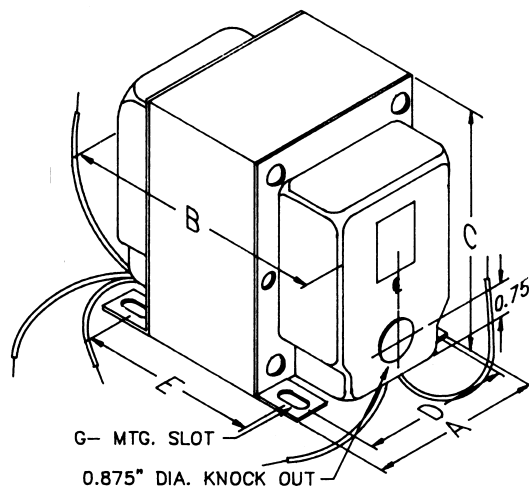


# Push - Pull Audiophile - Tube Output



## PUSH - PULL "CLASSIC" TUBE TYPE - ULTRA-LINEAR OUTPUT TRANSFORMERS

### Dimension Table

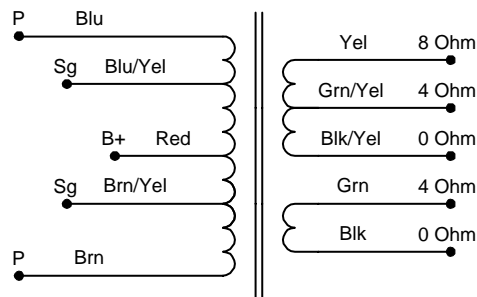
- Designed for push-pull tube output circuits.
- Enclosed (shielded), 4 slot, above chassis Type "X" mounting, both end bells include knockouts for optional above chassis wiring.
- Frequency response 30 Hz. to 30 Khz. at full rated power (+/- 1 db max. ref. 1 Khz) minimum.
- Insulated flexible leads 8" min.
- All units include 40% screen taps for Ultra-Linear operation (if desired).
- Typical applications - Push-Pull: triode, Ultra-Linear pentode, pentode and tetrode connected audio output.
- For the "ultimate" in Push-Pull output see our line of epoxy potted output transformers.

Cat. No.	A	B	C	D	E +/- 1/16"	G Slot
1608	2.5	2.75	3.06	2	1.69	.203 x .38
1609	2.5	2.75	3.06	2	1.69	.203 x .38
1615	2.5	3.25	3.06	2	2.19	.203 x .38
1620	2.5	3.5	3.06	2	2.44	.203 x .38
1650F	2.5	3.5	3.06	2	2.44	.203 x .38
1645	3.13	3.5	3.81	2.5	2.19	.203 x .38
1650H	3.13	4	3.81	2.5	2.69	.203 x .38
1650K	3.13	4	3.81	2.5	2.69	.203 x .38
1650N	3.13	4.25	3.81	2.5	2.94	.203 x .38
1650P	3.13	4.25	3.81	2.5	2.94	.203 x .38
1650R	3.75	4.25	4.56	3	3.06	.203 x .38
1650T	3.75	4.5	4.56	3	3.31	.203 x .38
1650W	4.38	7.5	5.25	3.5	5.88	.203 x .38

Audio

Cat. No.	Audio Watts	Primary Impedance	Secondary Impedance	Wt. Lbs.
1608	10	8,000 ct	4-8-16	2.5
1609	10	10,000 ct	4-8-16	2.5
1615	15	5,000 ct	4-8-16	3.25
1620	20	6,600 ct	4-8-16	3.5
1650F	25	7,600 ct	4-8-16	4
1645	30	5,000 ct	4-8-16-70V	4.5
1650H	40	6,600 ct	4-8-16	6.5
1650K	50	3,400 ct	4-8-16	7
1650N	60	4,300 ct	4-8-16	8
1650P	60	6,600 ct	4-8-16	8
1650R	100	5,000 ct	4-8-16	12
1650T	120	1,900 ct	4-8-16	14
1650W	280	1,900 ct	4-8-16	28

### Transformer Schematic



Note: Part # 1645 has an additional tap on the secondary for 70V output

#### CANADA

Phone: (519) 822-2960 Fax: (519) 822-0715

#### USA

Phone: (716) 651-0086 Fax: (716) 651-0726



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# Push - Pull Audiophile - Tube Output

