# Additional Service Manual

### **SERVICE INFORMATION (PARTS)**

AlphaTheta Date: Feb. 28, 2023 No.: SPH21004-A

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The explanation for Note: \*1 -\*3 is described on the last page of this SI.

Model No. Group*1 Applied countermeasure to MP*2 Serial number applied		Serial number applied countermeasure *3		
Refer to following pages.				
DETAIL				
DETAIL	-Interchangeability for design change of each assy with usage of alternative parts			
REASON	-Due to procurement convenience			

## Please discard the previous SI (SPH21004, Date: Sept. 29, 2021) [Change] Design change due to further usage of alternative parts

Due to fire incident at AKM factory, design change of related assy was performed. But additional design change has been applied due to delivery issue of alternative parts. ASSY before and after design change are not interchangeable. If combination is not correct, unit does not work properly.

The change history of related ASSY is as in below table. Unit does not work properly if the combination of each assy is not correct. Please check the serial No, whether below modification is applied when replacing subjected assy. Also, please check the part No printed on the board.

Combination					Description
Main ASSY	LCDB ASSY	LCD Module	JLCD1/2 ASSY	AUDIO ASSY	Description
DWX4287	DWX4291	DWX4375	DWX4288, 4289	DWX4298,	Original
DWX4669(*1)	DWX4622(*1)	1	1	DWX4621,	Group A (*3)
DWX4857,4865	1	1	DWX4805, 4806	DWX4671	Group B
DWX4857,4865	DWX4897	DWX4870	1	(*2)	Group C

<sup>\*1</sup> DWX4669 + DWX4622 are supplied as service kit (GXX1600)

PAD1 ASSY (DWX4292->DWX4623), PAD2 ASSY (DWX4293->DWX4624),

USBA ASSY (DWX4294->DWX4625) and CRFD ASSY (DWX4295->DWX4626)

After remedy, please mark according to P.3 for distinction of the group for future repairs.

Crown	Current Part	Parts com	patibility		New Part	
Group	Part Name(Symbol)	Part N	umber ↓	Pa	rt Number	Part Name(Symbol)
A	MAIN ASSY	DWX4287	4	DWX46	69	MAIN ASSY
A	LCDB ASSY	DWX4291	4	DWX46	22	LCDB ASSY
A	PAD1 ASSY	DWX4292	3	DWX46	23	PAD1 ASSY
A	PAD2 ASSY	DWX4293	3	DWX46	24	PAD2 ASSY
A	USBA ASSY	DWX4294	3	DWX46	25	USBA ASSY
A	CRFD ASSY	DWX4295	3	DWX46	26	CRFD ASSY
A	AUDIO ASSY	DWX4298	4	DWX46	21	AUDIO ASSY
A	AUDIO ASSY	DWX4621	3	DWX46	71	AUDIO ASSY
В	MAIN ASSY	DWX4669	2	DWX48	57	MAIN ASSY
В	JLCD1 ASSY	DWX4288	2	DWX48	05	JLCD1 ASSY
В	JLCD2 ASSY	DWX4289	2	DWX48	06	JLCD2 ASSY
В	XPAD ASSY	DWX4290	3	DWX48	45	XPAD ASSY
C	MAIN ASSY	DWX4857	3	DWX48	65	MAIN ASSY
C	LCDB ASSY	DWX4622	2	DWX48	97	LCDB ASSY
C	TFT LCD	DWX4375	2	DWX48	70	LCD MODULE

[Part compatibility] 1:Changeable from old to new. 2:Not Interchangeable at all. 3:Interchangeable in both ways. 4:only in special case 5:Do not use old parts. Memo: TI-35361 TI-35362

'TI-35717 'TI-35792

Services examination(E): E1 Web release(W): W1 YS

<sup>\*2</sup> Each AUDIO ASSY is interchangeable by updating the firmware to the latest version.

<sup>\*3</sup> The following parts are also changed with design change of Group A. But the circuit is not changed, so old and new assy are interchangeable.

Model No.Group*1Applied countermeasure to MP*2Countermeasure to MP*2XDJ-XZ/AXJAYes1251~XDJ-XZ/AXJBYes1801~XDJ-XZ/AXJCYes2331~	re applied serial number *3
XDJ-XZ/AXJ B Yes 1801~	
XDLX7/AXI C Vas 2331	
ADJ-AZJIMAJ C 168 2551~	
XDJ-XZ/LWSYXJ A Yes 17818~	
XDJ-XZ/LWSYXJ B Yes 26057~	
XDJ-XZ/LWSYXJ C Yes 31489~	
XDJ-XZ/UXJCB A Yes 6561~	
XDJ-XZ/UXJCB B Yes 11911~	
XDJ-XZ/UXJCB C Yes 12401~	
XDJ-XZ-N/AXJ A Yes 101~	
XDJ-XZ-N/AXJ B Yes 101~	
XDJ-XZ-N/AXJ C No	
XDJ-XZ-N/LWYXJ A Yes 431~	
XDJ-XZ-IVLWYXJ B Yes 431~	
XDJ-XZ-N/UXJCB A Yes 1181~	
XDJ-XZ-N/UXJCB B Yes 1181~	
XDJ-XZ-N/UXJCB C No	
XDJ-XZ-W/AXJ A Yes 1~	
XDJ-XZ-W/AXJ B Yes 1~	
XDJ-XZ-W/AXJ C Yes 181~	
XDJ-XZ-W/LWYXJ A Yes 1~	
XDJ-XZ-W/LWYXJ B Yes 1~	
XDJ-XZ-W/LWYXJ C No 301~	
XDJ-XZ-W/UXJCB A Yes 1~	
XDJ-XZ-W/UXJCB B Yes 601~	
XDJ-XZ-W/UXJCB C Yes 2201~	

