

LVPS Regulator and Power Supply Application Suggestions

Version 1.0

	condition	volt	available current	application	
				Premium	Standard
			mA	Note, below	
Regulator	LL1683 6.6VAC winding	12	200		1
		10	300	2	3
		8	430		
		5	710	4	
	LL1683 5.2VAC winding	12	15		
		10	100		
		8	200	5	5
		5	450	6	7
Power Supply	115VAC or 230VAC	12	235		1 or 8
		10	385	2	3
		8	530	5	5
		5	830	4 or 6	7
Application notes: <ol style="list-style-type: none"> 1. Relay power for Line Stage in Preamplifier 2. RAKK dac Mark IV, 10V 3. RAKK dac Mark III 4. RAKK dac Mark IV, 5V 5. USB Adapter 6. I2S Adapter in Premium system 7. I2S Adapter in Standard system 8. Relay power for Active Output in DAC 					

The Lundahl LL1683 power transformer has four low-voltage windings: two 6.6VAC and two 5.2VAC.

For the DAC, one of the 6.6VAC windings is used to supply filament power to the tubes and the other 6.6VAC winding is used to power the RAKK dac. In the case of the RAKK dac Mark III used in the Standard version of the Extreme RAKK dac, this second 6.6VAC winding supplies a single 10V Regulator. In the case of the RAKK dac Mark IV used in the Premium version of the Extreme RAKK dac, this second 6.6VAC winding supplies two regulators: the 10V and 5V power.

For the preamplifier, one of the 6.6VAC windings is used to supply filament power to the tubes and the other 6.6VAC winding is used to power the mute relay used in the Line Stage. The Standard version of the Regulator is always used to provide relay power because it does not affect the sonic performance of the preamplifier.

For the DAC, the two 5.2VAC windings are used to power the I2S and USB adapters. These adapters are powered separately in order to maintain isolation of the power and ground.

For the preamplifier, the two 5.2VAC windings are unused.

For the DAC, a Standard power supply is used to provide power for the Active Output mute relay.

In all cases, the Premium and Standard power supplies can be used as an alternative to the LL1683 transformer with Regulators.