

1000 Watts AB-Class Audio Power Amplifier For 2-Ohms Loudspeaker (Core)

(Schematic Diagrams)

Version r2-hdf-x-2012

Revision Number: 1.1

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Designed By: Heru Himawan Tejo Laksono

Based MATRIX 1.4 Free Audio Power Amplifier Technology (R-2 HDF-X 2012)

Base Technology Invention By Heru Himawan Tejo Laksono & Mujiono Irkhas

URL: <http://matrix14freeamp.sourceforge.net/>

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




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







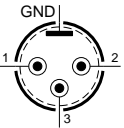
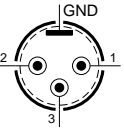
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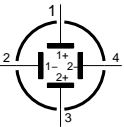




CONVENTIONS (PART-1)

THIS ADDITIONAL PAGE INTENDED TO CONFIRM THE COMPONENT SYMBOLS, ALPHABETICAL SYMBOLS, AND UNIT CONVENTIONS THESE ARE BEING USED WITHIN THE SCHEMATICS.

ALPHABETICAL SYMBOL	COMPONENT/PART NAME	UNIT
C	CAPACITOR	FARAD
CNT	CONNECTORS & HEADERS	UNITLESS
D	DIODE FAMILY	UNITLESS
F	FUSE	UNITLESS
J, XJ	JUNCTION, JUMPER, JACK	UNITLESS
L	COIL	HENRY
Q	BIPOLAR JUNCTION TRANSISTOR	UNITLESS
R	FIXED RESISTOR	OHM
SW	SWITCH & RELAY	UNITLESS
T	TRANSFORMER	UNITLESS
XRV	VARIABLE RESISTOR	OHM
XU	INTEGRATED CIRCUIT/SUB-CIRCUIT	UNITLESS






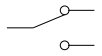
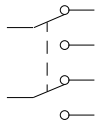
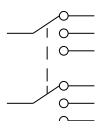
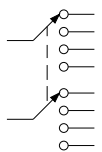
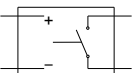
INTER-CONNECTION SYMBOL	DESCRIPTION
	SOLDERED WIRE POLE
	CURRENT/VOLTAGE SUPPLY NET CONNECTION
	OUT TO
	BIDIRECTION
	INPUT FROM
	POWER GROUND (0V)
	SYSTEM GROUND
	NONE CONNECTED

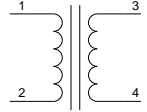
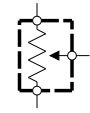
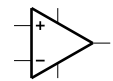


COMPONENT/PART SYMBOL	DESCRIPTION
	CAPACITOR
	POLARIZED ELECTROLYTE CAPACITOR
	JUNCTION DIODE
	BREAKDOWN/ZENER DIODE
	LIGHT EMITTING DIODE
	FUSE
	SINGLE ENDED/LINE INPUT/OUTPUT SIGNAL SOCKET JACK
	DUAL ENDED/LINE INPUT/OUTPUT SIGNAL SOCKET JACK
	BALANCED INPUT/OUTPUT SIGNAL SOCKET JACK (MALE)
	BALANCED INPUT/OUTPUT SIGNAL SOCKET JACK (FEMALE)

COMPONENT/PART SYMBOL	DESCRIPTION
	SPEAKER
	OUTPUT TO SPEAKER TERMINAL
	MAIN ENTRY CORD SOCKET JACK
	JUMPER
	COIL

CONVENTIONS (PART-2)

THIS ADDITIONAL PAGE INTENDED TO CONFIRM THE COMPONENT SYMBOLS, ALPHABETICAL SYMBOLS, AND UNIT CONVENTIONS THESE ARE BEING USED WITHIN THE SCHEMATICS.

