Lubic Standard-ATX Assembling Instructions

Ver.7.11

【Introduction】

We appreciate for purchasing our product of “Lubic Standard-ATX” series.

This product is a kit for assembling ATX PC case by using aluminum frames, joint parts and acrylic panels.

We are transmitting topics or information related to this product across the official website of Lubic“ www.lubic.jp ”. It provides a lot of fulfilled contents such as opportunities for exchanging views lively among the users or announcement for completed products.

【Inquiries related to this product】

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Kairen Co., Ltd. “Support Center”

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Acceptance Time : Working Days (Mon through Fri)

10：30AM - 6：00PM (Not available for Sat, Sun. and national holidays)

[Notes in advance to assembly work]

●Please read this manual before starting an assembly work.

●Please check that all contents are all lined up. * Refer to the contents list.

●If anything is missing, please contact to support center. The missing item will be delivered as soon as possible.

[Notes during assembly work]

●Please work at horizontal and well-balanced place.

●Use of work gloves are recommended for preventing from causing accidents or damages.

●Please conduct work with following the work procedures. Incorrect process may lead to the potential cause of damages or accidents.

●Please be careful not to scratch the furniture around.

●A cross slot screwdriver is required for work. Please prepare separately.

●The contents of this product are designed to be fit to the size of the completed product based on the instruction manual.

●Protection film is coated on the metal fittings or acrylic panels. Please remove the film upon use.

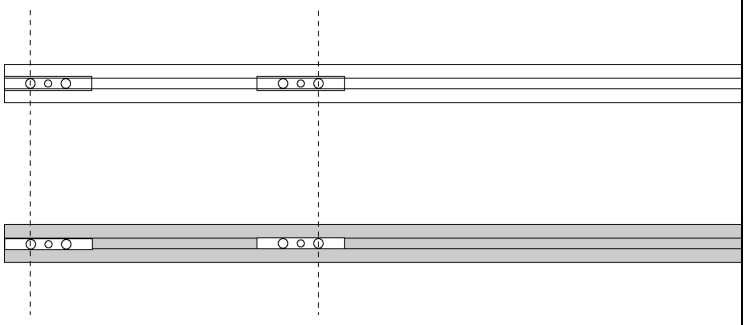
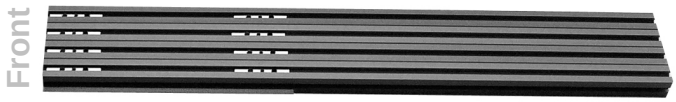
●Please be very careful with the direct contact between frames or metal fittings and acrylic panels. It may lead to the potential cause of damages or corruptions.

●Please keep the used tools or unused parts out of the reach of children after work.

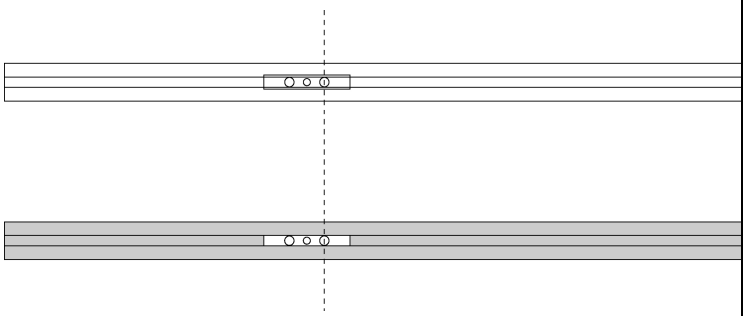
Table of Contents

1. Preparations

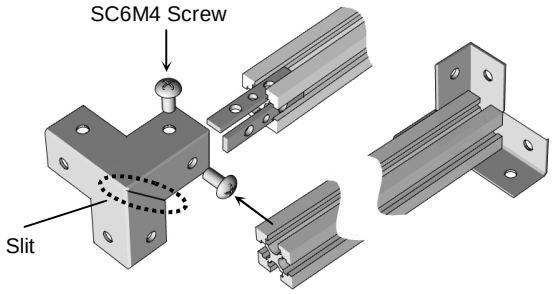
Step ① Preparing 448 mm frame for top and bottom plane

Prepare 448mm frame for top and bottom plane	
  Front **Component 1**	【Prepare 448mm frame for top and bottom plane】 Fix “Washer (3S)” by using “PSCM4” on the 448mm frame with adjusting the hole on the **attached paper pattern A.** The fixed washers will be used later for fixing drive stay panels. * Please use the attached ”hexagonal wrench” for fixing screws for “PSCM4”. ★ Create 4 pieces of the same parts. ★ The completed component is called **“Component 1”**.

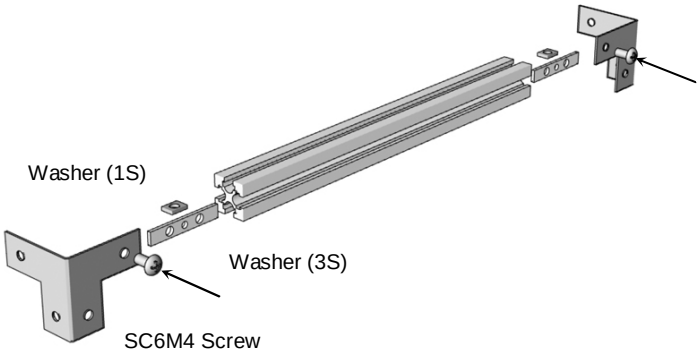
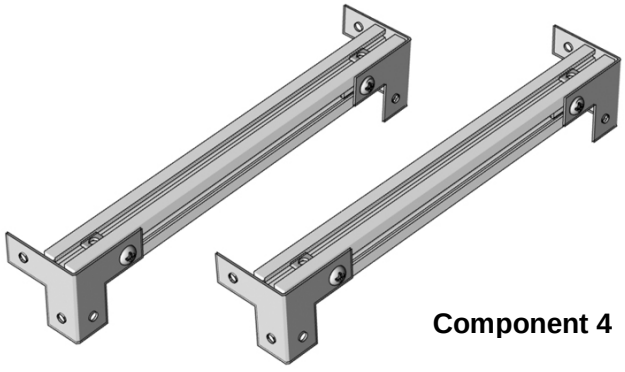
Step ② Preparing 448mm frame for back plane

Prepare 448mm frame for back plane	
  Top **Component 2** Bottom	【Prepare 448mm frame for back plane of the case】 Fix “Washer (3S)” by using “PSCM4” on the 448mm frame with adjusting the hole on the **attached paper pattern B.** The fixed washers will be used later for fixing back panels. * Please use the attached ”hexagonal wrench” for fixing screws for “PSCM4”. ★ Create 2 pairs of the same parts. ★ The completed component is called **“Component 2”**.

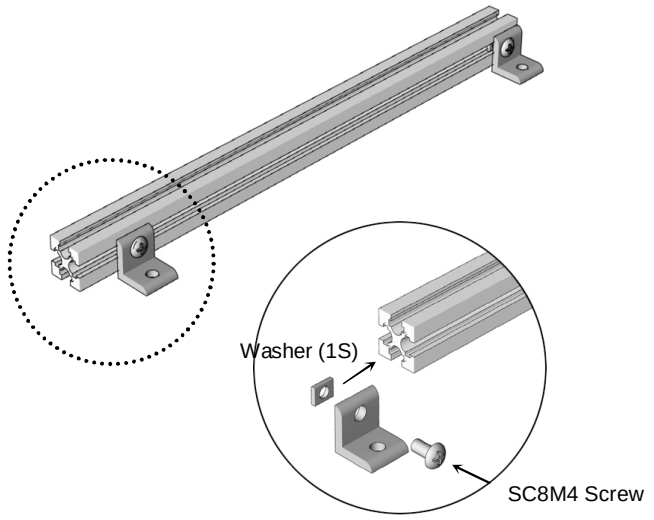
Step ③ Preparing 192 mm frame for top plane

