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Power supply kit for malotki V71 modules

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This kit allows a power supply specially designed for Malotki V71 preamplifier modules to be rack-mounted.
This kit is designed to power up to 2 modules.
2 transformers 30VA (not supplied) are necessary.
T1 110V or 220V (depending on the country) to 6V
T2 220V to 6V

WARNING !!! :

This power supply provides dangerous high voltage.!!!

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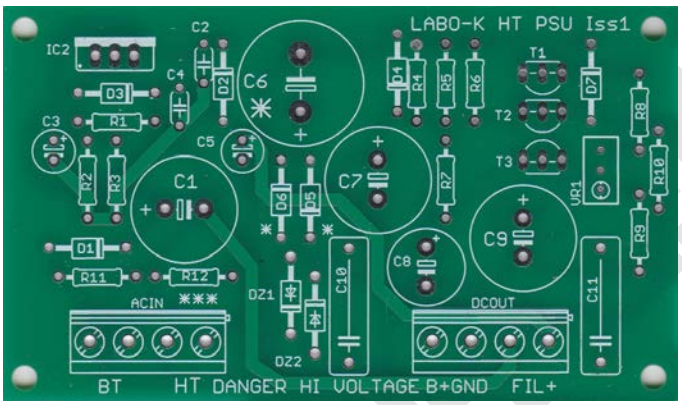
KIT OVERVIEW

1 PCB for connecting:
- 1 power transformer 6/220v (not supplied)
- PSU BUS

This card performs the rectifying and filtering of the AC voltage.
It provides the adjustable +280v supply voltage necessary for the operation of the V71 preamplifier and the 6V AC for heaters of tubes.



Connectors and components.
The transformers are not supplied.

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FPSU BOAD PART LIST

The components D3, R1, R2, R3, C1, C2, C3, C4, C5, IC2 are not fitted

ACIN /DCOUT Bornier 2	
D1, D2	**STRAP (Component leg)**
D4, D7	1N4007
D5, D6	1N4007(110V Option) not used
DZ1, DZ2	Diode Zener 75V 0,5w
R4	270R
R5, R7	33K 1W
R6	100K
R8	120K
R9	150K
R10	10R
R11, R12	100R
C6	22µF/450v (110V Option) not used
C7, C9	10µF/450v
C8	2,2µF/450v
C10, C11	100n 630V
VR1	50K
TR1, TR2, TR3	MPSA42

Unless otherwise stated, the resistors are 1/4w 1% metal film.

FPSU BOARD CONNECTORS PINOUT

AC in	
1	AC 6V
2	AC 6V
3	AC 220V
4	AC 220V

Terminal	ACOUT
1	B+ (280V)
2	GND
3	6V AC Fil
4	6V AC Fil

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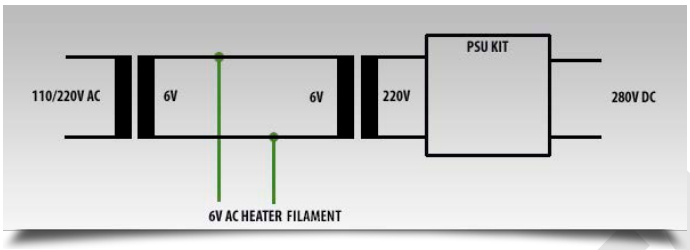
INSTALLATION INSTRUCTIONS FOR TRANSFORMERS

This power supply uses 2 transformers.
The first one transforms the mains (110V or 220V) into 6V AC voltage to supply the filaments of the tubes.
A second 220V/6V transformer is used in the opposite direction.
It transforms the 6V of the filaments into 220V AC to drive the High Voltage regulation board. This isolates the power supply from the mains.



1. Connect transformers secondaries (not supplied)
2. Connect the 6V wires to ACIN connector (BT)
3. Connect the 220V of T2 to the ACIN connector (HT).

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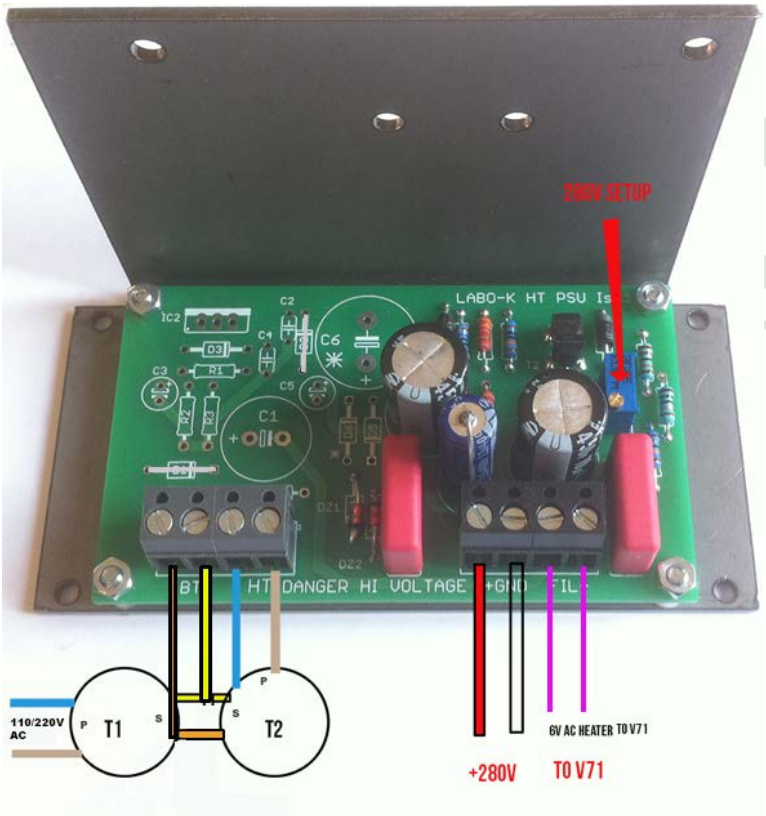
CONNECTING POWER TRANSFORMERS



Set output B+ to 280V DC using the trimmer.

WARNING :
280V DC is dangerous !!!

OPTIONNAL COMPONENTS PART LIST

To supply the tube heaters with direct current, you will need to:
Do not install the 100R resistors R11 and R12
Install the following components on the FPSU board

D1, D2 D3	1N4002
R1	243R
R2	1000R
R3 Not installed	
R11, R12	100R
C1	470µF/25V
C2, C4	100n 50V
C3	10µF/25V
C5	100uF/25V
IC2	LM317T

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Legal notice :

Labo★K Effects shall not be responsible and disclaim all liability for any damage (whether direct or consequencial) that may result from a wrong use of the kit by the user.