COMPONENT/PART SYMBOL	DESCRIPTION
	HEATSINK UNMOUNTED NPN BIPOLAR JUNCTION TRANSISTOR
	HEATSINK UNMOUNTED PNP BIPOLAR JUNCTION TRANSISTOR
	HEATSINK MOUNTED NPN BIPOLAR JUNCTION TRANSISTOR
	HEATSINK MOUNTED PNP BIPOLAR JUNCTION TRANSISTOR
	FIXED RESISTOR
	SINGLE PAIR WITH TWO SELECTIONS SPDT SWITCH
	DUAL PAIR WITH TWO SELECTIONS SPDT SWITCH
	DUAL PAIR WITH THREE SELECTIONS SPDT SWITCH
	4-POS WITH 2-COM ROTARY SWITCH
	RELAY / VOLTAGE CONTROLLED SWITCH

COMPONENT/PART SYMBOL	DESCRIPTION
	TRANSFORMER
	VARIABLE RESISTOR
	OPERATIONAL AMPLIFIER
SAFETY INSTRUCTIONS SYMBOL	DESCRIPTION
	Alerts you to the presence of insulated dangerous voltage, or indicates a live area on the circuit, that may be sufficient to constitute a risk of shock.
	Alerts you to important maintenance instructions in the accompanying literature.

Important:

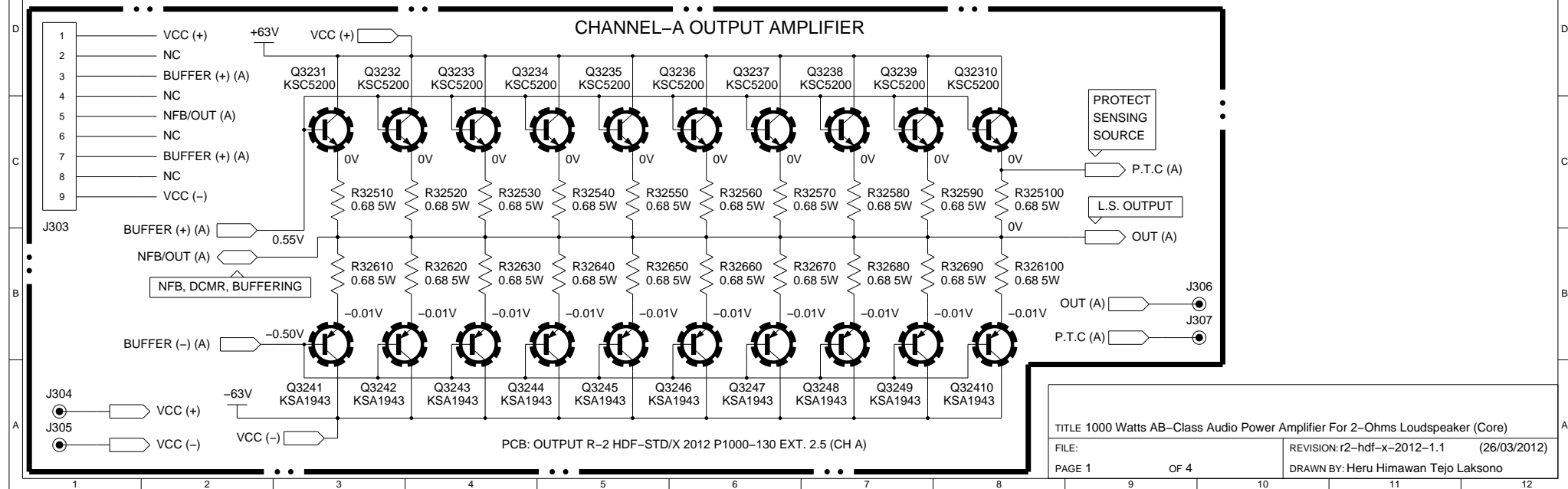
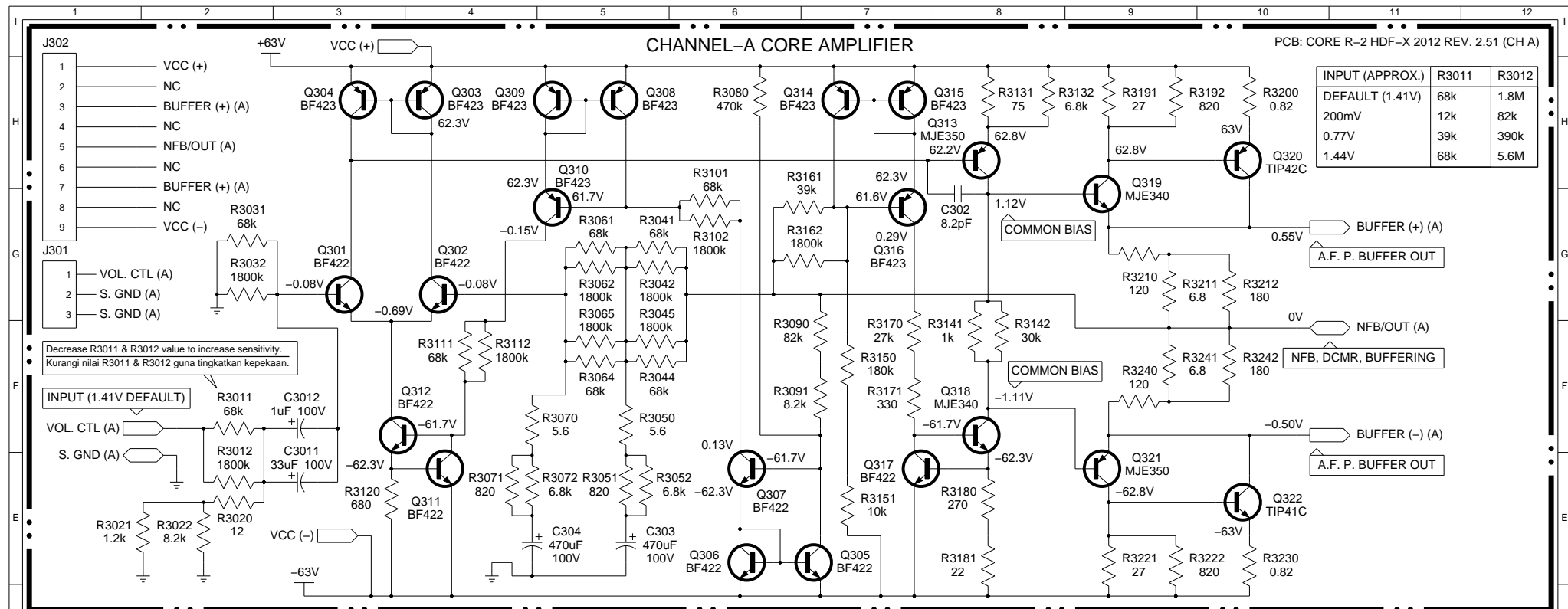
The designated circuits where implemented 2 (two) different ground connections:

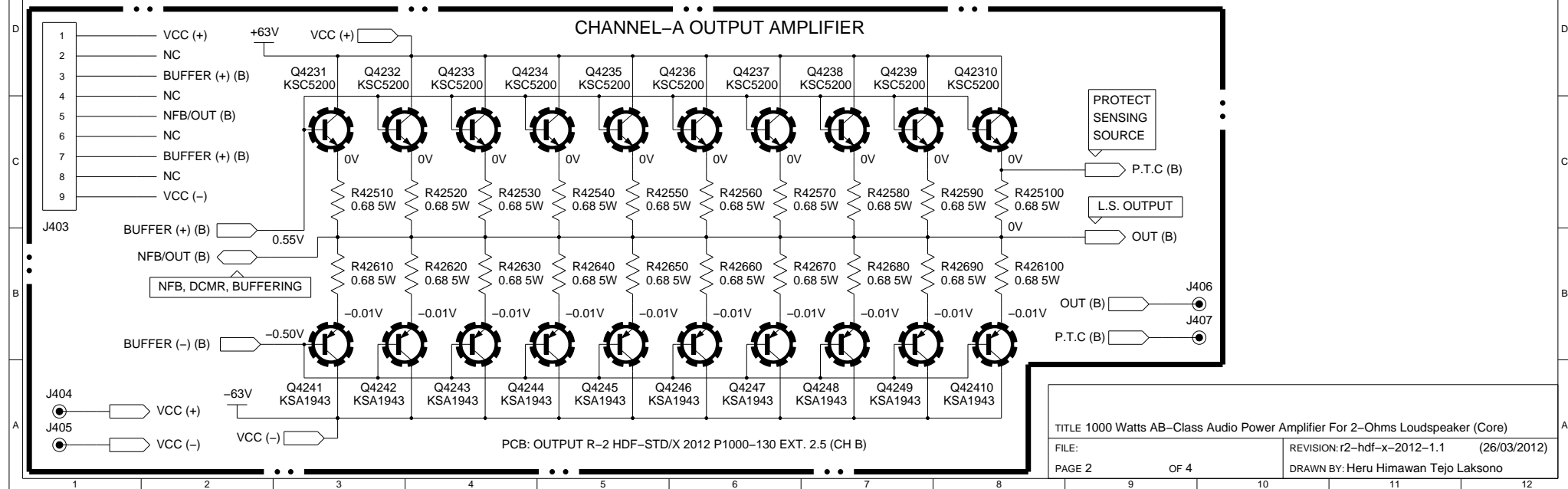
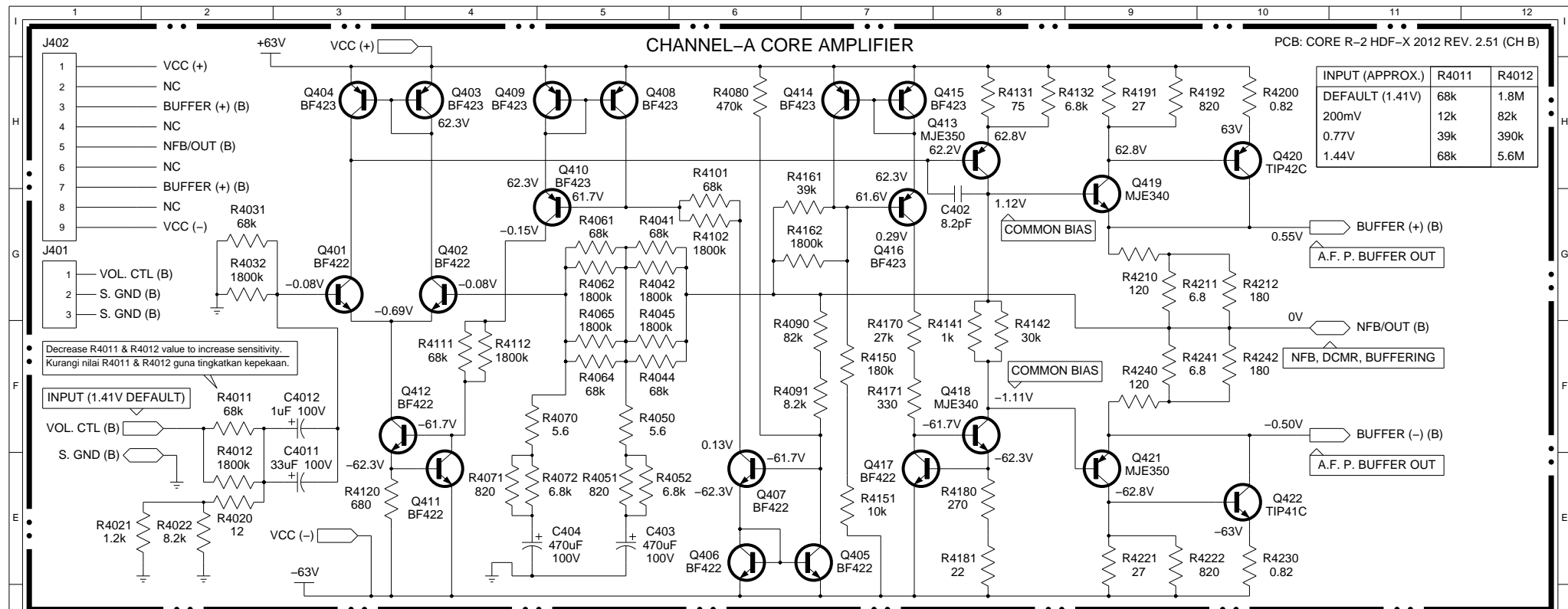
1. Power Ground

