

# Taylor

CUSTOM  
BUILT

# Tubes

## TZ-40

ZERO BIAS TRIODE  
40 WATTS PLATE DISSIPATION  
The Wonder Tubes

**\$3.50**

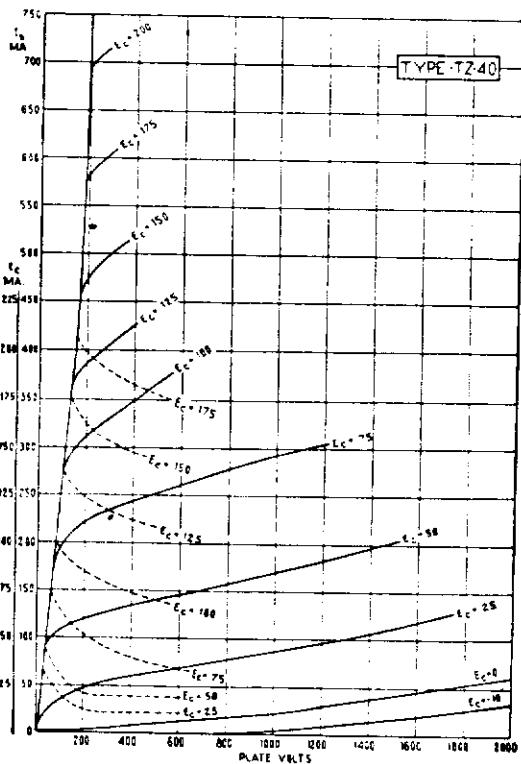
DELIVER 250 WATTS CLASS B AUDIO  
OUTPUT

THE IDEAL DOUBLER TUBE

### CLASS B AUDIO DATA

In the chart below, the current value is the maximum average value as would be indicated on the plate current meter with sine wave input. For the same peak output with voice input the maximum average plate current as indicated on meter will be approximately 50 to 60 per cent of this value.

| Audio<br>Watts<br>Output | 750                    | 1000                    | 1250                      | 1500                    | Supply Voltage  |
|--------------------------|------------------------|-------------------------|---------------------------|-------------------------|---|
| 100                      | 6000<br>230 ma.<br>4.0 | 15500<br>145 ma.<br>2.0 |                           |                         | ←Plate to Plate load<br>←Max. Av. Ip.<br>←Watts drive |
| 150                      |                        | 8800<br>240 ma.<br>4.4  | 16000<br>175 ma.<br>2.75W |                         | ←Plate to Plate load<br>←Max. Av. Ip.<br>←Watts drive |
| 175                      |                        | 7350<br>280 ma.<br>5.5  | 14000<br>200 ma.<br>3.4   | 20000<br>170<br>2.75    | ←Plate to Plate load<br>←Max. Av. Ip.<br>←Watts drive |
| 225                      |                        |                         | 10000<br>280 ma.<br>6.0   | 16000<br>215<br>3.85    | ←Plate to Plate load<br>←Max. Av. Ip.<br>←Watts drive |
| 250                      |                        |                         |                           | 12000<br>250 ma.<br>6.0 | ←Plate to Plate load<br>←Max. Av. Ip.<br>←Watts drive |



### GENERAL CHARACTERISTICS

|                               |     |
|-------------------------------|-----|
| Filament Volts.....           | 7.5 |
| Filament Current, amps.....   | 3.0 |
| Amplification Factor.....     | 62  |
| Plate Dissipation, watts..... | 40  |

### Interelectrode Capacities

|                          |     |
|--------------------------|-----|
| Grid-Plate, mmi.....     | 5.0 |
| Grid-Filament, mmi.....  | 4.8 |
| Plate-Filament, mmi..... | 0.8 |

### Overall Dimensions

|                               |       |
|-------------------------------|-------|
| Maximum Length, inches.....   | 6 1/4 |
| Maximum Diameter, inches..... | 2 1/4 |
| Alsimag UX 4 Prong Base       |       |

### CLASS C TELEGRAPHY, Maximum Ratings

|                               | C.C.S. | I.C.A.S. |
|-------------------------------|--------|----------|
| D. C. Plate Volts .....       | 1250   | 1500     |
| D. C. Plate Current, ma.....  | 125    | 150      |
| D. C. Grid Current, ma.....   | 45     | 45       |
| D. C. Grid Volts .....        | 250    | 250      |
| Plate Dissipation, watts..... | 40     | 40*      |

### Typical Operating Conditions

|                               |      |      |
|-------------------------------|------|------|
| D. C. Plate Volts .....       | 1250 | 1500 |
| D. C. Plate Current, ma.....  | 125  | 150  |
| D. C. Grid Current, ma.....   | 31   | 38   |
| D. C. Grid Bias Volts.....    | —90  | —90  |
| From Grid Leak of, ohms.....  | 2900 | 2370 |
| Plate Dissipation, watts..... | 40   | 60*  |
| Power Output, watts.....      | 116  | 165  |
| Driving Power, watts.....     | 7.25 | 10   |

\* It is permissible to allow the plate dissipation to approach twice the normal rating in telegraph service where key down condition exists approximately 50 per cent of the time.

### CLASS C TELEPHONY, Maximum Ratings

|                               | C.C.S. | I.C.A.S. |
|-------------------------------|--------|----------|
| D. C. Plate Volts .....       | 1000   | 1250     |
| D. C. Plate Current, ma.....  | 115    | 125      |
| D. C. Grid Current, ma.....   | 45     | 45       |
| D. C. Grid Volts .....        | 250    | 250      |
| Plate Dissipation, watts..... | 30     | 40*      |

### Typical Operating Conditions

|                               |      |      |
|-------------------------------|------|------|
| D. C. Plate Volts .....       | 1000 | 1250 |
| D. C. Plate Current, ma.....  | 100  | 125  |
| D. C. Grid Current, ma.....   | 26   | 30   |
| D. C. Grid Bias Volts.....    | —65  | —100 |
| From Grid Leak of, ohms.....  | 2500 | 3300 |
| Plate Dissipation, watts..... | 27   | 40*  |
| Power Output, watts.....      | 73   | 116  |
| Driving Power, watts.....     | 4.6  | 7.5  |

\* The intermittent nature of voice modulation in amateur transmission permits the use of the maximum plate dissipation rating.

### CLASS B AUDIO

#### Typical Operation Conditions for Two Tubes

|                                | C.C.S. | I.C.A.S. |
|--------------------------------|--------|----------|
| D. C. Plate Volts .....        | 1250   | 1000     |
| D. C. Plate Current, ma.....   | 240    | 200      |
| D. C. Grid Bias Volts.....     | —4.5   | 0        |
| Power Output, watts.....       | 200    | 130      |
| Driving Power, watts.....      | 4.5    | 2.8      |
| Plate to Plate Load, ohms..... | 11000  | 11000    |
| Peak Grid to Grid Volts.....   | 242    | 200      |
|                                | 265    | 269      |

\* The intermittent nature and low average power in a voice wave permits use of higher peak power output without overloading the tubes. Power outputs listed are for sine wave voltage and are intended for use in calculating modulating capabilities. Actually the power output is much less with voice input.