## 1600 Series Continued...

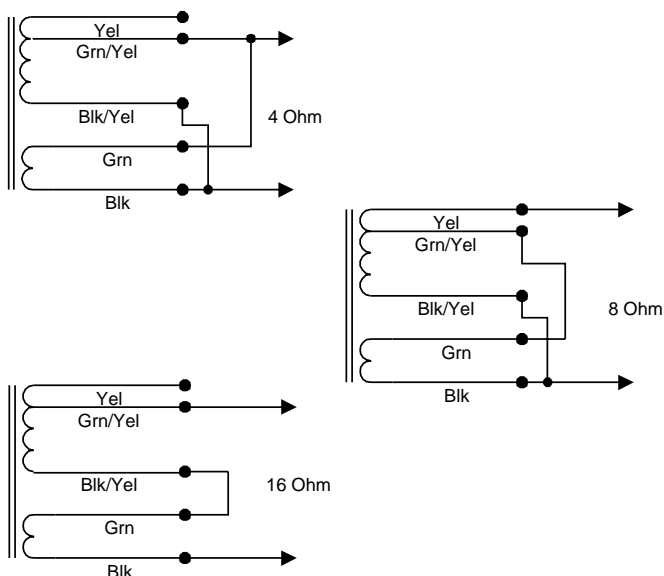
### Suggested Tube Types

Cat. No.	Audio Watts	Primary Impedance	Tube Types
1608	10	8,000 ct	6AQ5, 6V6, 6BQ5, EL84
1609	10	10,000 ct	6AQ5, 6V6, 6BQ5, EL84
1615	15	5,000 ct	2A3, 6A3, 6AQ5, 6B4G, 6L6, 6V6
1620	20	6,600 ct	6AQ5, 6L6, 6V6
1650F	25	7,600 ct	6L6GC, 6V6, 807, 5881, EL34
1645	30	5,000 ct	6L6GC, 6V6, 807, 5881, EL34
1650H	40	6,600 ct	6L6GC, 807, 5881, EL34
1650K	50	3,400 ct	6L6GC, 807, 5881, EL34, 6146B, 6550B
1650N	60	4,300 ct	6L6GC, 807, 5881, EL34, 6146B, 6550B, KT88
1650P	60	6,600 ct	6L6GC, 807, 5881, EL34, 6146B, 6550B, KT88
1650R	100	5,000 ct	807, 5881, EL34, 6146B, 6550B, KT88
1650T	120	1,900 ct	6L6GC, 5881, EL34, 6550B, KT88
1650W	280	1,900 ct	6L6GC, 5881, EL34, 6550B, KT88

**Notes:** The above examples of possible combinations are to help you narrow down the choices of transformers for your favorite tube types. How you operate the tubes (push-pull, push-pull parallel, ultra-linear, class, B+, bias, operating points, etc.) will change optimum plate to plate load impedance. Only a few of the most popular tubes are shown. As more tubes become available we will add them to the list.

A tube manual or tube manufacturer's technical data sheets should be consulted first, before making a decision on a proper output transformer.

### Secondary Connections

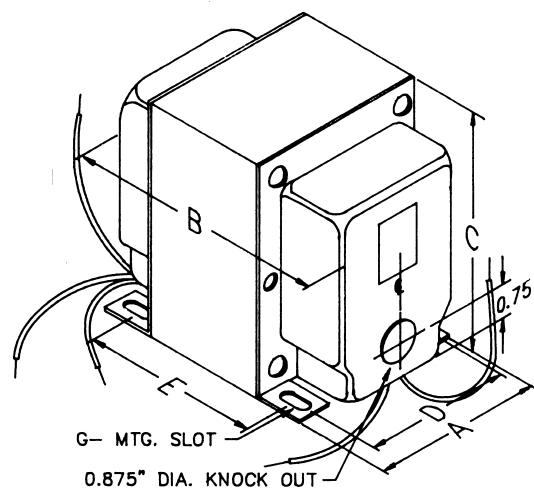
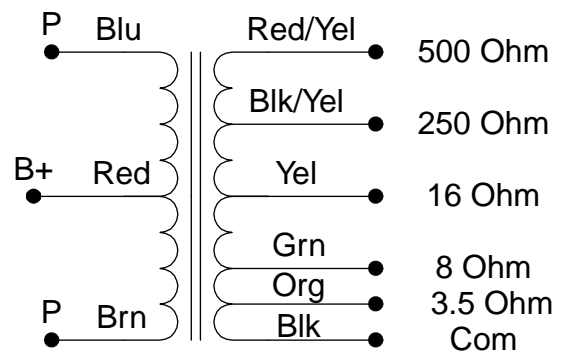


## PUSH - PULL "CLASSIC" TUBE TYPE OUTPUT TRANSFORMER

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- Enclosed (shielded), 4 slot, above chassis Type "X" mounting, both end bells include knockouts for optional above chassis wiring.
- Frequency response 30 Hz. to 30 Khz. at full rated power (+/- 1 db max. ref. 1 Khz) minimum.
- Insulated flexible leads 8" min.
- Typical applications - Push-Pull: triode, pentode and tetrode connected audio output.

Cat. No.	Audio Watts	Primary Impedance	Secondary Impedance	Wt. Lbs.
1650G	35	6,600 ct	3.5-8-16-250-500	5

### Transformer Schematic



### Dimension Table

A	B	C	D	E	G (slot)
3.13	3.75	3.81	2.50	2.25	.203 x .38