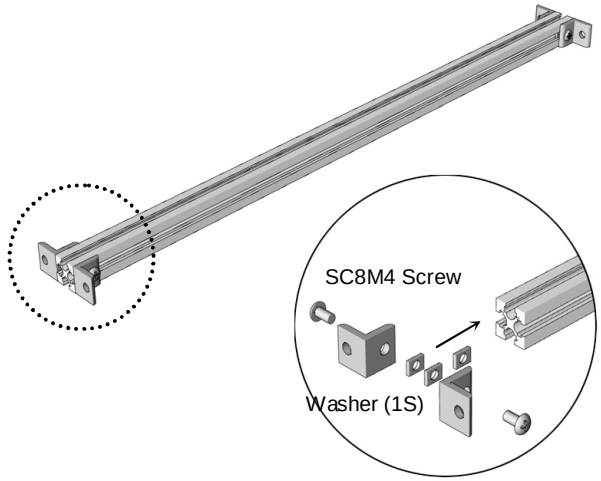
Creating 192mm frame with CAP attached	
  **Component 3**	【Mount “CAP” on 192 mm frame】 Insert “Washer (3S)” into 192mm frame as shown on the left diagram. Apply 192mm frame deeply into the “CAP” and fix it with “SC6M4 screws”. * Please remove the white protection film coated on “CAP” upon use. * Fix screws so as to face the slit part of CAP in the same planes. It will be faced at the top plane in the latter work. (Refer to the left diagram) Mount “CAP” on both sides of 192mm frame. ★ The completed component is called **“Component 3”.** ★ Create 2 pairs of the same parts.

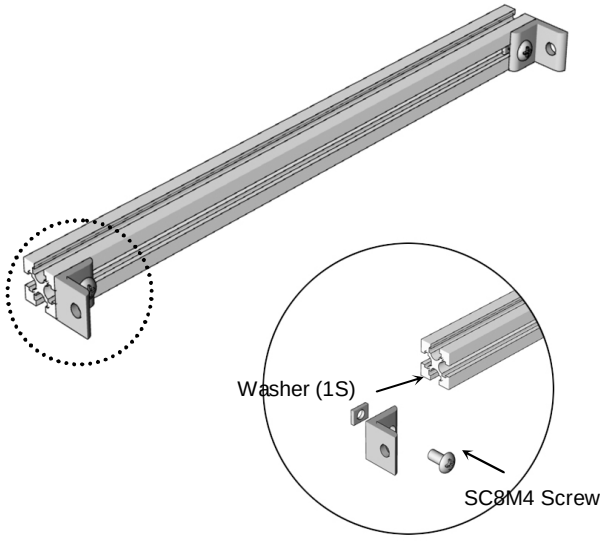
Step ④ Preparing 192 mm frame for bottom plane

Creating 192mm frame with CAP-EX attached	
  **Component 4**	【Mount “CAP-EX” on 192mm frame】 Prepare in the same procedure as Step ③. Mount “CAP-EX” in the direction shown on the left diagram. At this time, insert 2 pieces of “Washer (1S)” in each frame as shown on the left diagram. * Please remove the white protection film coated on “CAP-EX” upon use. * Here, only 1 plane shall be fixed with screws, however, please do NOT forget to insert other “Washer (3S)” for the rest of the planes as they will be used upon mounting “Wheels” later. Mount “CAP-EX” on both sides of 192mm frame. ★ The completed component is called **“Component 4”.** ★ Create 2 pairs of the same parts.

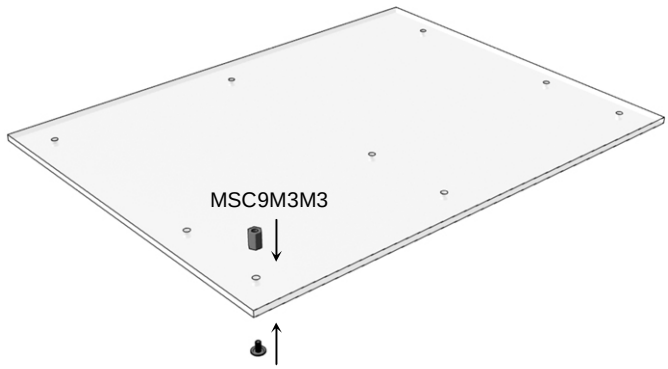
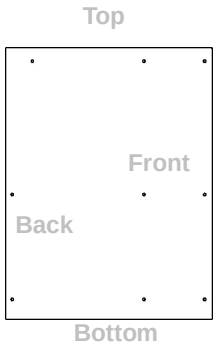
Step ⑤ Preparing acrylic panel fixing frame for motherboard

Creating LP attached 256mm frame (bottom part) for fixing motherboard	
	【Mount "LP" on both ends of the frame】 Mount 2 pieces of "LP (L-shaped bracket)" on both ends of 256mm frame. Fix "LP (L-shaped bracket)" on the frame by using "Washer (1S)" and "SC8M4 Screws". At this time, place "LP (L-shaped bracket)" in the position 16mm (equals to the length of one piece of LP) inward from the end of the frame. (Refer to the left diagram) Please check the direction of the "LP (L-shaped bracket)". ★ The completed component is hereafter called **"Component 5"**.

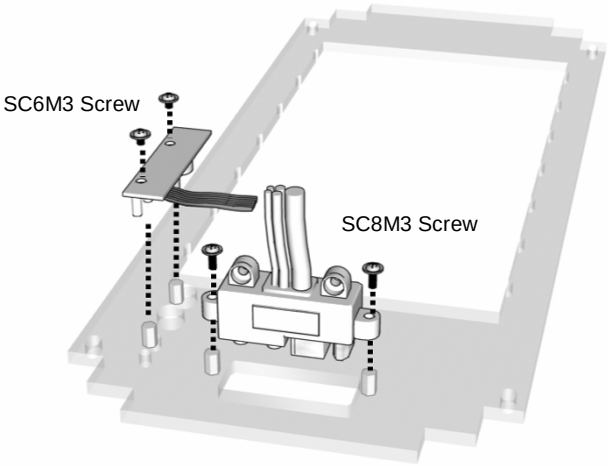
Creating 448mm frame with LP attached	
	【Mount "LP" on both ends of the frame】 Mount 2 pieces of "LP (L-shaped bracket)" on both ends of 448mm frame. Fix "LP (L-shaped bracket)" on the frame by using "Washer (1S)" and "SC8M4 Screws" as shown on the left diagram. At this time, insert one piece of "Washer (1S)"into one side of the frame. (Refer to the left diagram). ★ The completed component is hereafter called **"Component 6"**.

Creating LP attached 256mm frame (top part) for fixing motherboard	
	【Mount "LP" on both ends of the frame】 Mount "LP (L-shaped bracket)" on both ends of 256mm frame. Fix "LP (L-shaped bracket)" on the frame by using "Washer (1S)" and "SC8M4 Screws" as shown on the left diagram. Please check the direction of the "LP (L-shaped bracket)". ★ The completed component is hereafter called **"Component 7"**.

Step ⑥ Preparing acrylic panel for motherboard

Prepare acrylic panel for motherboard	
	【Fix “MSC9M3M3” on “acrylic panel for motherboard (ACMB-AI)”】 Fix the attached “MSC9M3M3” on the “acrylic panel for motherboard (ACMB-AI)” as shown in the left diagram. Adjust “MSC9M3M3” to the hole on the acrylic panel and fix it with “SC8M3 Screws” from under surface of the panel. Please check the front and back plane of the acrylic panel. ★ The completed component is hereafter called **“Component 8”**.  *** Mounting Motherboard** Fix with “SC6M3 Screws” by adjusting the position of screw hole for motherboard and the position where “MSC9M3M3” is fixed on the acrylic panel.

