Steinway & Sons A1 & A2 INSTALLATION MANUAL

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INTRODUCTION

This Installation Manual was created to assist you with setting up and using your Steinway Lyngdorf electronics and accessories.

Please read all material carefully prior to installation or first use of your Steinway Lyngdorf product. If you need additional assistance, contact your Steinway Lyngdorf representative or email **contact@steinwaylyngdorf.com**.

COMPLIANCE

WEEE

The European Parliament and the Council of the European Union have issued the Waste Electrical and Electronic Equipment Directive. The purpose of the Directive is to prevent waste of electrical and electronic equipment and to promote reuse, recycling, and other forms of waste recovery. Steinway Lyngdorf products and the accessories packed with them are subject to the WEEE Directive. Please dispose of any waste materials in accordance with your local recycling regulations. Products and equipment which must be collected for reuse, recycling, and other forms of recovery are marked with the icon of the crossed-out waste receptacle.





FCC

Steinway Lyngdorf products and accessories comply with parts 15 and 68 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference; and (2) this device must accept any interference received, including any interferenceo that may cause undesired operation. A1/A2 amplifier and P1 processor contain TX FCC ID: TYOJN5139M0

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Equipment marketed to a consumer must be capable of complying with the necessary regulations in the configuration in which the equipment is marketed.

IMPORTANT SAFETY INSTRUCTIONS

Warnings



Caution: Risk of electrical shock. Do not open.

Caution: To reduce the risk of electrical shock, do not remove cover. No user-serviceable parts inside. Refer servicing to qualified personnel.

Explanation of graphical symbols



The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.



The lightning with arrowhead within an equilateral triangle is intended to alert the user to the presence of uninsulated "Dangerous Voltage" within the product's enclosure that may be of sufficient magnitude to constitute f electrical shock to a person

a risk of electrical shock to a person.

PRE-INSTALLATION

Unpacking the product

Carefully remove the unit and accessory kit from the carton and visually check for shipping damage. Contact both the shipper and your Steinway Lyngdorf representative immediately if the unit bears any sign of damage from mishandling. Note: Keep shipping carton and packing material for future use or in the unlikely event that the unit needs servicing. If this unit is shipped without the original packing, damage could occur and void the warranty.

Inventory

Check the list below to ensure that all necessary product components have been delivered. Report all discrepancies to your Steinway Lyngdorf representative immediately.

- Amplifier
- Installation Manual
- Link cable
- Power cord

LED Signaling

Red:	Standby
Green:	On
Orange:	Switching on or off
Blinking red:	Error

The blinking red LED indicates that the amplifier has shut down. This can be caused by several factors, including overheating, short-circuiting of the speaker output, or hardware failure.

OPERATING VOLTAGE

Steinway Lyngdorf amplifiers must be connected to the mains power system only.



Important: it is of utmost importance that the mains voltage switch is set appropriately. Turning the A1/A2 on with the incorrect voltage setting will cause serious damage to the amplifier.

VENTILATION REQUIREMENTS

Steinway Lyngdorf amplifiers do not have built-in ventilation, nor do they need any special cooling systems for heat dissipation. When mounting amplifiers in a rack, never arrange more than three directly atop each other without any spacing. A minimum of one unit of spacing between each stack of three amplifiers is recommended.

When installing the amplifiers in an open cabinet or elsewhere without rack mounts, keep a minimum clearance of one inch on all sides. Do not install the amplifiers in an environment that will expose them to excessive heat.

CABLE CONNECTIONS

Cables and Plugs

Use only the power cables included with the amplifier when connecting it to the mains. For your home theater system, use only mains cables and power plugs approved by Steinway Lyngdorf. Using other cable and/or plug types will void the warranty and may cause damage to the system.

Connecting

For cabling between the processor and amplifiers, please use RJ45 to RJ45 B standard cables.

- For cable lengths less than 1 meter, use CAT5E/shielded CAT6 cable.
- For cable lengths in excess of 1 meter, use double-shielded CAT5E cables.
- All RJ45 connectors should be shielded.

Please refer to the wiring diagram supplied by Steinway Lyngdorf to determine which cables you need. Poor quality cables may violate safety/ EMC regulations as well as cause significant noise and interference. Use only cables and connectors approved by Steinway Lyngdorf.



INSTALLATION

To properly set up the amplifier, please follow these steps, in this order:

- 1. Set the voltage switch to the correct mains voltage.
- 2. Assign ID to the amplifier.
- 3. Connect the Steinway Lyngdorf input and output link cables.
- 4. Connect speaker outputs.
- 5. Turn on the amplifier and proceed with setting up the processor.

Assigning ID Codes to the amplifier

Assign the correct ID code to each amplifier using the binary switch panel found on the back. An overview of the proper ID codes for the installation can be found in the project-specific wiring diagram supplied by Steinway Lyngdorf.



INSTALLING RACK MOUNTS

1. The bracket must be mounted with the hole facing upwards.



2. Insert the bracket into the amplifier's side slots.

The bracket must be inserted into the back slot first (A), then the front slot (B).



