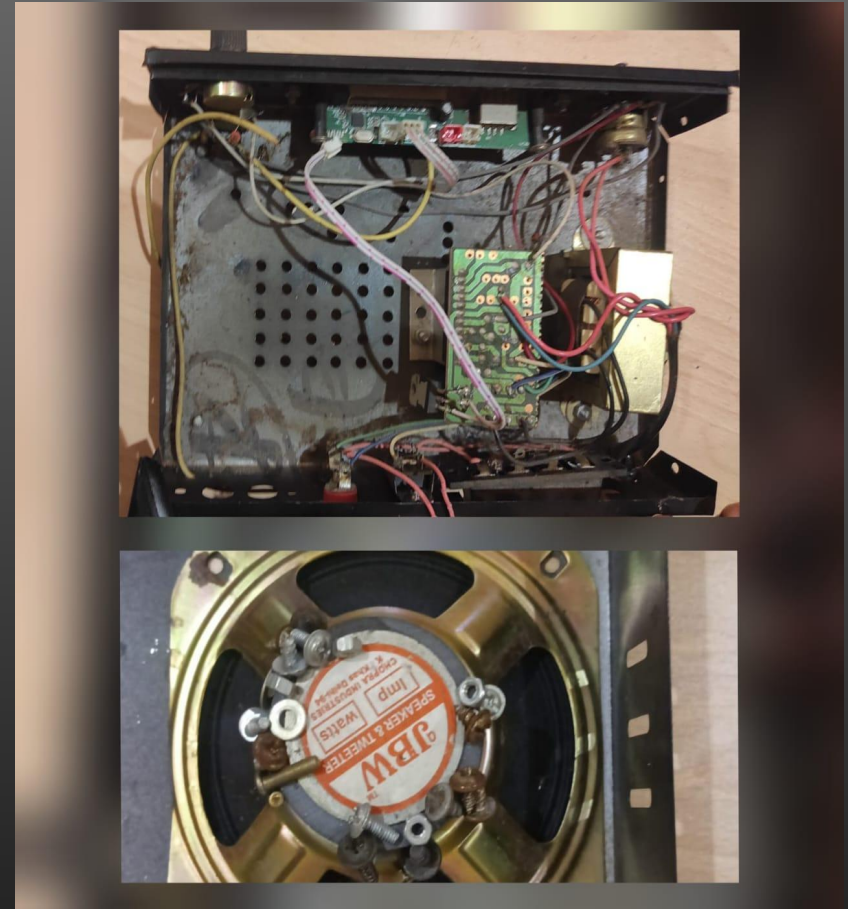


SYSTEM THINKING

SOUND AMPLIFIER

RADIO



COMPONENTS OF SOUND AMPLIFIER

Transformer

Converts **230V AC to 12V AC** for power supply.

Bridge Rectifier & Capacitor

Converts AC to **stable 12V DC**.

D6283 Amplifier IC

Increases the power of the audio signal.

Volume Control (Potentiometer)

Adjusts the loudness of the output.

Control system-Bass & Treble Circuit

Modifies low and high-frequency sounds.

Speaker (4Ω , 8Ω)-Output system

Converts amplified signals into audible sound.

Digital Display

Shows volume, bass levels, and input modes.

Antenna (FM Module)

Captures FM radio signals if included.