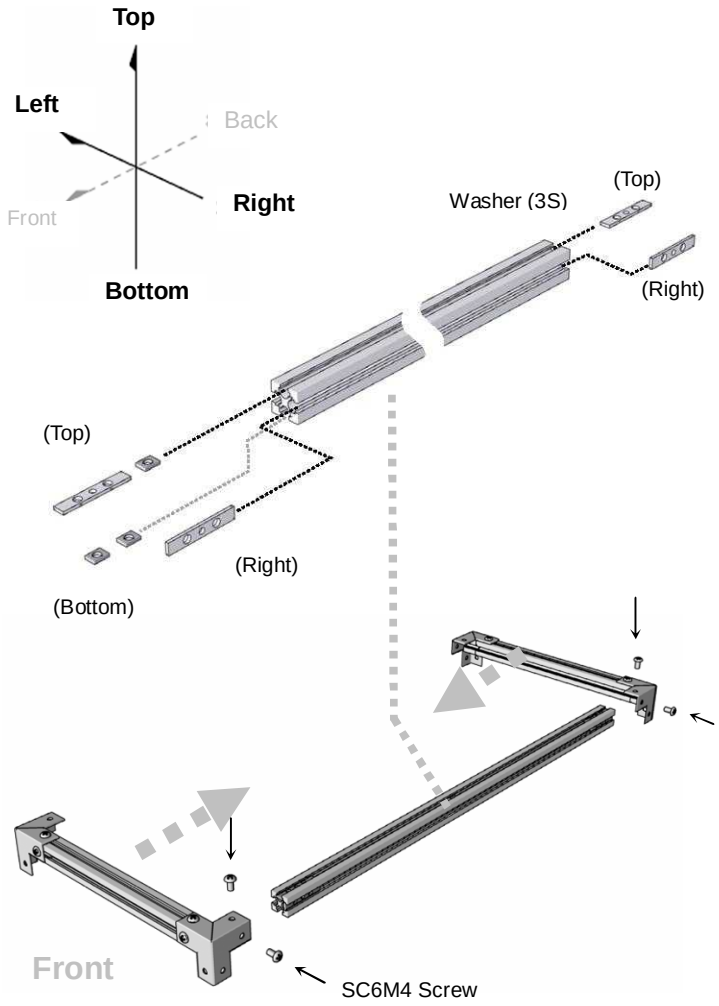
Step ⑦ Preparing front panel

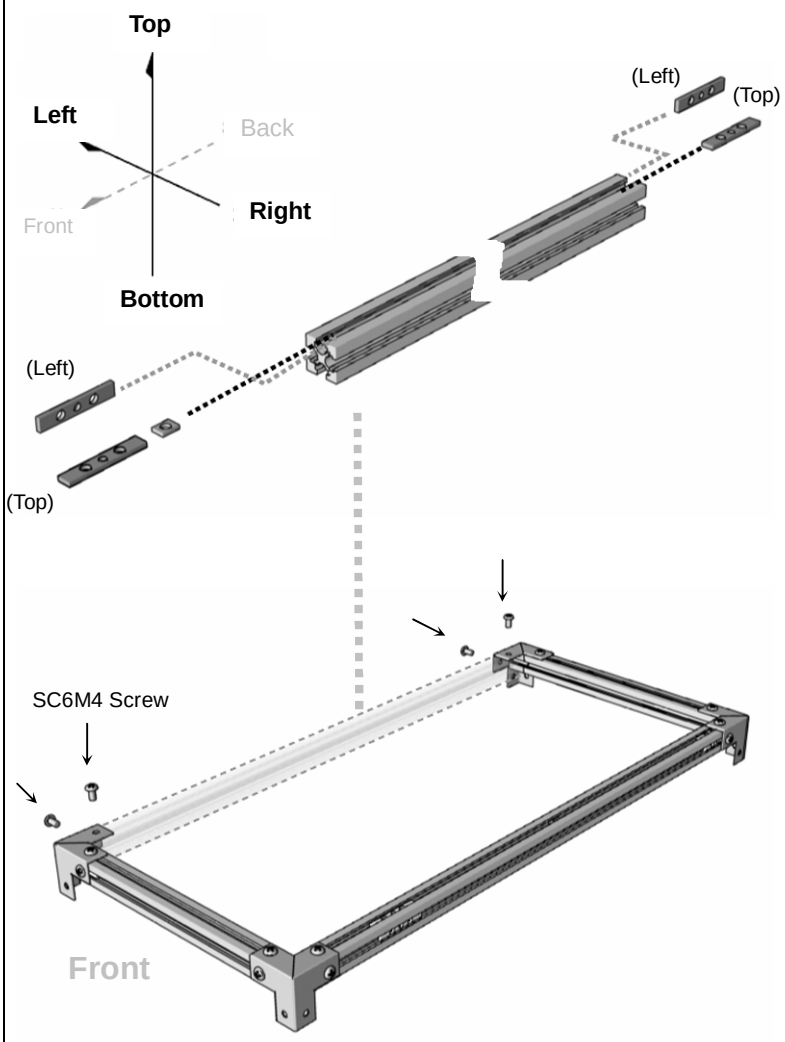
Mount switch and front port on the front panel	
	【Mount “Switch (SW)” and “USB1394” on “Front Panel (ACFP-A)”】 Fix “Switch (SW)” on the reverse side of the ”Front Panel (ACFP-A)” with using “SC6M3 Screw”. (Refer to the left diagram) * Please place insulating washer between switch and screw. Then fix “USB1394” with attached “SC8M3 Screw”. ★ The completed component is hereafter called **“Component 9”**.

