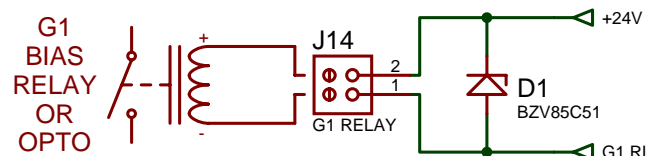
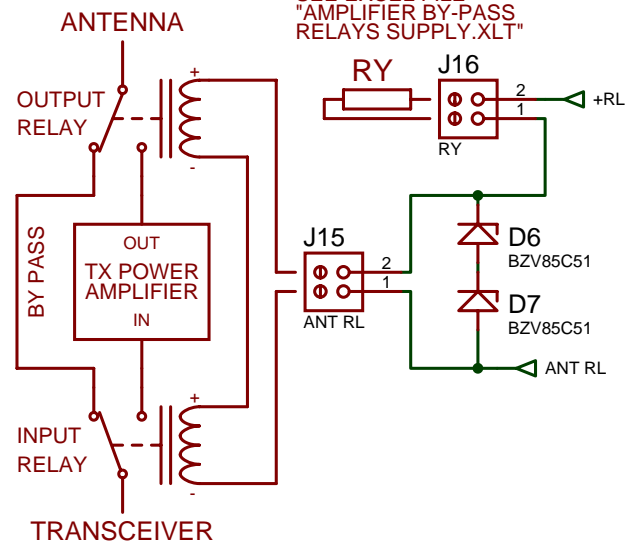