SUB-SYSTEMS IN SOUND AMPLIFIER

**1)INPUT SYSTEM -USER INTERFACE INCLUDES USB
AND SD CARD PORTS , ANTENNA FOR FM**

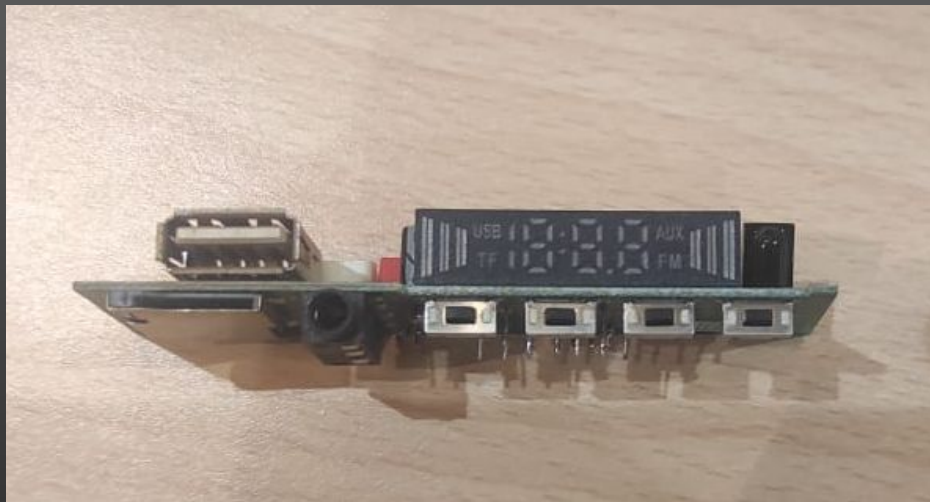
2)AMPLIFICATION UNIT -AMPLIFIER PCB:D6283