2. Assembly

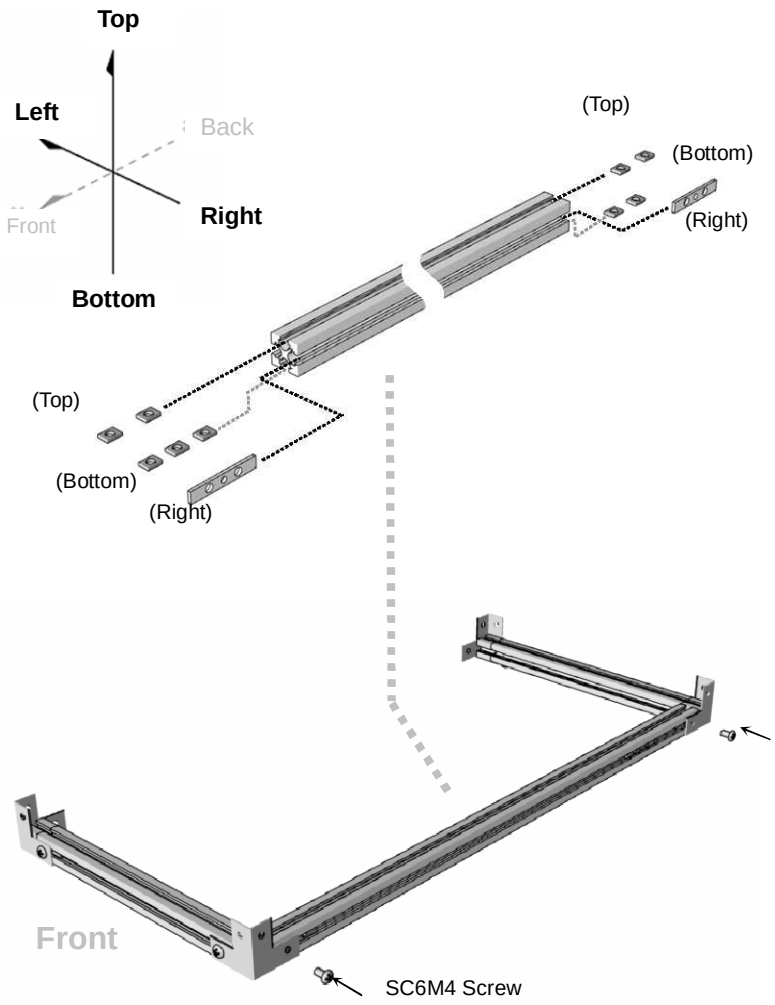
Creating framework for top plane

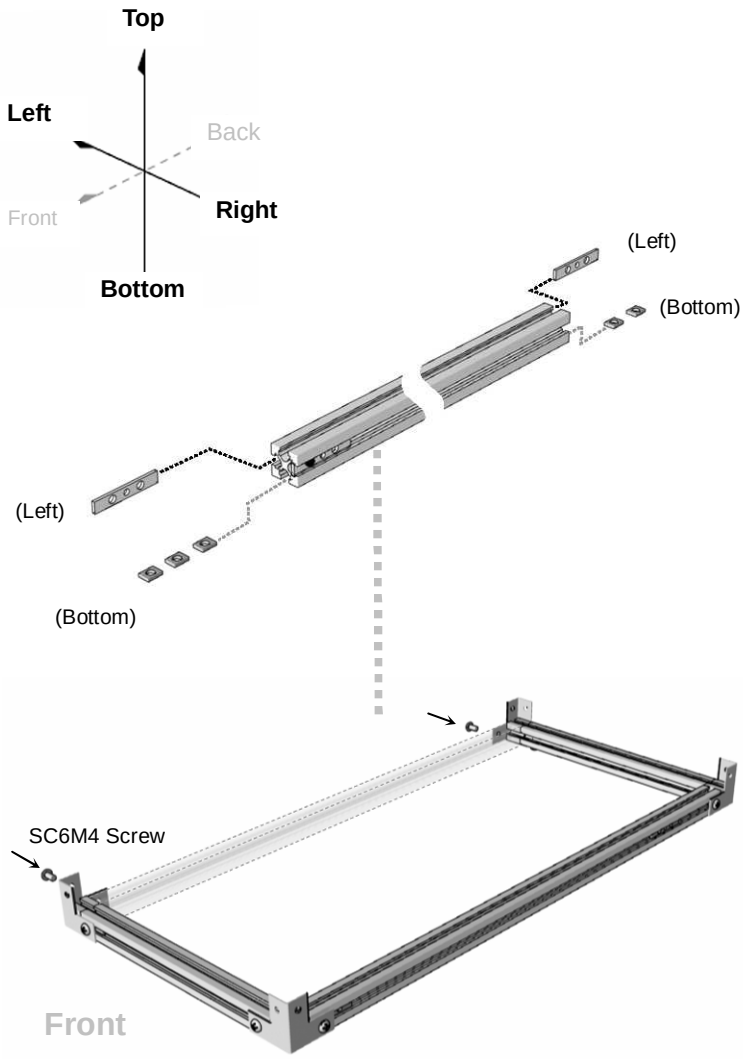
* The following explanation is based on the premise that the case being faced at front.

Mounting 448mm frame at upper right	
	【Insert washer into 448mm frame at upper right】 Turn the plane left where the washer of **"Component 1"** prepared in Step 1 is fixed. (The plane where washer is fixed shall face front) Insert the washer into the groove of the frame as shown in the left diagram. Top: Washer (3S)x2, Washer (1S)x1 Right: Washer (3S)x2 Bottom: Washer (1S)x2 * The washer inserted here is used for mounting panels or columns. 【Fix 448mm frame at upper right】 Fix both sides of **"Component 1"** where washer is inserted with **"Component 3"** by using "SC6M4 screws".

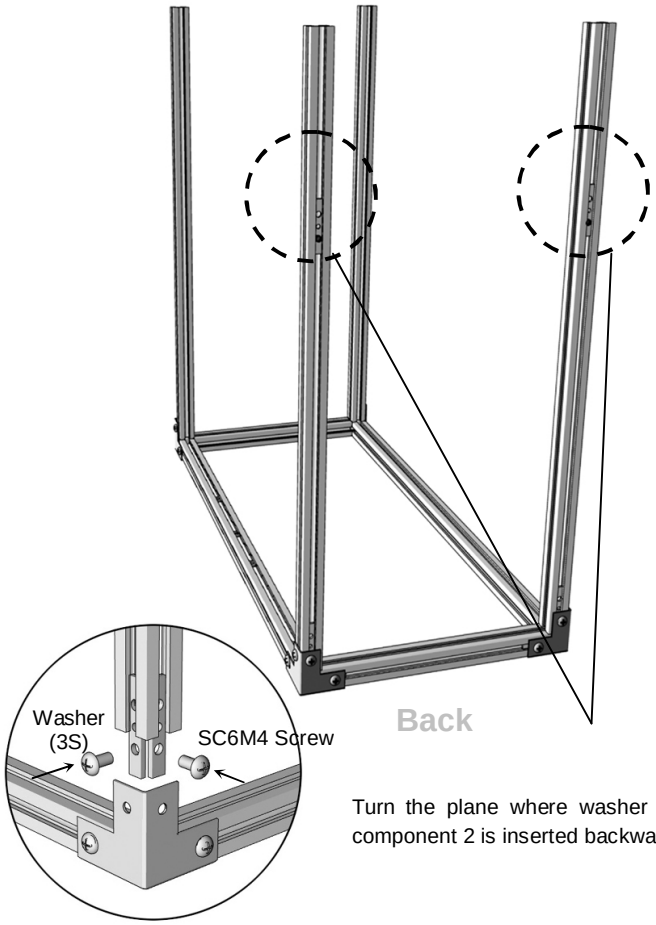
Mounting 448mm frame upper left	
	【Insert washer into 448mm frame at upper left】 Turn the plane right where the washer of **"Component 1"** prepared in step 1 is fixed. (The plane where washer is fixed shall face front) Insert the washer into the groove of the frame as shown in the left diagram. Top: Washer (3S)x2, Washer (1S)x1 Left: Washer (3S)x2 * The washer inserted here is used for mounting panels. 【Fix 448mm frame at upper left】 Fix both sides of **"Component 1"** where washer is inserted with **"Component 3"** by using "SC6M4 screws". ★ Now the top plane framework is completed.

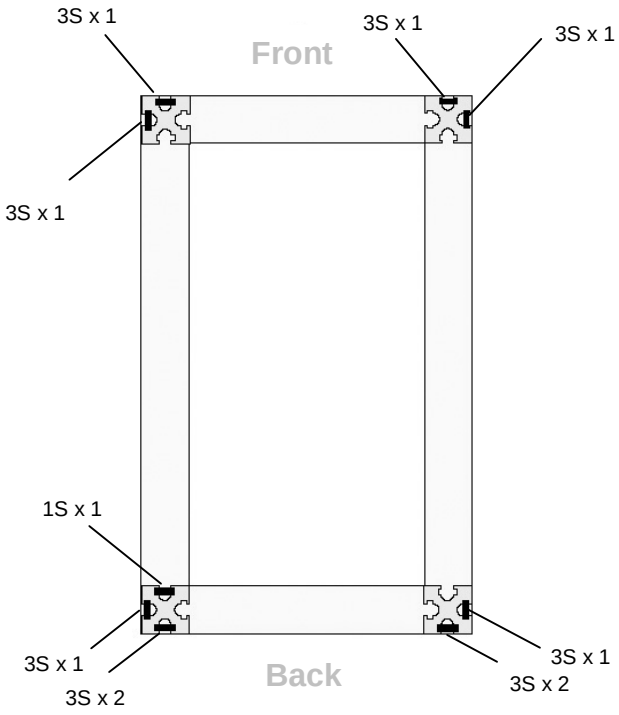
Creating framework for bottom plane

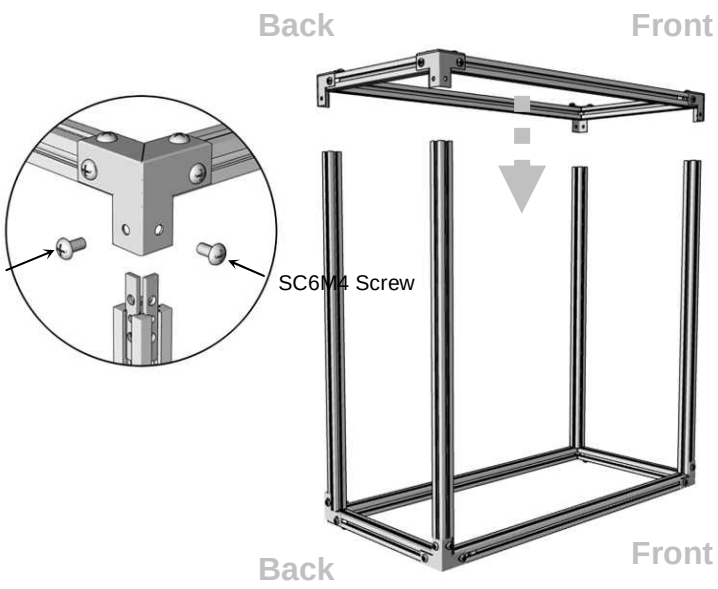
Mounting 448mm frame lower right	
	【Insert washer into 448mm frame at lower right】 Turn the plane left where the washer of **“Component 1”** prepared in step 1 is fixed. (The plane where washer is fixed shall face front) Insert the washer into the groove of the frame as shown in the left diagram. Top: Washer (1S)x4 Bottom: Washer (1S)x5 Right: Washer (3S)x2 * The washer inserted here is used for mounting panels, columns and wheels. 【Fix 448mm frame at lower right】 Fix both sides of **“Component 1”** where washer is inserted with **“Component 4”** by using “SC6M4 screws”.