# VOIR CORRECTION D'ERREUR DE CABLAGE RL2

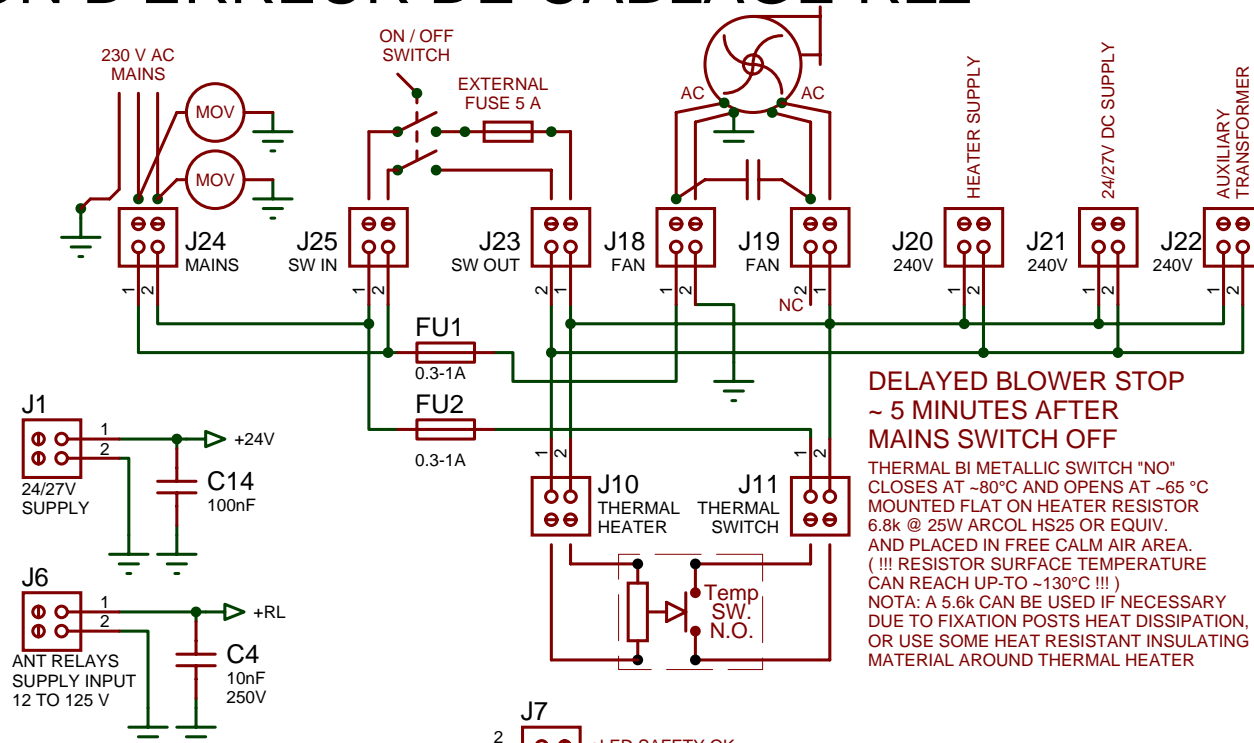


FOR "RY" CALCULATION  
SEE EXCEL FILE  
"AMPLIFIER BY-PASS  
RELAYS SUPPLY.XLT"



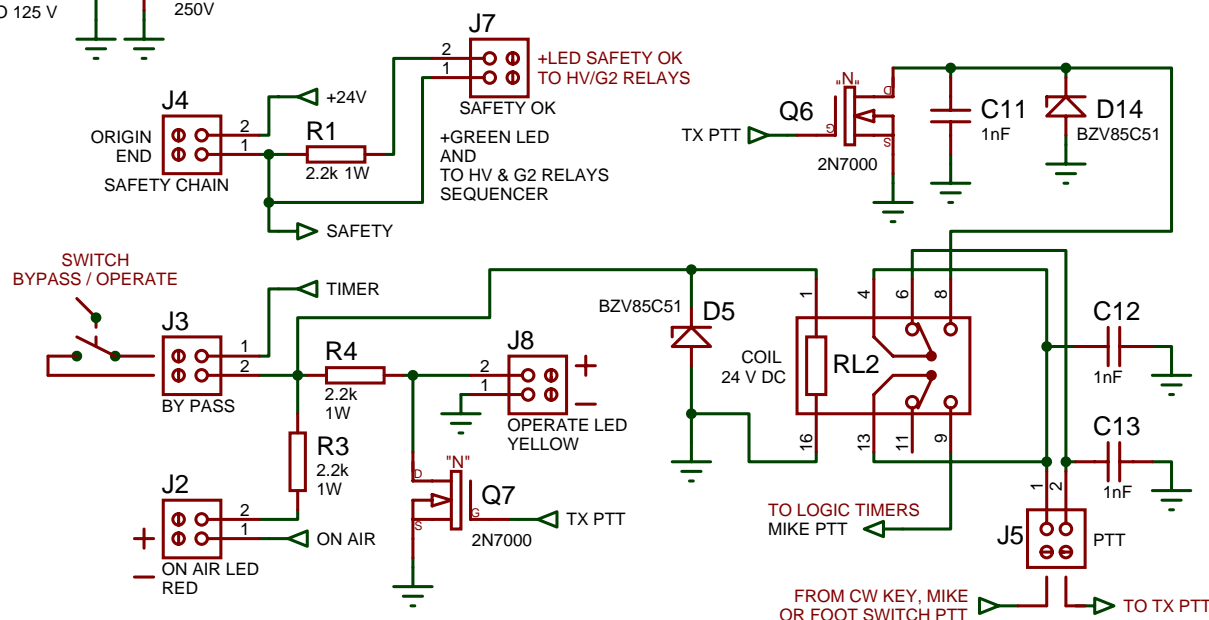
J17 / J26 / RL3 CAN BE USED TO ACTIVATE A RX  
PREAMPLIFIER OR MUTE A SEPARATE RECEIVER.

