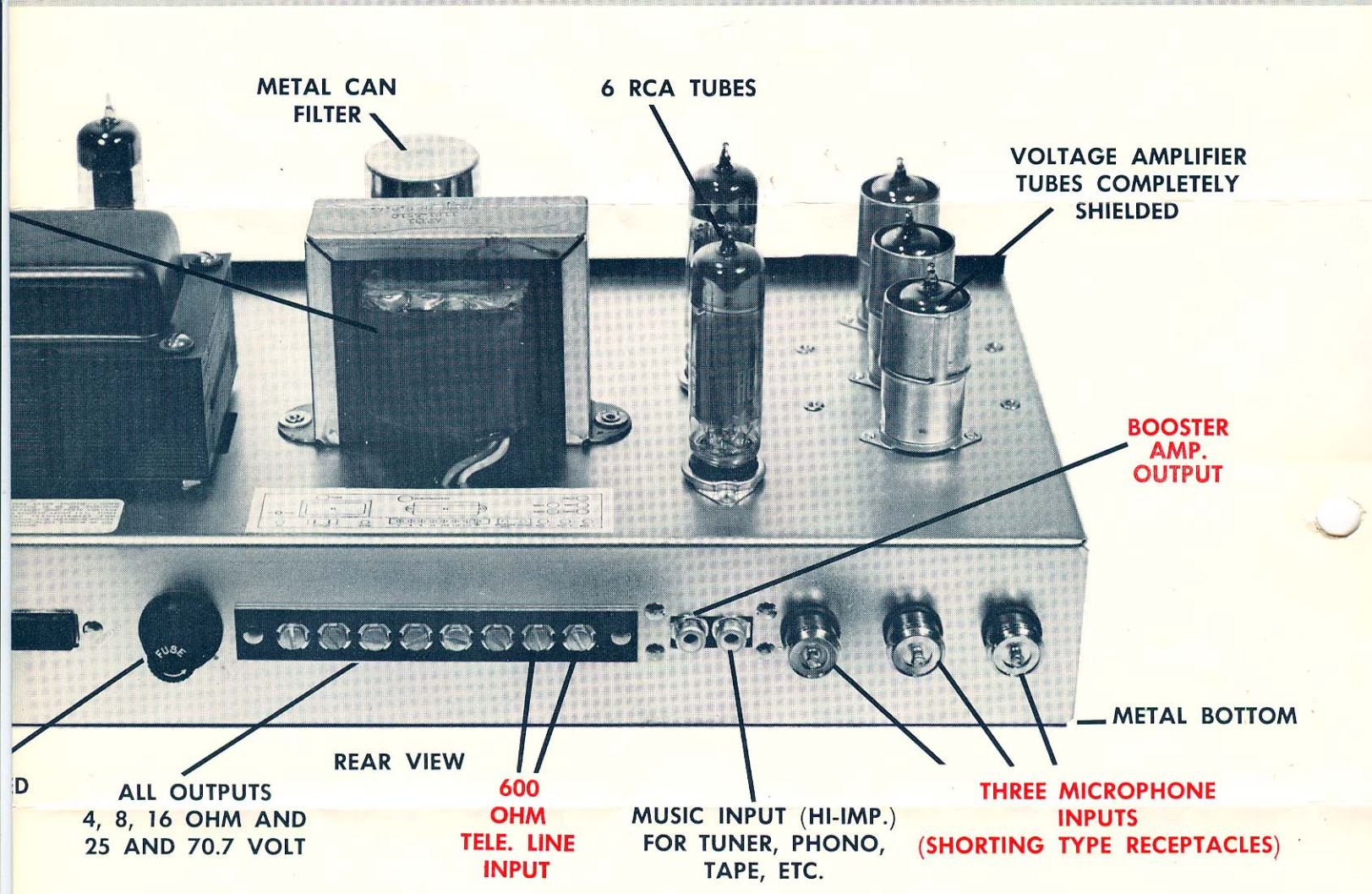


# in a 20 Watt Amplifier

(PRECISE RESPONSE)