Mounting 448mm frame lower left	
	【Insert washer into 448mm frame at lower left】 Turn the plane right where the washer of **"Component 1"** prepared in step 1 is fixed. (The plane where washer is fixed shall face front) Insert the washer into the groove of the frame as shown in the left diagram. Left: Washer (3S)x2 Bottom: Washer (1S)x5 * The washer inserted here is used for mounting panels or wheels. 【Fix 448mm frame at lower left】 Fix both sides of **"Component 1"** where washer is inserted with **"Component 4"** by using "SC6M4 screws". ★ Now the bottom plane framework is completed.

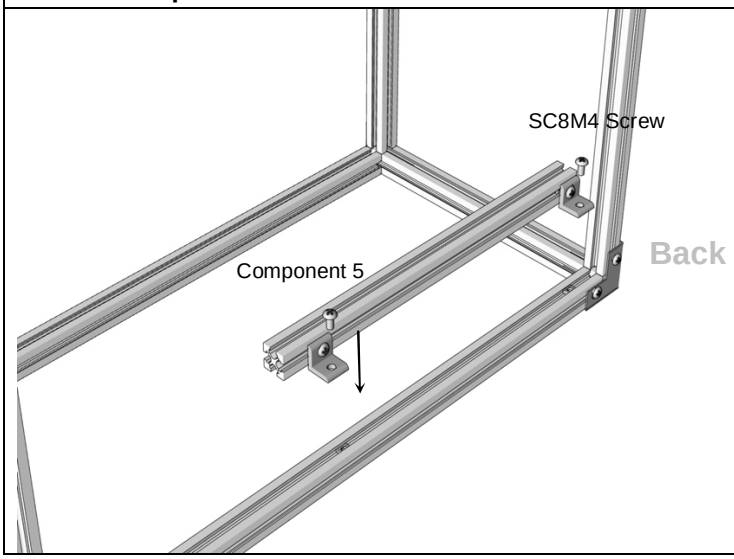
Connecting framework of top and bottom planes

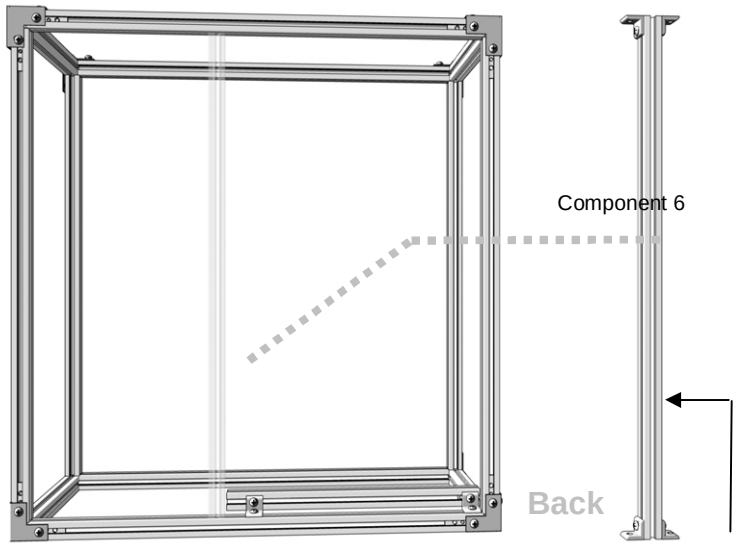
Set up 448mm frame on the bottom plane framework	
 Turn the plane where washer (3S) of component 2 is inserted backward	【Install 448mm frame column on the bottom plane framework】 Install 4 pieces of 448mm frames (2 out of 4 refers to **"Component 2"**) on the bottom plane framework. Fix **"Component 2"** on the backward. (Refer to the left diagram) Please check the direction of the "Bottom plane framework". Insert "Washer (3S)" into the bottom of 448mm frame and fix them with "SC6M4 screws".

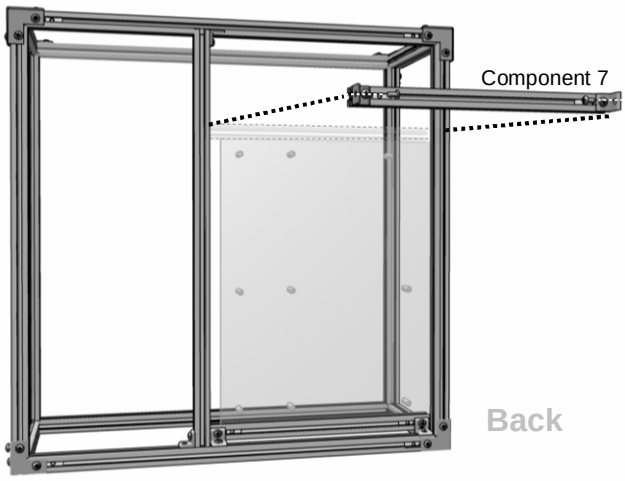
Prepare for mounting top plane framework	
 【Overhead view diagram of base part】	【Insert washer (3S) into the bottom framework with column attached】 Prepare for mounting column attached bottom framework on the top plane. Insert "Washer (3S)" and "Washer (1S)" into the column of bottom framework as shown on the left diagram. * The extra "Washer (3S)" already inserted on the reverse side will be used later upon mounting the power supply fixing panel.

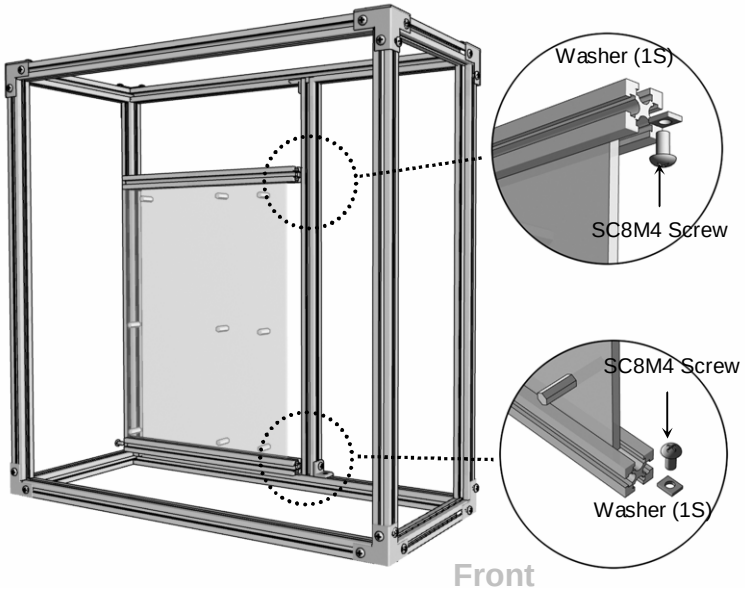
Mount top plane framework	
	【Fix top and bottom framework together】 Combine top and bottom framework together with checking the matching direction and fix them by “SC6M4 Screws” as shown on the left diagram. ★ Now the case frame is completed.