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#### [Description]

\* This is the content of original SI (SPH21004)

Group A: AKM IC

- Change of touch panel IC

IC3606 on LCDB ASSY AK4187VN -> TSC2007IPWR@V LCDB ASSY DWX4291 -> DWX4622 Firmware change on Main ASSY (It is not rewritable) Main ASSY DWX4287 -> DWX4669

- \* Old LCDB ASSY (DWX4291) becomes unavailable, so if it is defective, Main ASSY also need to changed to new ones. We supply DWX4622 and DWX4669 as service kit (GXX1600)
- Change of DAC IC

IC5802 on AUDIO ASSY: AK4458VN -> PCM1690 IC5603,5604: AK5358AET -> PCM1803ADB Circuit around the above IC is also changed with these IC change.

Part No of AUDIO ASSY DWX4298 -> DWX4621

Notice: Please update the firmware (Ver.1.22) when changing AUDIO ASSY from old to new.

AUDIO ASSY has further changed from DWX4621 to DWX4671, but DWX4298, DWX4621 and DWX4671 are interchangeable if the firmware is updated to the latest version.

#### Group B: JOG UCOM

JOG UCOM that is installed on JLCD 1/2 ASSY and its peripheral circuit were changed due to procurement convenience.

Also, firmware for new JOG UCOM is stored on Main ASSY in line with this design change. This firmware is not rewritable, so change of Main ASSY is also required when changing JOG UCOM from old to new. Old/new firmware can recognize only old or new JOG UCOM each other. So, either of old or new should match between JOG UCOM and Main ASSY.

Old New

JLCD1/JLCD2 ASSY: DWX4288/DWX4289 DWX4805/DWX4806 Not interchangeable MAIN ASSY: DWX4669 DWX4857, DWX4865(\*) Not interchangeable

If old/new of JLCD ASSY does not correspond with Main ASSY, below symptoms occur.

- Backlight of JOG LCD turns off.

[REV] button blinks rapidly.

\* The latest Main ASSY has been changed from DWX4857 to DWX4865, but they are interchangeable. XPAD ASSY is also changed from DWX4290 to DWX4845, but they are also interchangeable.

#### Group C: LCD Module

Furthermore, LCD module on display part and its circuit on LCDB ASSY were changed due to procurement convenience of driver IC.

Old and new LCD module are not interchangeable, so changing LCDB ASSY is also required when replacing LCD Module from old to new. If the combination is incorrect, the display will not be shown properly (The display may be partially misaligned).

Old New

LCD MODULE: DWX4375 DWX4870 Not interchangeable LCDB ASSY: DWX4622 DWX4897 Not interchangeable

<u>All parts except for the original parts are available.</u> Please confirm the parts that are installed in the unit and order the correct parts.

FYI, below combination is also confirmed to work properly.

Change LCD & LCDB ASSY (DWX4375 & DWX4622) of the unit with group A to the one of group C (DWX4870 & DWX4897)

#### [Modification mark after repair]

Please put below mark when changing parts from old to new, so the group can be identified correctly in future repairs.

Change to Group A	Put a black dot on serial No label
Change to Group B	Put a blue dot on serial No label
Change to Group C	Put a red dot on serial No label

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#### Supplementary Explanation (This contents are not related to the service remedy of this SI.)

#### \*1 Group

Even if the countermeasure method is the same, replacement part or firmware, for instance, may differ depending on models

This symbol (alphabet) is used for classifying models in such case.

If the group is same, exactly the same remedy can be applied.

#### \*2 Applied countermeasure to Mass Production (MP)

Indicate whether the countermeasure has been/will be taken during production or not

- (1) Yes The countermeasure has been/will be taken during production.
- (2) No The countermeasure has NOT been/will NOT be taken during production.

#### \*3 Serial number applied countermeasure

Indicate the serial number, in case the countermeasure has already been/will be applied in the production at factory.

(1) "Serial Number" This is the serial number to which the countermeasure has already been/will be applied.

Sample 1: "ABCD001000UC-"

 $The \ countermeasure \ has \ started/will \ start \ from \ ABCD001000UC \ at \ factory.$ 

Sample 2: "RD\*\*-"

In case of unknown the actual number, only production year/month is shown here.

(RD: April, 2018)

(2) "-----" Not applied the countermeasure in the production.

Or, unknown the applied serial number.