100 CYCLES

**WE'RE PROUD  
TO SHOW YOU  
THE CHASSIS!**



## DAVIS MODEL 201-A AMPLIFIER

The Best for Background Music  
and General Public Address Use

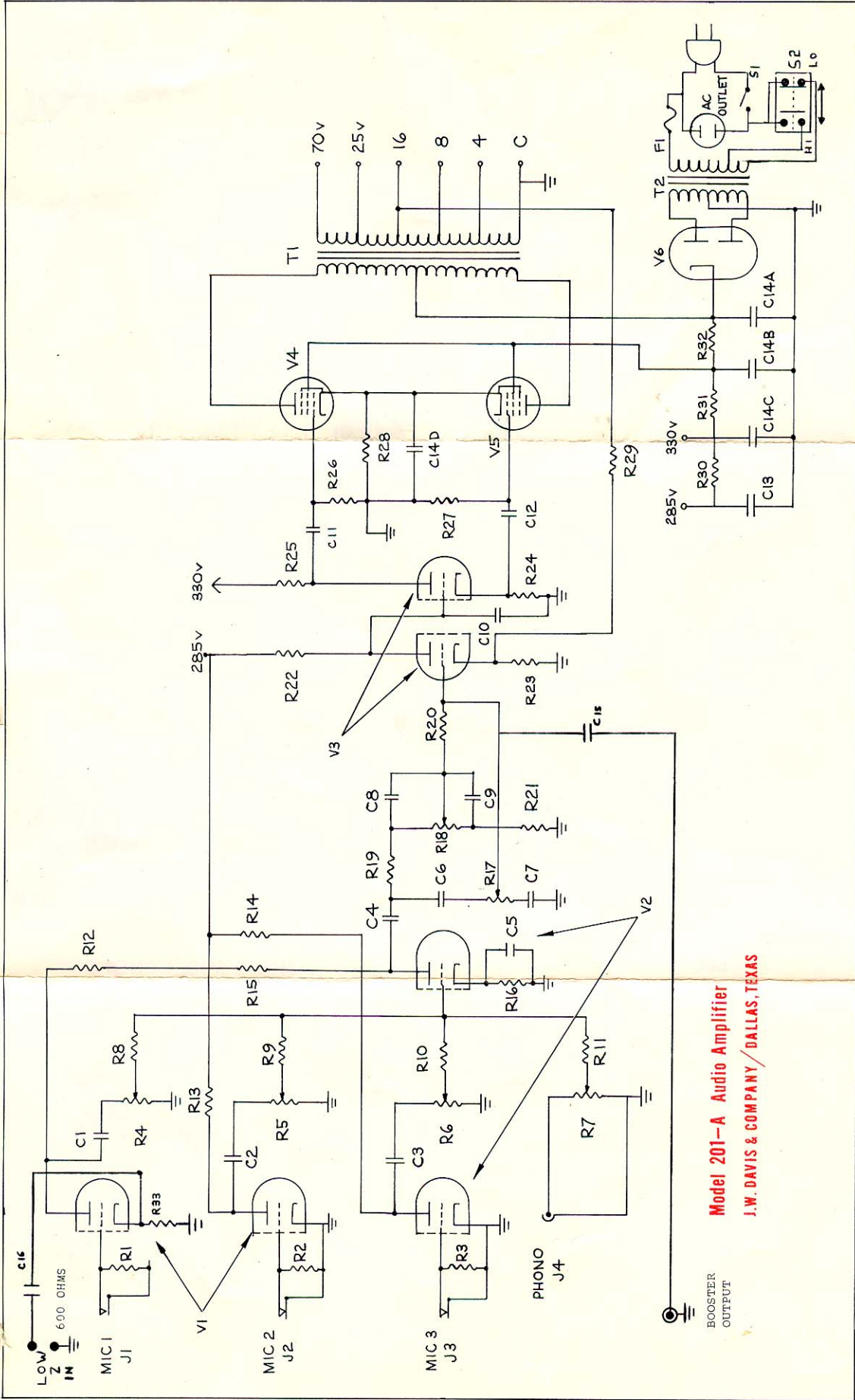


**J. W. DAVIS & COMPANY**

9212 Denton Drive

P. O. Box 35313

Dallas, Texas



**Model 201-A Audio Amplifier**  
**J.W. DAVIS & COMPANY / DALLAS, TEXAS**

PARTS LIST MODEL 201-A

- |               |                 |              |
|---------------|-----------------|--------------|
| C1 - C2 - C3  | R1 - R2 - R3    | V1 - V2 - V3 |
| C4 - C9 - C11 | R4 - R5 - R6    | V4 - V5 -    |
| C12 -         | R7 -            | V6 -         |
| C5 -          | R8 - R9 - R10   |              |
| C6 - C10      | R11 -           |              |
| C7 - C8 - C15 | R12 - R13 - R14 |              |
| C13 -         | R15 -           |              |
| C14 -         | R16 -           |              |
|               | R17 -           |              |
|               | R18 -           |              |
|               | R19 -           |              |
|               | R20 -           |              |
|               | R21 -           |              |
|               | R22 - R26 -     |              |
|               | R27 -           |              |
|               | R23 -           |              |
|               | R24 - R25       |              |
|               | R28 -           |              |
|               | R29 -           |              |
|               | R30 -           |              |
|               | R31 -           |              |
|               | R32 -           |              |
|               | R33 -           |              |
|               | V1 - V2 - V3    |              |
|               | V4 - V5 -       |              |
|               | V6 -            |              |
- 
- |               |            |
|---------------|------------|
| C1 - C2 - C3  | 560K ½W    |
| C4 - C9 - C11 | 1.5K ½W    |
| C12 -         | 56K ½W     |
| C5 -          | 130 ohm 5W |
| C6 - C10      | 100K ½W    |
| C7 - C8 - C15 | 47K 1W     |