Fixing acrylic panel for motherboard

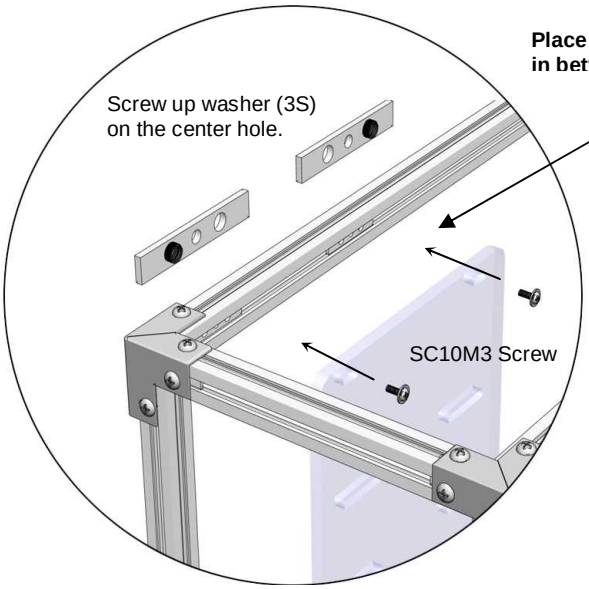
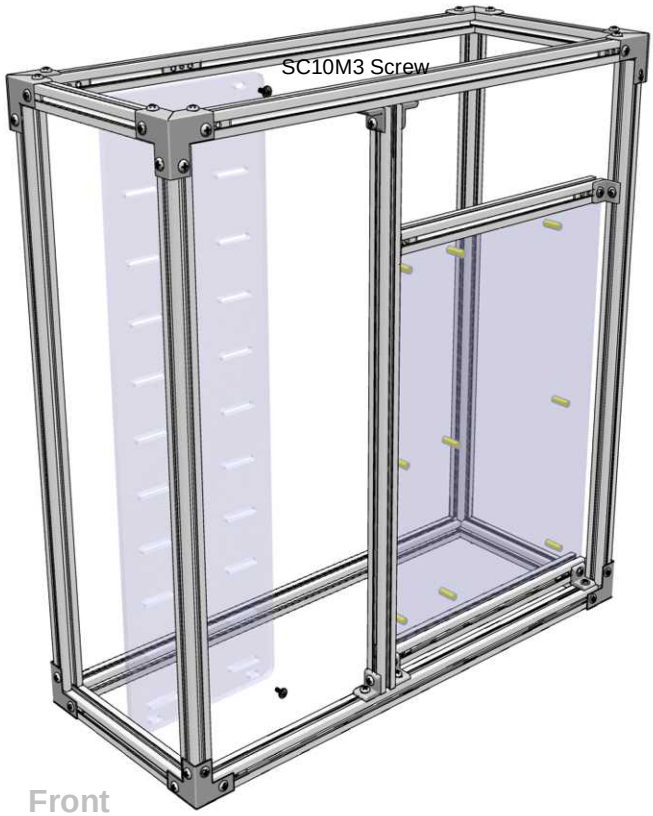
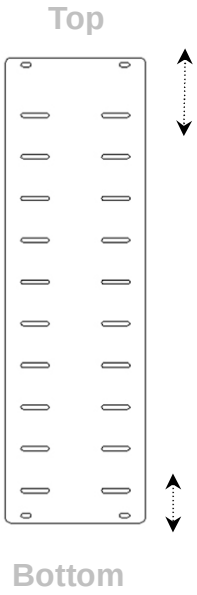
Mount **"Component 5"**	
	【Mount **"Component 5"** on the case frame】 Mount **"Component 5"** on the right backward of the bottom plane of the case frame. Fix it with "SC8M4 Screws" as shown on the left diagram. * Please check the direction of "Component 5". * Fix it with using 2 pieces of pre-inserted "Washer (1S)" placed in the backward of the frame.

Mount **"Component 6"**	
 Turn the plane of component 6 where "Washer (1S)" inserted to face backward.	【Mount **"Component 6"** on the case frame】 Fix **"Component 6"** adjusting with **"Component 5"**. At this time, turn the plane of 448mm frame where "Washer (1S)" is inserted to face backward and fix it with "SC8M4 Screws". (Refer to the left diagram).

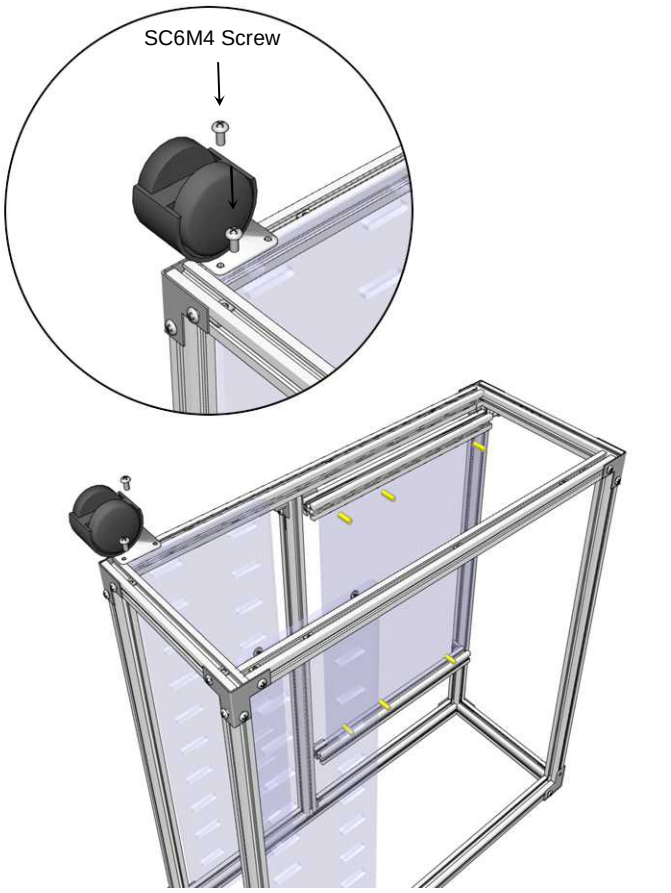
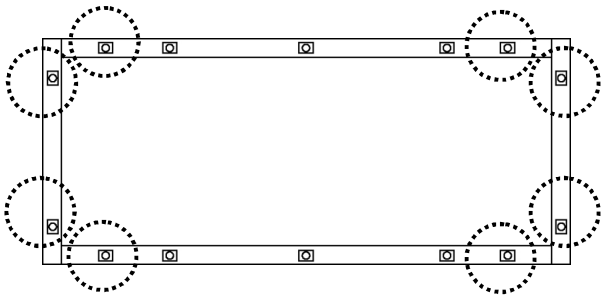
Mount **“Component 7”**	
	【Mount **“Component 7”** on the case frame】 Mount **“Component 7”** with “SC8M4 Screw” as shown on the left diagram. Place **“Component 8”** into the groove of **“Component 5”** and **“Component 7”** and fix the position of **“Component 7”**.

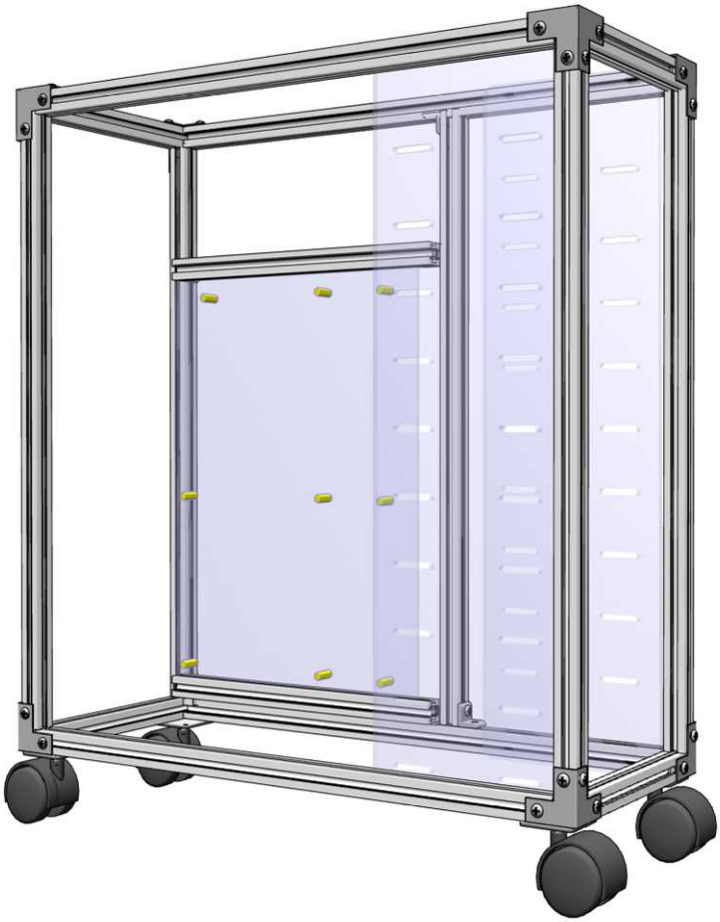
Mount **“Component 8”**	
	【Fix **“Component 8”**】 Insert “Washer (1S)” into both top and bottom part of **“Component 8”** and fix them with “SC8M4 Screws” in order to prevent **“Component 8”** from being fallen off from its position toward the front panel direction as shown on the left diagram. * It is designed to allow the **“Component 8”** to be released from the back for maintenance.