3. Push the plastic pin into the hole to secure the bracket.



POWER SUPPLY SPECIFICATIONS

Steinway & Sons A1

Power supply type		SMPS (manual voltage selection)
		100-120V AC/220-240V AC
Power input voltage		
Power input frequency		50-60Hz
Overload protection		Yes
Over-temperature		Yes
protection		
Heat output	at standby	1 W
	atidle	25 W ~ 85 BTU
	at idle, max volume	45 W ~ 155 BTU
	at normal movie material over long periods	approx. 55 W ~ 187 BTU
		1 W
Power consumption	at standby	~ 8 mA for 120 V
		~ 4 mA for 230 V
	at normal movie material	approx. 55 W
	over long periods	~ 0.5 A for 120 V
	over long periods	~ 0.2 A for 230 V
	Maximum mains power	700 W
	draw per amplifier,	~ 5.8 A for 120 V
	connected to	~ 2.9 A for 230 V
	boundary woofers	2.9 A 101 230 V
	Maximum mains power	500 W
	draw per amplifier,	~ 4.2 A for 120 V
	connected to	~ 2.1 A for 230 V
	channel speakers	2.1 A 101 230 V
	Average mains power	500 W
	draw per amplifier,	~ 4.2 A for 120 V
	connected to	~ 2.1 A for 230 V
	boundary woofers	
	Average mains power	350 W
	draw per amplifier,	~ 2.9 A for 120 V
	connected to	~ 1.5 A for 230 V
	channel speakers	1.5 A 101 2.50 V
Peak cycle by cycle		
current drawn from mains		
	230, 50Hz	30A
	120V, 60Hz	40A

Steinway & Sons A2

Power supply type		SMPS (manual voltage selection)
Power input voltage		100-120V AC/220-240V AC
Power input frequency		50-60Hz
Overload protection		Yes
Over-temperature		
protection		Yes
Heat output	at standby	0.5 W
	at idle	25 W ~ 85 BTU
	at idle, max volume	45 W ~ 155 BTU
	at normal movie material over long periods	Approx. 70 W ~ 221 BTU
		0.5 W
Power consumption	at standby	~ 4 mA for 120 V ~ 2 mA for 230 V
	at normal movie material over long periods	approx. 70 W ~ 0.6 A for 120 V ~ 0.3 A for 230 V
	Maximum mains power draw per amplifier, connected to boundary woofers	1400 W ~ 11.6 A for 120 V ~ 5.8 A for 230 V
	Maximum mains power draw per amplifier, connected to channel speakers	1000 W ~ 8.4 A for 120 V ~ 4.2 A for 230 V
	Average mains power draw per amplifier, connected to boundary woofers	1000 W ~ 8.4 A for 120 V ~ 4.2 A for 230 V
	Average mains power draw per amplifier, connected to channel speakers	700 W ~ 5.8 A for 120 V ~ 3.0 A for 230 V
Peak cycle by cycle		
current drawn from mains		
	230, 50Hz	30A
	120V, 60Hz	40A

Power Input vs Power Output

All 4 channels are driven. A2 output bridge voltage at max. 4 Ohm loads. Irms[A] is mains current. PF is Power factor. Eta is Efficiency.

230V, 50Hz:

Pout		Mains		
[W]:	Pin [W]:	Irms [A]:	PF:	Eta [%]:
0	38,8	0,35	0,48	0
4 x 10	82,7	0,73	0,5	48,4
4 x 25	147	1,2	0,52	68,0
4 x 50	258	2,1	0,54	77,5
4 x 75	375	3,0	0,55	80
4 x 100	499	3,8	0,56	80,2
4 x 150	740	5,7	0,57	81,1
4 x 200	987	7,4	0,58	81,1

120V, 60Hz:

Pout		Mains		
[W]:	Pin [W]:	Irms [A]:	PF:	Eta [%]:
0	38,8	0,57	0,57	0
4 x 10	87	1,2	0,59	46
4 x 25	148	2,0	0,62	67,6
4 x 50	262	3,5	0,63	76,3
4 x 75	382	5,1	0,64	78,5
4 x 100	502	6,6	0,65	79,7
4 x 150	773	9,8	0,67	77,6
4 x 200	1050	12,9	0,7	76,2

SERVICE INFORMATION

In order to obtain warranty service, you must contact your original dealer or the Steinway Lyngdorf distributor of the region or country where you are located. If you have trouble locating an authorized representative, please contact the Steinway Lyngdorf Customer Service Department using the contact information at <u>www.steinwaylyngdorf.com</u>, or you may email contact@steinwaylyngdorf.com.

Steinway Lyngdorf Rævevej 3 DK 7800 Skive Denmark

In some cases, the Customer Service Department may solve a service problem without the need of repair or any other measures, thereby avoiding further inconvenience or delay. In some cases it may be necessary to return the equipment to Steinway Lyngdorf or an authorized service provider for repair; therefore, it is recommended that you save your original packing materials. Steinway Lyngdorf will not be responsible for any damage due to unauthorized packing or shipment in non-original packing materials. If return is made in authorized packaging, risks are borne by Steinway Lyngdorf. Additional charges may occur if new packing materials are required for return shipment.