**REVISION 2: REPLACEMENT OF ALL RELAYS  
FORMERLY "S" RELAYS BY LESS EXPANSIVE  
AND MORE EASY TO FIND STANDARD RELAYS  
REVISION 2c: MODIFIED THERMAL HEATER**



**DELAYED BLOWER STOP  
~ 5 MINUTES AFTER  
MAINS SWITCH OFF**

THERMAL BI METALLIC SWITCH "NO"  
CLOSES AT ~80°C AND OPENS AT ~65 °C  
MOUNTED FLAT ON HEATER RESISTOR  
6.8k @ 25W ARCOL HS25 OR EQUIV.  
AND PLACED IN FREE CALM AIR AREA.  
(!!! RESISTOR SURFACE TEMPERATURE  
CAN REACH UP-TO ~130°C !!!)  
NOTA: A 5.6k CAN BE USED IF NECESSARY  
DUE TO FIXATION POSTS HEAT DISSIPATION,  
OR USE SOME HEAT RESISTANT INSULATING  
MATERIAL AROUND THERMAL HEATER

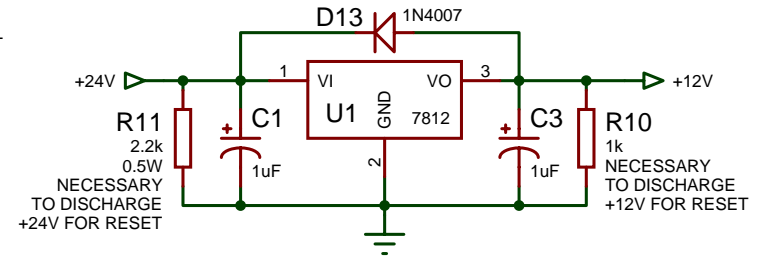
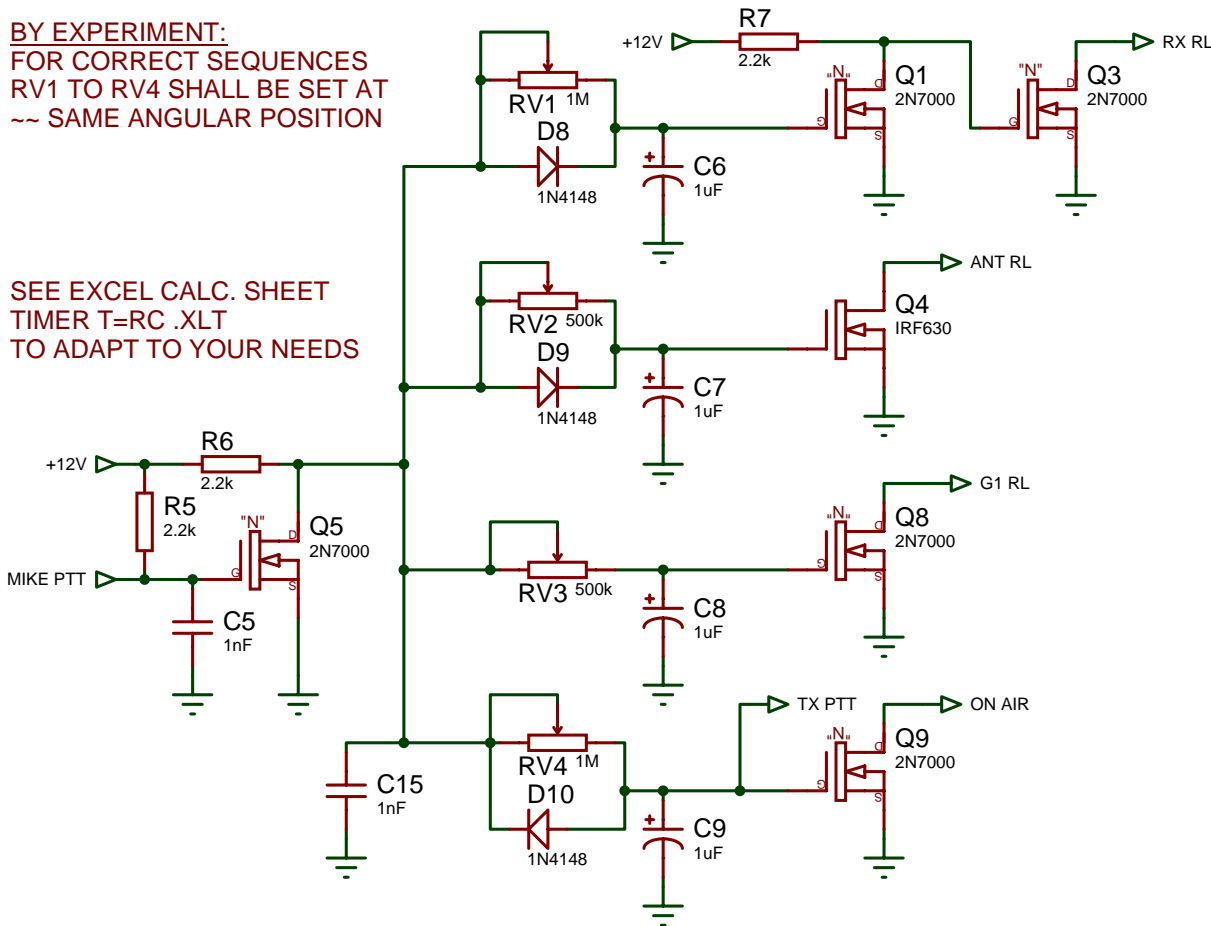