Fixing drive stay panel

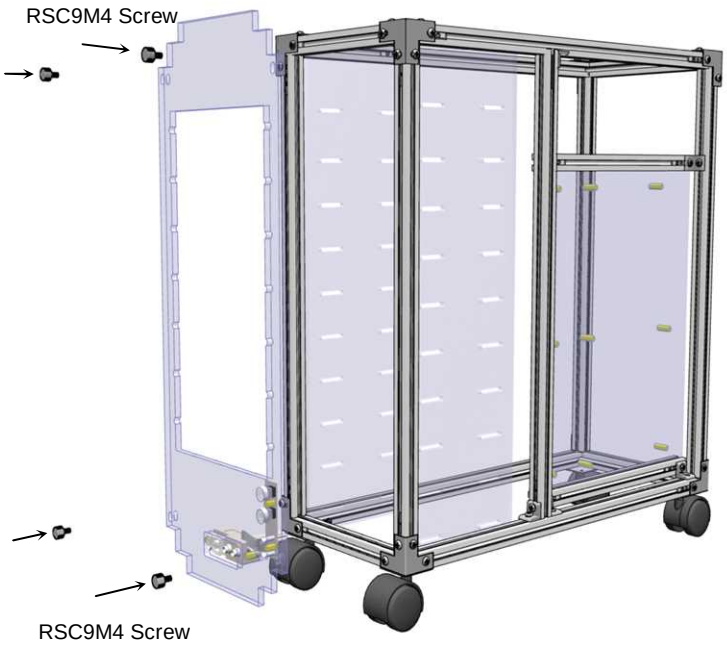
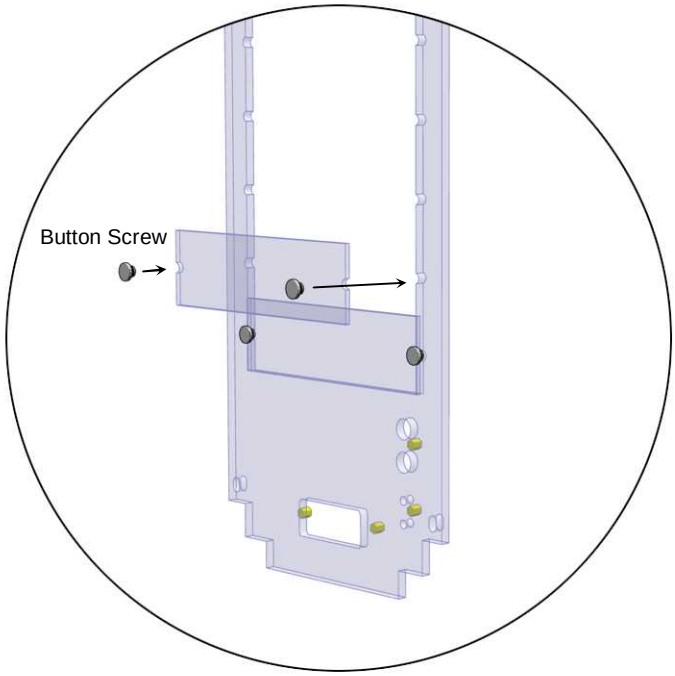
Fix drive stay panel	
 	【Fix “Drive Stay Panel (ACDS10)”】 Fix “Drive Stay Panel (ACDS10)” by using “SC10M3 Screws” with **placing the spacer for fixing the drive stay panel in between** as shown in the enlarged view on the left diagram. Repeat the same procedure and mount them on both sides. 【**Note !**】 This drive stay panel has top and bottom side. As shown below, the one with a wider space provided between the panel fixing hole and drive fixing hole refers to the top side. Please be careful NOT to mount oppositely. 

Mounting Wheels

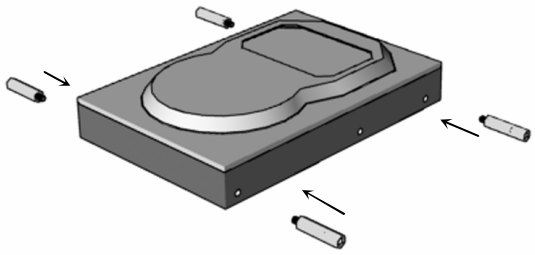
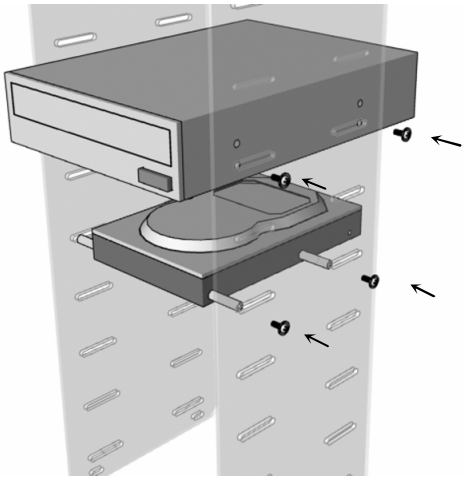
Mount wheels	
  Fix on the “Washer (1S)” circled in dotted line above.	【Mount “Wheel (WH)”】 Mount “Wheel (WH)” with “SC6M4 Screws” on the bottom plane of the case frame as shown in the enlarged view of the left diagram. Fix wheels on the external side of the “Washer (1S)” as described on the below left diagram.

Overall View	
	The left diagram refers to the assembled view up to this stage. Please check that no loose area or gap is found on every corner of the frame. (As such loosening part may lead to cause trouble upon mounting the panel).

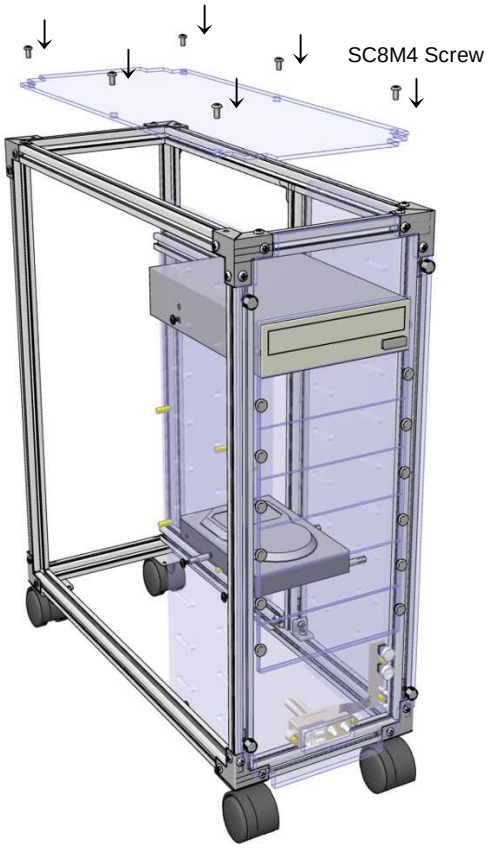
Mounting front panel

Mount **“Component 9”**	
	【Mount **“Component 9”**】 Fix **“Component 9”** with “ RSC9M4Screws”.
	Fix the “Front Cover” attached to the panel on the **“Component 9”** as shown in the enlarged view on the left diagram. (Please leave some space for mounting the drive related items) Please mount Front Covers on the panel with using the attached “Button Screws”.