The Power Ground by mean the common ending for all sub-circuits with relative high-current voltage intensity and contains stream/signal that may be carrying the AC hum.

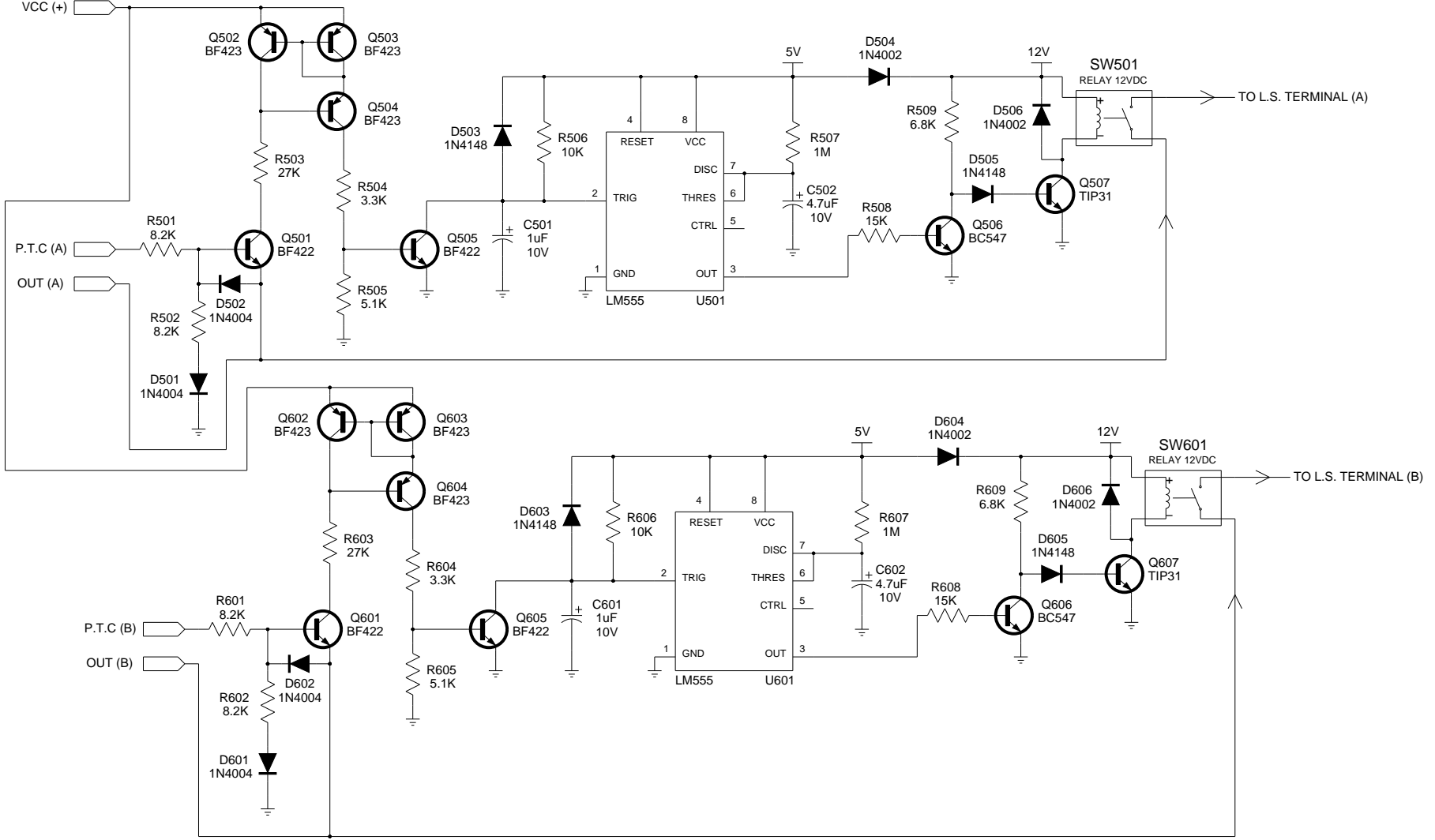
2. System Ground

The System Ground by mean the common ending for all high-sensitive sub-circuits and ending for those processes the small audio signal.





