and harness. Remove the Two screws.

Figure 12 (69975405/KTS270DGI01)



Disconnect the LVDS Cable and harness. Remove the Two screws.

Figure 13 (69976501/KTS270DPI01)

- 3) Remove four screws mounting the A/D board to the chassis.
- 4) Disconnect the LVDS and converter harnesses from the A/D board and remove the four screws securing the A/D board to the monitor assembly. Retain the screws for later use. See Figure 12 &13.
- 5) Install the new A/D board PN 300602 with the four screws removed in Step 4 and reconnect the LVDS and converter harnesses. See Figure 12&13.
- 6) Attach the new A/D board to the chassis using four screws removed in Step 6.
- 7) Reinstall the electronics cover with screws removed in Step 1.
- 8) Use the black Sharpie marker to mark the manufacturer label with a check mark next to the serial number to indicate the defective A/D board has been replaced. See Figure 14.

Mark the label with a checkmark indicating the A/D board was replaced.

Model Rating 12Ver. 3.54

Working 12Ver. 3.54

Working - 0.24(161688)05001-011, Verneur-gu, Model Rating 12Ver. 3.54

Working -

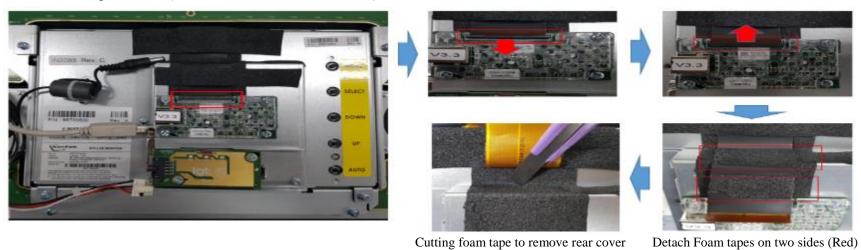
Figure 14

# Appendix A: 10.1" Detail A/D board replacement procedure

1. Disconnect input cables (DC Cable, DP Cable, USB "B" Type Cable, DVI Cable, LED Board Cable)

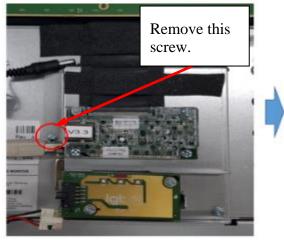


2. Disconnect input cables (Touch Controller flexible cable)



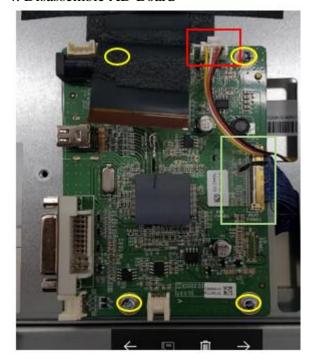
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# 3. Disassemble Rear Cover

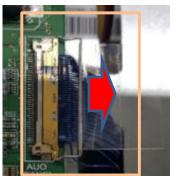




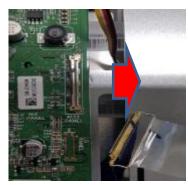
Disassemble 1 point of screw to separate rear cover







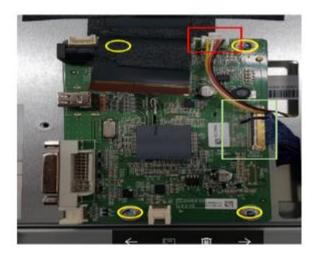


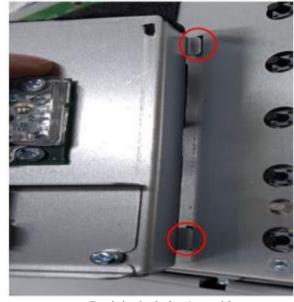


- 1) Disconnect 1 point connector from AD Board
- 2) Disconnect 1 point LVDS connector from AD Board
- 3) Move the lock bracket up
- 4) Disassemble 4 point screw

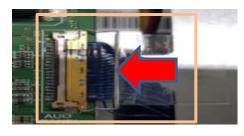


# 5. Re-Assemble AD Board

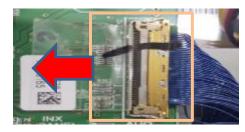




Put it in the hole. Assemble







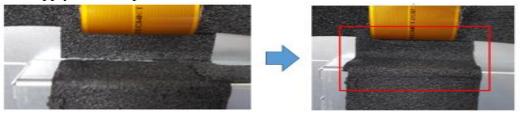
- 1) Connect LVDS connector to AD Board
  - 1-1) Connect LVDS Cable
  - 1-2) Move the lock bracket AD Board side
- 2) Assemble 4 points of screw3) Connect 1 point connector from AD Board

# 6. Re-Assemble Rear Cover



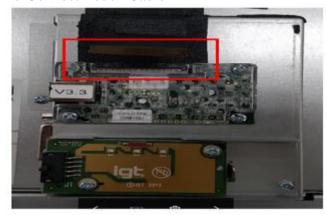
1 point of screw to assemble rear cover

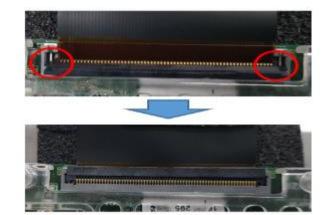
# 7. Re-Apply Foam Tape



Re-Attach foam tape on the location in the picture

# 8. Re-Connect Touch Cable





- 1) Connect touch cable
- 2) Check Touch cable lock Point
- 3) Cover the Cap

# 9. Re-Apply Foam Tape





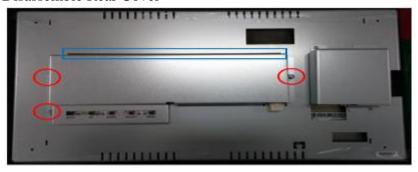


Re-Attach foam tape on the location in the picture

# ▶ Rework Completed

# Appendix B: 21.5" Detail A/D board replacement procedure

# 1. Disassemble Rear Cover



- 1) Detach EMI Tape applied at upper side of the rear cover
- 2) Disassemble 3 Nuts to separate rear cover