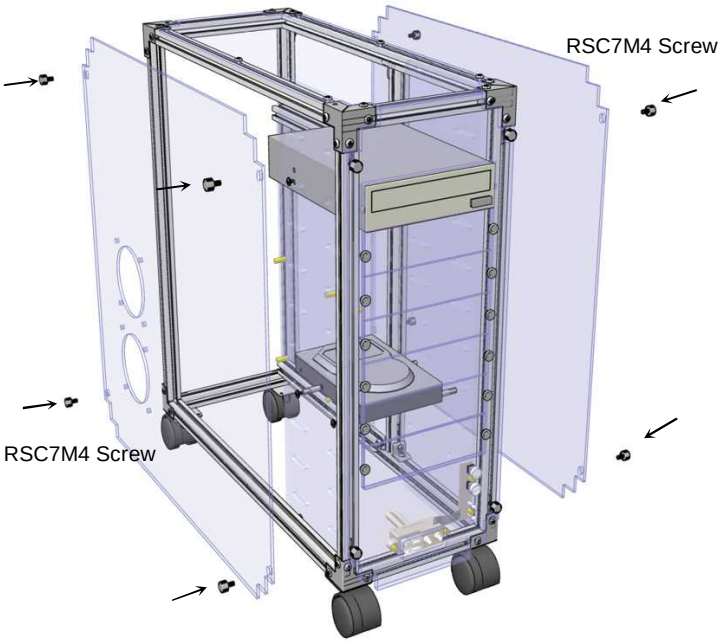
Mounting drive

Mount drive related items	
 STAND-HS or STAND-FC	【Prepare for mounting 3.5 inch drive】 ・In case of **HDD** Mount “STAND-HS” on HDD as shown on the left diagram. ・In case of FDD or a card reader Mount “STAND-FC” on the drive as shown on the left diagram.
	【Mount drive】 Fix the drive with “SC10M3 Screws” with adjusting to drive stay panel as shown on the left diagram. Please use the screw hole at the lower stand for mounting 5 inch optical drive.
 SC10M3 Screw	

Mounting top panel

Mount top panel	
	【Mount “Top Panel (ACUP-A)”】 Fix “Top Panel (ACUP-A)” with “SC8M4 Screws”. * Fix the screw placed at the center of the panel on the “Washer (1S)” inserted in the frame.

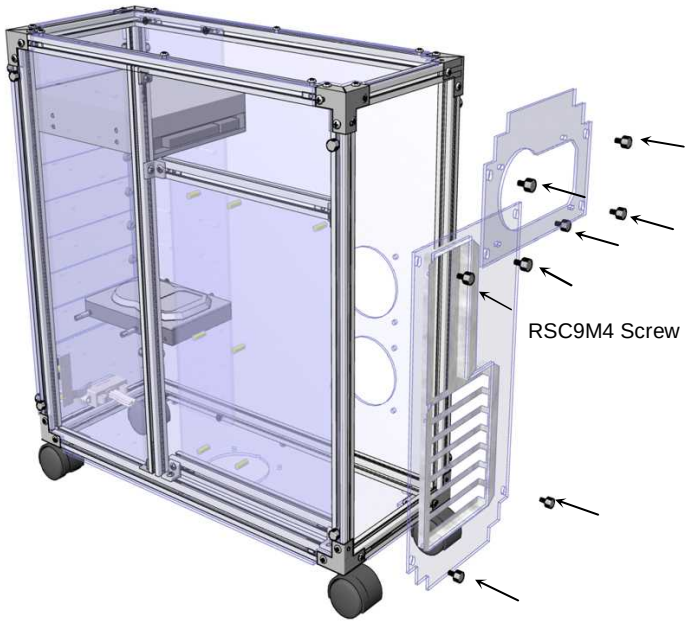
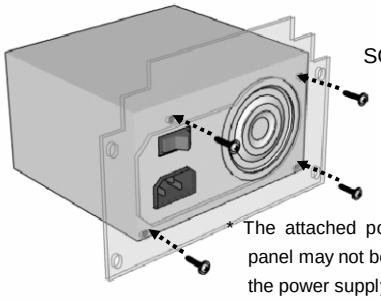
Mounting side panel

Mount side panel	
	【Mount “Side Panel (ACSP-A, ACSP-AH2”】 Fix “Side Panel (ACSP-A, ACSP-AH2” with ”RSC7M4 Screws”. Mount panel with Fan hole attached (ACSP-AH2) on the left side (reverse side of the motherboard). * By screwing up the case frame in vertical, the height of the screws will align with the ones on the front panel.

Mounting bottom panel

Mount bottom panel	
	【Mount “Bottom Panel (ACDP-A)”】 Fix “Bottom Panel (ACDP-A)” with “SC8M4 Screws”. * Screw up can be done easily if the position of screw hole on the panel and the position of “1S” inserted in the frame are adjusted in advance to bottom panel installation.

Mounting back panel and power supply fixing panel

Mount back panel and power supply fixing panel	
	【Mount “Power Supply Fixing Panel (ACPP)” and “Back Panel (ACBP-A)”】 Mount ATX power supply on the “Power Supply Fixing Panel (ACPP)” with “SC16H Screws”.  * The attached power supply fixing panel may not be used when using the power supply unit with different spec. Fix the power supply fixing panel with power supply installed on the upper back plane of the case frame with “RSC9M4 Screws”. Fix the back panel on the upper back plane of the case frame with “RSC9M4 Screws”. ★ Now the acrylic panel installation is completed.

Completion

Completed Drawing	
	★ Congratulations !! Lubic Standard-ATX is now completed. Fine-tune the screws in each part, and then mount the assembly parts available.

3. Appendix

SW and USB1394 distribution and connection

■"USB2.0 and 1394-Audio Module (USB1394)" Connection
As notation is not standardized, notation may vary depending on the companies.
Please conduct connection based on the below chart.

★Audio (Loudspeaker/Microphone terminal)

Notation of this product	General designation (role)	Other notations
MIC-IN	Front Microphone Input	AUD-MIC
GROUND	Front Microphone Ground	MIC-GND May be shared with Power
MIC-POWER	Front Microphone Power	AUD-MIC-BIAS Power Supply
GROUND	Front Audio Ground	AUD-GND
R-OUT	Front Right Channel Audio Signal Audio Line R	LINE_R Front Audio R R AUD_FPOUT_R
R-RET	Rear Right Channel Audio Signal Send audio R to returnable distribution and back plane terminal of R	RETURN_R Rear Audio R AUD-RET-R
L-OUT	Front Left Channel Audio Signal Audio Line L	LINE_L Front Audio L AUD_FPOUT_L
L-RET	Rear Left Channel Audio Signal Send audio L to returnable distribution and back plane terminal of L	RETURN_L Rear Audio L AUD-RET-L

★USB2.0

Notation of this product	General designation (role)	Other notations
①VCC	USB Power(+5V) for Port1 Power Supply	Power Supply +5V
②VCC	USB Power(+5V) for Port2 Power Supply	Power Supply +5V
①-D	USB Negative Signal for Port1 Minus Line	SBD2- DATA- USB0 DX-/USB6 DX-
②-D	USB Negative Signal for Port2 Minus Line	SBD3- DATA- USB1 DX-/USB7 DX-
①+D	USB Positive Signal for Port1 Plus Line	SBD2+ DATA+ USB0 DX+/USB6 DX+
②+D	USB Positive Signal for Port2 Plus Line	SBD3+ DATA+ USB1 DX+/USB7 DX+
①GROUND	USB Ground Ground	GND
②GROUND	USB Ground Ground	GND

★IEEE1394

Notation of this product	General designation (role)	Other notations
TPA+	Plus Line	Nearly the same
TPA-	Minus Line	Nearly the same
VG	Ground	GND GROUND
TPB+	Plus Line	Nearly the same
TPB-	Minus Line	Nearly the same
VP	Cable Power Power Supply	CABLE POWER
SHIELD	Shield Ground	Shielding GND GND GROUND

★Power Supply Switch (SW) Connection

Notation of this product	General designation (role)	Other notations
POWER SW (2 pin used)	Power Supply Switch Line	Power SW SPWR
HDD LED (2 pin used)	Hard Disc LED Line (+-)	IDE LED
POWER LED (3 pin used)	Power LED Line (+-)	ACPI LED
RESET SW (2 pin used)	Reset Switch	RESET