

Stage/Control**Function**

are detected in the D 501, 502 circuit. When X514 is ON, X 408 and the muting relay are off. If the level of pilot signal should drop so that X514 turns off, X 408 will conduct and mute the output. Thus the tuner is muted except when a stereo signal is received.

Stereo Lamp
PL-5

The stereo lamp lights when X514 is ON. X514 acts as the ground return for the lamp when the transistor is switched into conduction.

Click Suppressor
X 515

Transistor X 515 is a click suppressor. It acts to mute audio output electronically when the MODE switch is turned, or if the muting relay is energized. When X515 conducts, the discharge of C 531 in its collector circuit places a momentary reverse bias on diodes D 503 and D 506 to block audio output.

X515 receives positive turn-on voltages from either of two sources. One is a set of make-before-break contacts on the MODE switch SW 3-4.

The other is the emitter of X408, the muting relay driver. Capacitor C 532, in the base circuit of X515 acts to delay the application of electronic muting to provide "clickless" operation.

Power Supply

AC Input

Line input is supplied to the power transformer through the power switch SW-1, the fuse and the voltage selector.

Voltage Selector

The voltage selector sets up the proper power transformer connections to suit local line-voltage conditions.

DC Power Supply
D 601

A positive 24 volts is developed by the full-wave bridge rectifier D 601.

Voltage Regulator
X 601, 602, 604
D 602, 603

DC output from the rectifiers is filtered by C 601 and applied to the series regulator X 601.

Stage/Control**Function**

Transistor X 603 compares a sample of the output voltage, picked off at VR 601, with a reference voltage supplied by the Zener diodes D 602 and D 603.

A change in output voltage, detected by X 603 results in a change in conduction of X 602 and X 601 that offsets the original voltage shift.

DC Voltage ADJ.
VR 601

VR 601 adjusts the conduction of the series regulator to produce a standard output of +24 volts. The 24-volt output is supplied to various circuits through isolating resistors R608, 609, 610, 611. A voltage divider, R 606/R 607 provides a +12-volt output for the muting circuits and the stereo lamp.