**TRIODE OR TETRODE AMP DESIGN  
230VAC SUPPLY, BLOWER & RELAYS**

DATE:29/01/11 REV:2c PAGE: 1/3  
BY: F1FRV@SFR.FR  
DOC N°: AMATEUR RADIO

BY EXPERIMENT:  
FOR CORRECT SEQUENCES  
RV1 TO RV4 SHALL BE SET AT  
~~ SAME ANGULAR POSITION

SEE EXCEL CALC. SHEET  
TIMER T=RC .XLT  
TO ADAPT TO YOUR NEEDS

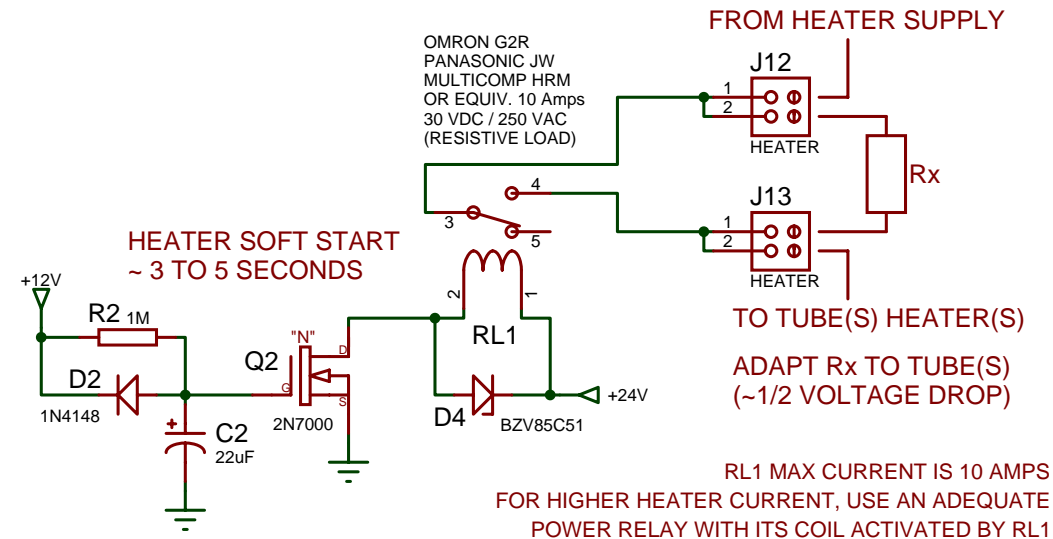
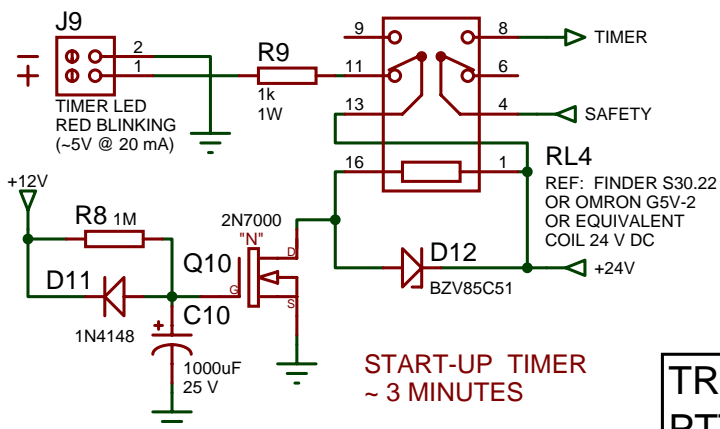