| C13 -         | 2.2K 1W    |
| C14 -         | 1K 5W      |
|               | 560 ohm ½W |
|               | 6E7 Tube   |
|               | 6BQ5 Tube  |
|               | 6CA4 Tube  |
- 
- |                 |                          |
|-----------------|--------------------------|
| R1 - R2 - R3    | 2.2 meg ½W               |
| R4 - R5 - R6    | 1 meg pot/audio taper    |
| R7 -            | 330K ½W                  |
| R8 - R9 - R10   | 470K ½W                  |
| R11 -           | 2.7K ½W                  |
| R12 - R13 - R14 | 1 meg pot treble control |
| R15 -           | 150K ½W                  |
| R16 -           | 100K ½W                  |
| R17 -           | 27K ½W                   |
| R18 -           |                          |
| R19 -           |                          |
| R20 -           |                          |
| R21 -           |                          |

# INSTALLATION AND OPERATING INSTRUCTIONS FOR DAVIS MODEL 201-A PUBLIC ADDRESS AMPLIFIER

## AMPLIFIER CONTROLS

MIC. 1, MIC. 2, MIC. 3—These three controls adjust the volume of each respective microphone as connected on rear of chassis. For minimizing feedback, never direct the sound from the loudspeaker toward the microphone. Feedback in the form of a howl is a natural condition and the speakers and microphone should be located so that this microphone control can be advanced as high as desired without feedback taking place. All three microphones can be used simultaneously. When using microphones only, turn the control knob marked MUSIC to minimum position.

MUSIC—This music control adjusts the volume for all accessories which might be connected to the MUSIC INPUT (Phono) located at rear of amplifier. When using music input only turn all microphone control knobs to minimum volume position.

TONE CONTROL—These controls should be adjusted for tonal balance—to suit individual taste and needs.

## AMPLIFIER INPUTS

MIC. 1, MIC. 2, MIC. 3.—For all high impedance type microphones: (Ceramic or crystal type normally used.)

