

POWER SUPPLY SPECIFICATIONS

for Steinway & Sons processors & amplifiers

S T E I N W A Y L Y N G D O R F

Power Specifications

P100, P100 2.1

Power supply type		SMPS w/active PFC
Power input voltage		100-240VAC
Power input frequency		50-60Hz
Over-temperature protection		Yes (PSU only)
Heat output		27 W ~ 92 BTU/h
Power consumption	Standby – deep sleep	<½ W
	Standby – network state	<2 W
	All on (all HDMI IN/out in use)	47 W

P200

Power supply type		SMPS w/active PFC
Power input voltage		100-240VAC
Power input frequency		50-60Hz
Over-temperature protection		Yes (PSU only)
Heat output		85 W ~ 290 BTU/h
Power consumption	Standby – deep sleep	<½ W
	Standby – network state	<2 W
	All on (all HDMI IN/out in use)	85 W

P300, P300 2.1

Power supply type		SMPS w/active PFC
Power input voltage		100-240VAC
Power input frequency		50-60Hz
Over-temperature protection		Yes (PSU only)
Heat output		47 W ~ 160.4 BTU/h
Power consumption	Standby – deep sleep	<½ W
	Standby – network state	<2 W
	All on (all HDMI IN/out in use)	47 W

SP-1

Power supply type		SMPS
Power input voltage		100-240VAC
Power input frequency		50-60Hz
Over-temperature protection		No
Heat output		11 W ~ 37,5 BTU/h
Power consumption	Standby – deep sleep	<½ W
	Standby – network state	<2 W
	All on	11 W

S T E I N W A Y L Y N G D O R F

A1 Amplifier

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	1 W
	at idle	25 W ~ 85 BTU
	at idle, max volume	45 W ~ 155 BTU
	at normal movie material over long periods	approx. 55 W ~ 187 BTU
Power consumption	at standby	1 W ~ 8 mA for 120 V ~ 4 mA for 230 V
	at normal movie material over long periods	approx. 55 W ~ 0.5 A for 120 V ~ 0.2 A for 230 V
	Maximum mains power draw per amplifier, connected to boundary woofers	700 W ~ 5.8 A for 120 V ~ 2.9 A for 230 V
	Maximum mains power draw per amplifier, connected to channel speakers	500 W ~ 4.2 A for 120 V ~ 2.1 A for 230 V
	Average mains power draw per amplifier, connected to boundary woofers	500 W ~ 4.2 A for 120 V ~ 2.1 A for 230 V
	Average mains power draw per amplifier, connected to channel speakers	350 W ~ 2.9 A for 120 V ~ 1.5 A for 230 V
Peak cycle by cycle current drawn from mains		
	230, 50Hz	30A
	120V, 60Hz	40A

S T E I N W A Y L Y N G D O R F

A2 Amplifier

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
Power consumption	at standby	0.5 W ~ 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

S T E I N W A Y L Y N G D O R F

A2 Power input vs Power output

All 4 channels are driven. A2 output bridge voltage at max. 4 Ohm loads.

I_{rms}[A] is mains current. PF is Power factor. Eta is Efficiency.

230V, 50Hz

Pout [W]:	Pin [W]:	Mains I _{rms} [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 [W]:	Pin [W]:	Mains I _{rms} [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