2N7000: OR EQUIVALENT

"N" MOSFET, P > 0.3W, ID MAX > 200mA, VDS > 60V  
RDS(ON) < 5 OHMS @ VGS10V & ID 0.2A

IRF630: OR EQUIVALENT

"N" MOSFET, P > 60W, ID MAX > 4A, VDS > 150V  
RDS(ON) < 3 OHMS @ VGS10V & ID 2A



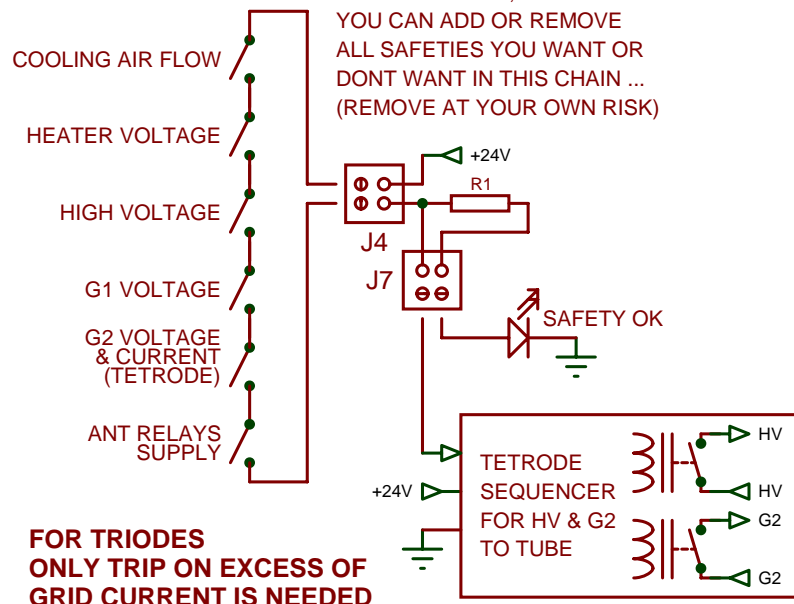
RL1 MAX CURRENT IS 10 AMPS  
FOR HIGHER HEATER CURRENT, USE AN ADEQUATE  
POWER RELAY WITH ITS COIL ACTIVATED BY RL1