If low impedance microphone is to be used, order DAVIS Model TR-600 Lo-Hi Microphone Matching Transformer.

PHONO (MUSIC)—For any record player that uses crystal or ceramic phono cartridges, AM-FM Radio tuner, or tape recorder (which has its own preamplifier).

TELEPHONE LINE INPUT: For use in wired music service. This is a 500-600 ohm input that can be used with any O db line. The input connections are located on the output terminal strip on rear of chassis and are the two extreme right hand terminal screws, as viewed from the rear.

Note: To use this connection, the microphone on #1 MIC Input must be removed. This will allow the #1 Microphone receptacle to short the grid of V1 tube. This must be done or this feature will not operate. In the event any extraneous signal is heard in the amplifier, reverse the telephone line connections. USE MIC #1 CONTROL KNOB TO ADJUST TELEPHONE LINE INPUT SIGNAL TO AMPLIFIER.

## ADDITIONAL FEATURES

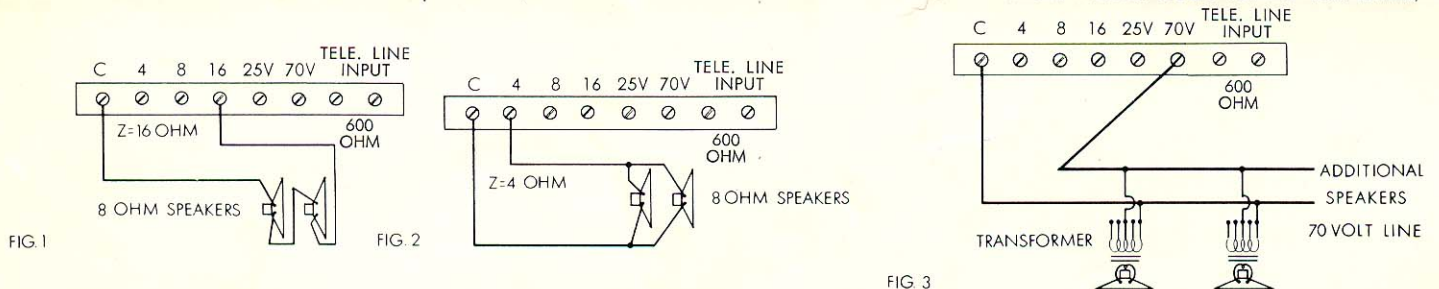
BOOSTER OUTPUT: This booster output can be connected directly to the phono or music input of any other amplifier when it is desired to connect another amplifier on the same line.

TUBE SAVER SWITCH: This is the toggle switch located on rear top of chassis. OFF position is full power. ON position: With switch in this position, the plate and filament voltages are reduced about 10%. This will increase tube life approximately 25% and allow transformer and all parts to run cooler. This ON position is suggested when amplifier is used continuously.

## CONNECTING SPEAKERS

The Model 201-A amplifier offers the ultimate in flexibility for the connection of speakers. Speakers should be connected directly to the screw terminals located at the rear. Connect one lead of your speaker to "C" (common) and the other lead to the appropriate terminal to match the impedance of your speaker. For example: To connect an 8 ohm impedance speaker to the amplifier use "C" and 8 on the terminal strip. More than one speaker can be used by connecting speakers in a series or parallel. If two speakers of equal impedance are connected in series (fig. 1) the total impedance will be twice that of one speaker. (For example: Two 8-ohm speakers connected in a series have 16 ohms of impedance.) If two speakers of equal impedance are connected in parallel (fig. 2) the total impedance will be  $\frac{1}{2}$  that of a single speaker. (For example: Two 8 ohm speakers connected in parallel will have a total impedance of 4 ohms.)

As a rule when more than two or three speakers are used, connections are made using the amplifier as a constant voltage source. You will note that there are appropriate terminals for 70.7 volt and 25 volt constant voltage lines. When using the constant voltage line, (fig 3) no consideration has to be given to the matching of impedances. However, a line matching transformer must be used on each speaker. (Such as our Model TR-1 for 70 volt lines or our Model TR-25 for 25 volt lines.)