**3)OUTPUT SYSTEM -WIREABLE SPEAKER,INTERNAL
SPEAKER**

RADIO MODEL-2280



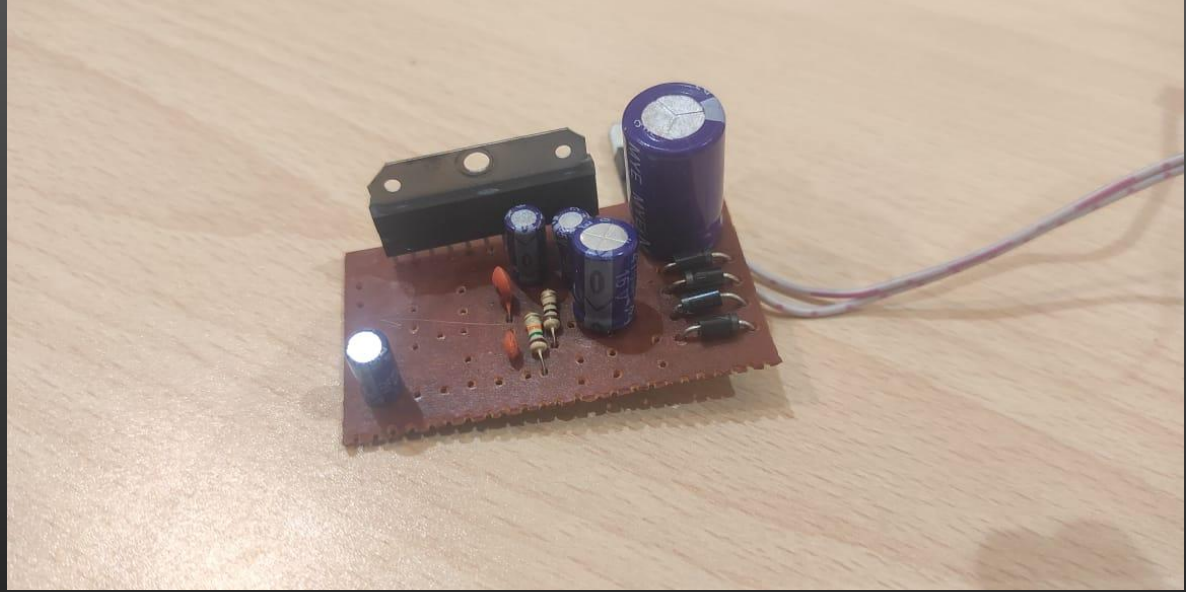
INPUT



TRANSFORMER

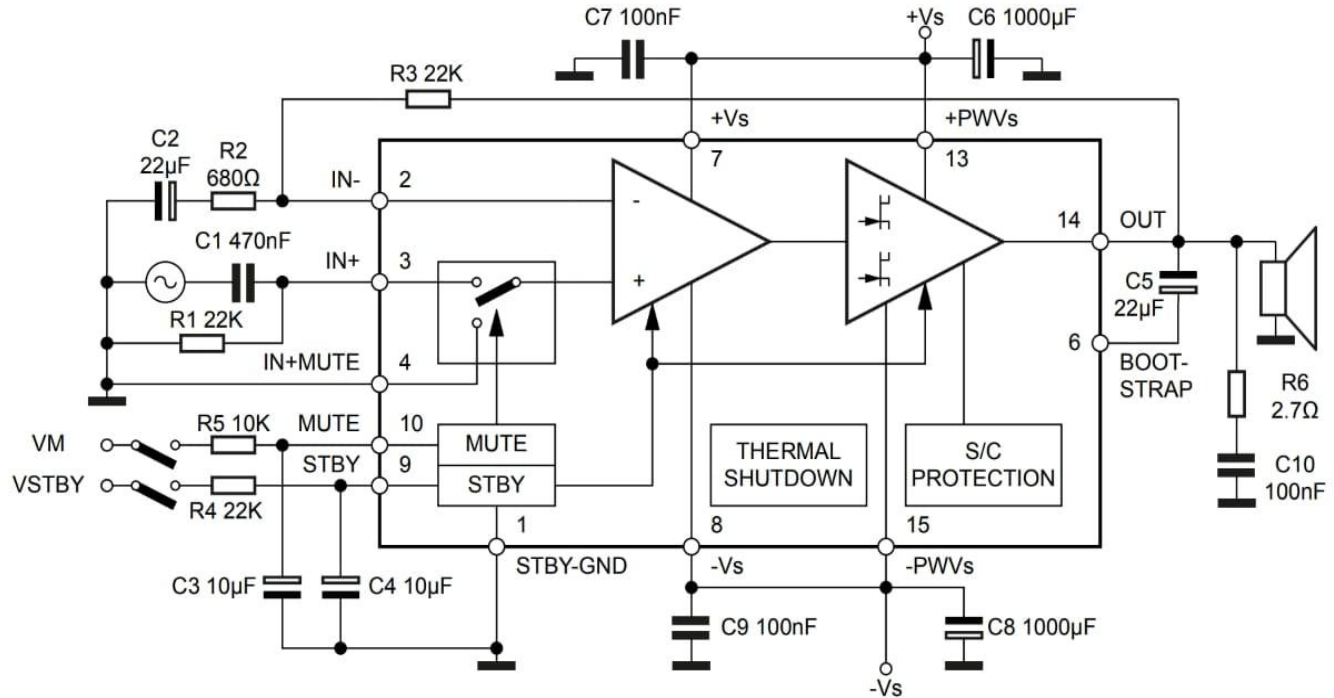


AMPLIFIER-D6283

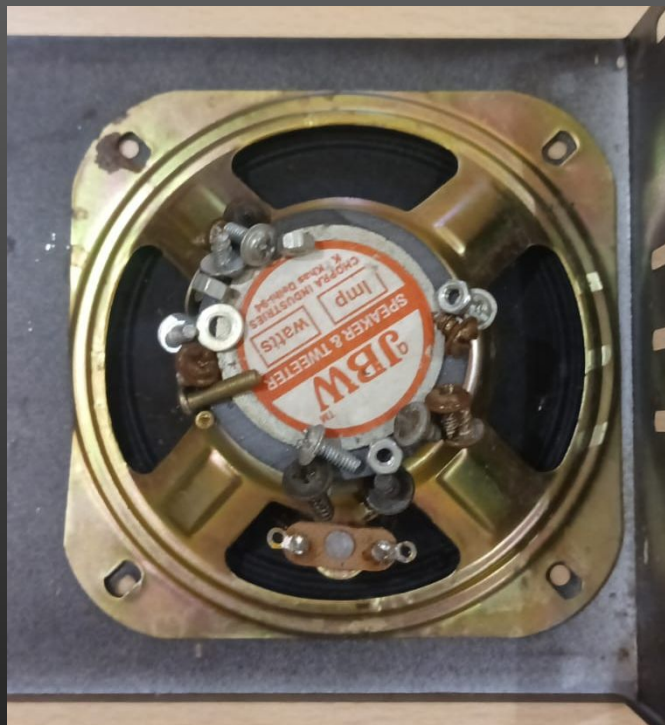


AMPLIFIER-D6283

Figure 1. Typical application and test circuit



OUTPUT



SUMMARY