## TRIODE OR TETRODE AMP DESIGN PTT LOGIC & START-UP TIMERS

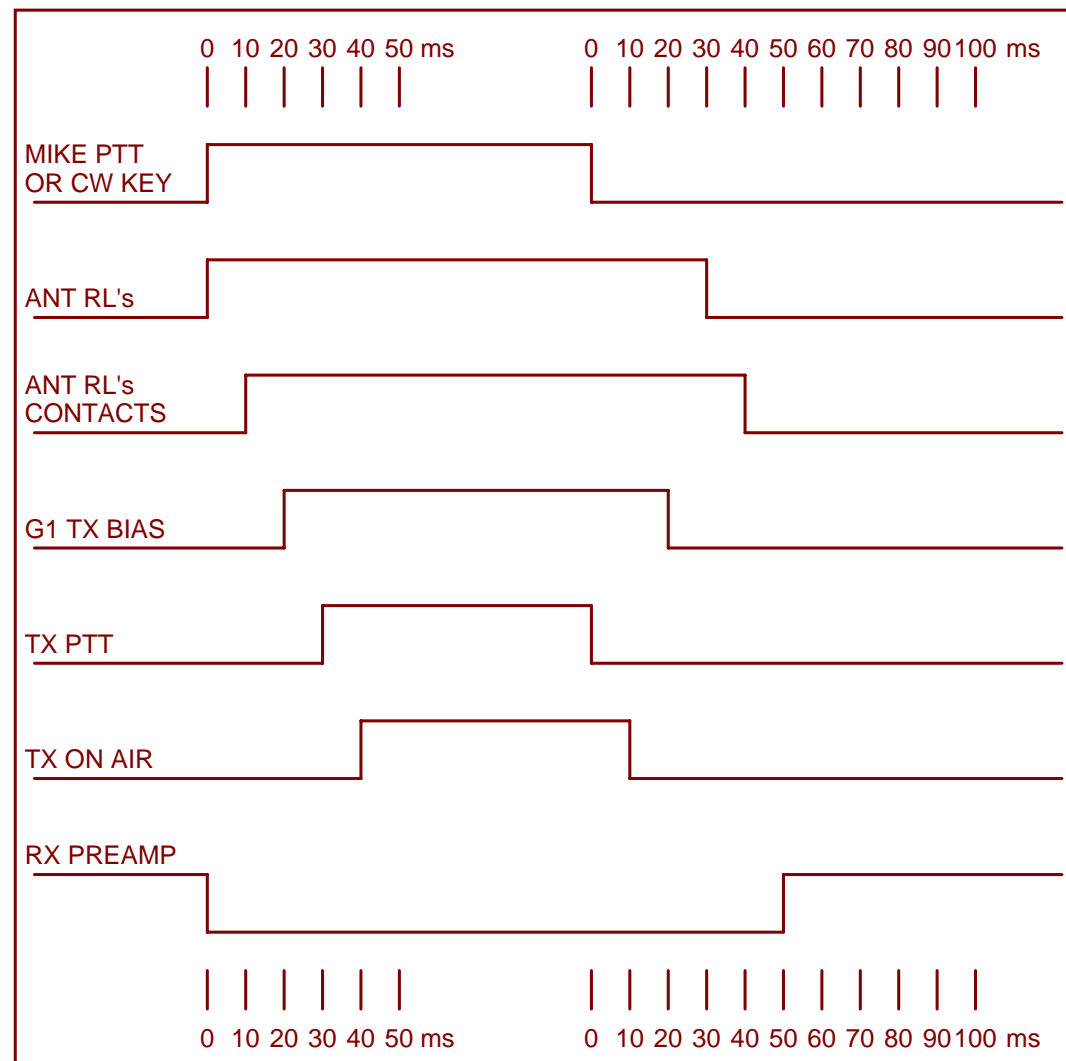
DATE: 29/01/11 REV: 2c PAGE: 2/3  
BY: F1FRV@SFR.FR  
DOC N°: AMATEUR RADIO

## SAFETY CHAIN

SAFETY CONTACTS  
NORMALLY OPEN, CLOSED WHEN OK  
YOU CAN ADD OR REMOVE  
ALL SAFETIES YOU WANT OR  
DONT WANT IN THIS CHAIN ...  
(REMOVE AT YOUR OWN RISK)



FOR ANTENNA RELAYS:  
BEFORE SELECTING VACUUM RELAYS, CHECK MANUFACTURER DATA  
FOR LIFE EXPECTANCY (OFTEN ONLY 100 000 CYCLES !!!!)