SHORT-CIRCUIT OUTPUT PROTECTOR

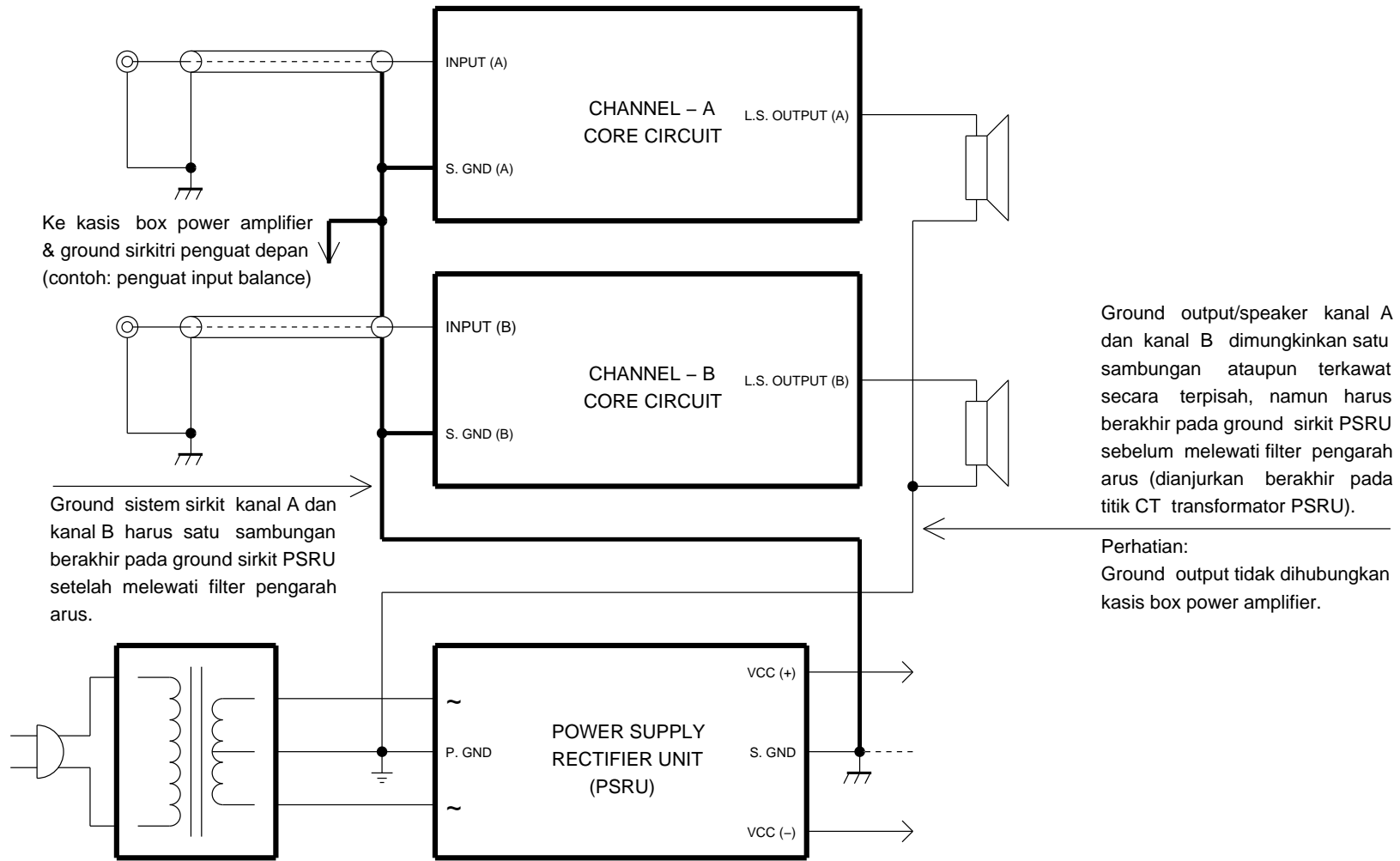


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PETUNJUK INSTALASI PEMBUMIHAN/GROUND



TITLE 1000 Watts AB-Class Audio Power Amplifier For 2-Ohms Loudspeaker (Core)

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