When using the constant voltage line method, consideration must be given to the selection of the wattage taps on the speaker transformer so that when totaled they do not exceed 20 watts which is the rating of the amplifier.

When two or more speakers are used in the same area, they must be phased correctly or some sound cancellation will occur.

A 117 Volt AC receptacle is provided on rear of chassis for the convenience of supplying power to associated equipment.

## CONNECTING INPUTS

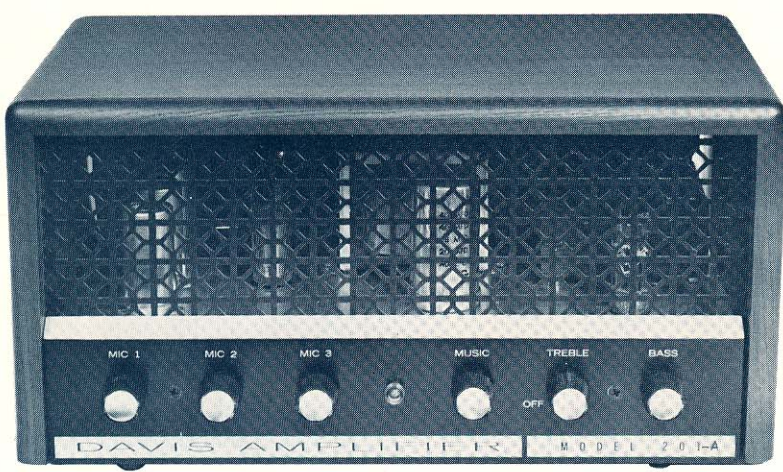
The output from any record player or record changer equipped with a crystal or ceramic cartridge may be plugged in the PHONO (MUSIC) receptacle located on the rear of the chassis. Either an AM or an FM radio tuner, or a tape deck which has its own pre-amplifier may be connected in this same receptacle. Use shielded insulated single-conductor cable to connect these accessories. The microphones are connected to the receptacles mounted on the rear of the amplifier.

**6 TUBES  
3 MICROPHONE  
INPUTS!**

# The Best Buy Commercial

(HI-FI FREQUENCY RESPONSE)  
**20-20,000**

**EXTRA HEAVY  
OUTPUT TRANSFORMER  
(FULL FREQUENCY RESPONSE)**

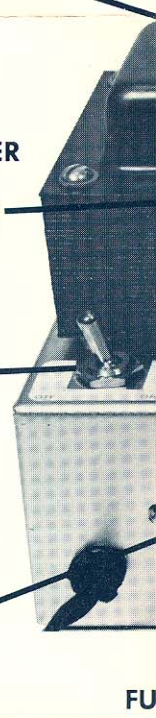


**COMPLETE IN BEAUTIFUL  
OIL WALNUT CABINET.  
(CHASSIS ONLY AVAILABLE)**

**HEAVY DUTY POWER  
TRANSFORMER  
FOR CONTINUOUS  
OPERATION**

**TUBE SAVER  
SWITCH**

**115 V.  
CONVENIENCE  
OUTLET**



**BEAUTIFUL BLACK  
AND GOLD PANEL**

**MICROPHONE #1,  
#2 & #3 VOLUME  
CONTROLS  
(CAN ALL BE USED  
SIMULTANEOUSLY  
OR MIXED)**

**FRONT  
VIEW**

**MUSIC  
VOLUME**

**TREBLE  
CONTROL**

**BASS BOOST  
TONE CONTROL  
(NOT BYPASS TYPE)**

**SPECIFICATIONS:**

- GAIN:** ..... 125 db microphone, 95 db phono.
- INPUT SENSITIVITY:** Microphone — .003 V., Phono 0.2 volts.
- TUBES:** ..... 3-6EU7, 2-6BQ5, 1-6CA4
- SIZE:** ..... 14½" wide, 7" high, 7½" deep
- SHIPPING WEIGHT:** ..... 14½ Pounds