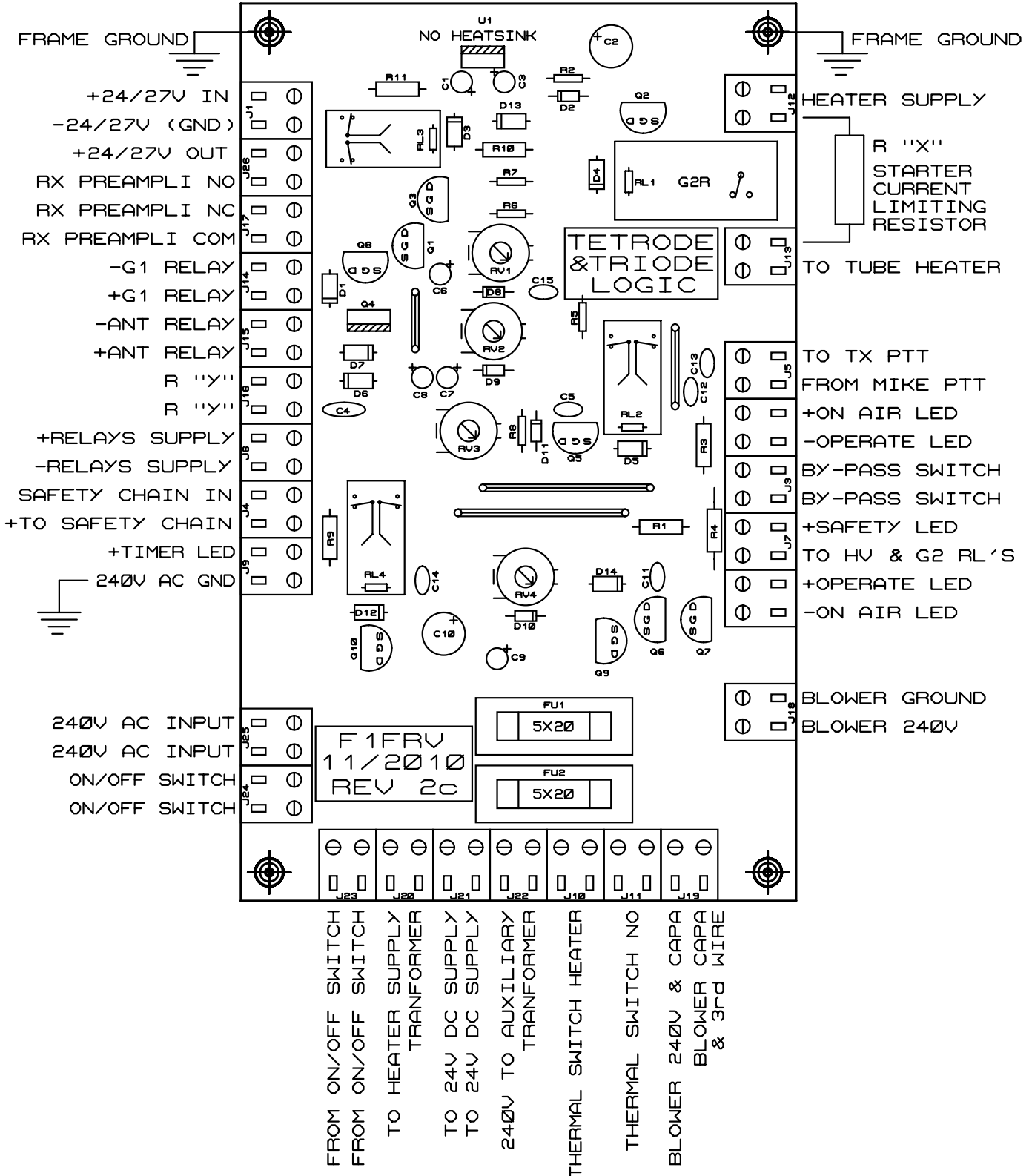
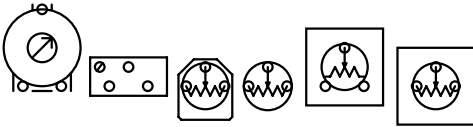
SEE SPECIFIC FRONT PLATES WITH LEDS  
1 FOR TRIODES, 1 FOR TETRODES

# TRIODE OR TETRODE LINEAR AMPLIFIER DESIGN LOGIC BOARD WITH LOW COST RELAYS

DATE: 11/2010 REV: 2c  
BY: F1FRV@SFR.FR  
DOC Nr: AMATEUR RADIO

PCB DIMENSIONS: 100x160 mm 234 HOLES DONT FORGET THE 4 STRAPS !!!  
REV 2c TO ACCEPT ALL TYPES OF VARIABLE RESISTORS

ALL THESE TYPES OF VARIABLE  
RESISTORS CAN BE USED



VOIR CORRECTION D'ERREUR DE CABLAGE RL2