# 2. Disassemble AD Board



- 1) Disconnect the OSD & Power connectors
- 2) Disassemble 4 Screws



3) Disconnect the LVDS connector



- 4) Separate AD Board
- 3. Apply the new AD Board to the monitor by assembling 4 Screws.



4. Re-Connect OSD & Power & LVDS Cable to the new AD Board.



5. Re-Assemble Rear Cover to the monitor by assembling 3 Nuts.



6. Attach EMI Tape again at the upper side of the rear cover

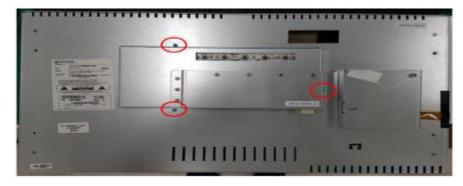




# ▶ Rework Completed

Appendix C-1: 23" KTL230DP-0x Detail A/D board replacement procedure

# 1. Disassemble Rear Cover



Disassemble 3 Screws to separate rear cover



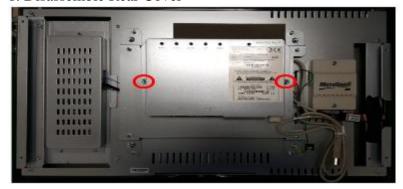


- 1) Disconnect the OSD & Power connectors
- 2) Disassemble 4 Screws
- 3) Disconnect the LVDS connector
- 4) Separate AD Board

- 3. Reconnect the LVDS and converter harnesses.
- 4. Apply the new AD Board to the monitor by assembling 4 Screws.
- 5. Re-Connect OSD & Power Cable to the new AD Board.
- 6. Re-Assemble Rear Cover to the monitor by assembling 3 Screws.
- ► Rework Completed

# Appendix C-2: 23" KTL230S-05 Detail A/D board replacement procedure

# 1. Disassemble Rear Cover



Disassemble 2 Nuts to separate rear cover



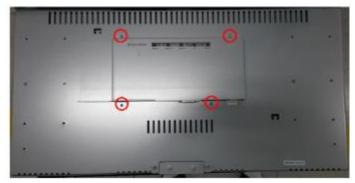
- 1) Disconnect the OSD & Power connectors
- 2) Disassemble 4 Screws on AD Board
- 3) Disassemble 2 Screws on OSD Board to make a space for disconnecting LVDS cable



- 5) Separate AD Board
- 3. Apply the new AD Board to the monitor by assembling 4 Screws.
- 4. Re-Connect OSD & Power & LVDS Cable to the new AD Board.
- 5. Apply OSD Board to the monitor by assembling 2 Screws.
- 6. Re-Assemble Rear Cover to the monitor by assembling 2 Nuts.
- ▶ Rework Completed

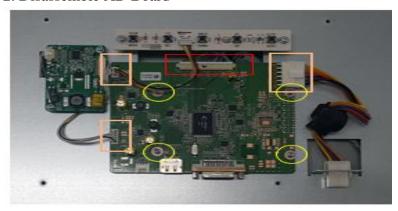
# Appendix D-1: 27" KTS270DGI01 Detail A/D board replacement procedure

# 1. Disassemble Rear Cover



Disassemble 4 Screws to separate rear cover

# 2. Disassemble AD Board



- 1) Disconnect the OSD & Power connectors
- 2) Disassemble 4 Screws



3) Disconnect the LVDS connector



- 4) Separate AD Board
- 3. Re-Connect LVDS Cable to the new AD Board.



- 4. Apply the new AD Board to the monitor by assembling 4 Screws.
- 5. Re-Connect OSD & Power Cable to the new AD Board.
- 6. Re-Assemble Rear Cover to the monitor by assembling 4 Screws.
- ▶ Rework Completed.

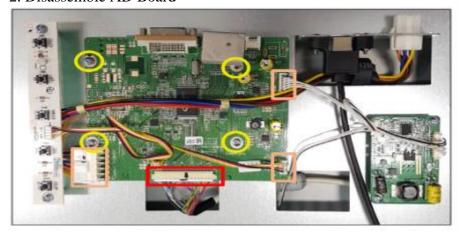
# Appendix D-2: 27" KTS270DPI01 Detail A/D board replacement procedure

# 1. Disassemble Rear Cover



Disassemble 5 Screws to separate rear cover





- 1) Disconnect the OSD & Power connectors
- 2) Disassemble 4 Screws
- 3) Disconnect the LVDS connector
- 4) Separate AD Board

- 3. Apply the new AD Board to the monitor by assembling 4 Screws.
- 4. Re-Connect OSD & Power & LVDS Cable.
- 5. Re-Assemble Rear Cover to the monitor by assembling 5 Screws.
- ▶ Rework Completed