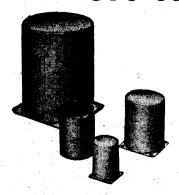
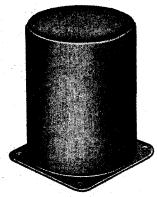
# UTC COMMERCIAL GRADE COMPONENTS



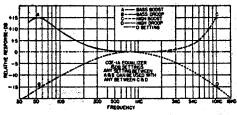
The commercial grade series of transformers incorporate conservative design and rugged construction to assure dependability under continuous service operation in industrial and commercial grade communication equipment. These units are mounted in uniform drawn cases finished in light grey enamel, and intended for chassis mounting. All items are poured with special sealing compound in addition to vacuum impregnation of coil structures.

CG-134, 135 and 136 are of the hum-bucking type to assure low hum pick-up. All audio components are linear. ±11/2 DB from 40 to 10,000 cycles (no unbalanced D.C.), except CVL and CVM units . . . 40 to 6000 cycles. Parallel feed low level interstage units with 50,000 ohms and .25 mfd. 200 ohm windings on input transformers are balanced and may be used for 150 to 250 ohm circuits.



# INPUT, INTERSTAGE, MIXING AND LOW LEVEL OUTPUT TRANSFORMERS

Type No.	Application	Primary Impedance Ohms	Max. Level dbm	Secondary Impedance Ohms	Case No.
CG-131	.1 plate to 1 grid	15,000	+28	135,000 3:1 ratio	RC-50
CG-132	1 plate to 2 grids	15,000	+30	135,000 C.T. 3:1 ratio overall	RC-62
CG-133	2 plates to 2 grids	30,000 P to P	+32	80,000 overall 1.6:1 ratio ovarall	RC-75
CG-134	Line to I grid hum- bucking	50, 200, 500	+30	80,000	RC-50
CG-135	Line to 2 grids hum- bucking	50, 200, 500	+30	120,000 overali	RC-50
CG-235	Line to 1 or 2 grids, hum-bucking; multi- ple alloy shielded for low hum pickup	50, 200, 500 ohms	+28	80,000 overall	RC-75
CG-136	Single plate and low impedance mike or line to 1 or 2 grids hum-bucking	15,000, 50, 200	+30	80,000 overali	RC-62
CG-137	Mixing	50, 200, 500	+28	50, 200, 500	RC-50
CG-140	Triode plate to line	15,000	+30	50, 200, 500	RC-58
CG-141	PP triode plates to line	30,000 P to P	+32	50, 200, \$00	RC-50
CG-233	PP 6C5, 12AU7, similar triodes to AB 45's, 2A3's, 6L6's, etc.	30,000 P to P	+35	25,000 overall .9:1 ratio overall	RC-87
CG-333	PP 6C5, 12AU7, similar triodes to fixed bias 6L6's	30,000 P to P	+35	5,000 overall 4:1 ratio overall	RC-87
CQ-433	PP 45, 2A3, similar tubes to fixed bias 2 or 4 6L6's	5,000 P to P	10W.	1,250 overall .5:1 ratio overall	RC-100





#### UNIVERSAL INTERSTAGE EQUALIZER-CGE-1A

The UTC CGE-1A is the ideal device for any application where frequency response control is desired. Incorporating the latest developments in design and manufacture, this new unit provides the ultimate in control and flexibility. This equalizer is not a simple R-C tone control, but employs resonant circuits in a unique arrangement providing equalization characteristics unobtainable by conventional circuits. Designed to work from a low or medium impedance source (0 to 20,000 ohms) to a high impedance (500,000 ohms or open grid), the CGE-1A affords continuously variable equalization over a 30 DB range at either end of the spectrum, while introducing only 18 DB total insertion loss. (See curve above). Complete independence of high frequency and low frequency controls permits a wide variety of settings without affecting the over-all volume level. Because of its low insertion loss, this unit may be incorporated directly in many amplifiers. If existent gain is low, a single medium-mu triode stage will provide both proper gain and source impedance. The mechanical construction permits mounting with case on panel directly behind controls, or with case separated from controls and panel. An etched, calibrated panel is provided. CGE-1A Panel Dim. 236" x 31/2" x 21/2" deep. Wt. 2 lbs.

#### DYNAMIC NOISE SUPPRESSION INDUCTOR

Incorporates two accurate High Q coils [.8 hy. and 2.4 hy.] for use in dynamic noise suppression circuits. Excellent circuit accompanies unit.

Type CG-50 RC-62 Case

#### COMMERCIAL GRADE CASE

Case Ne.	Base Dim. (\$q.)	Mounting Dim. (Sq.)	Mounting Screw	Height +1/2, -1/14	Cutout Dia.	Unit Weight Lbs.
RC-37	136	11/2	4-40	156	11/4	.35
RC-50	15%	15/14	6-32	21/4	11/2	1/2
RC-62	113/16	11/2	6-32	21/2	11/2	1
RC-75	23/16	11714	8-32	27/8	17/8	11/2
RC-87	2%16	21/32	8-32	31/4	2	21/2
RC-100	3	23/8	8-32	33/4	25/8	31/2
RC-112	37/16	211/16	10-32	41/8	27/8	5
RC-125	33/4	3	10-32	41/2	3	61/2
RC-150	41/2	3%14	12-28	51/2	3%	11
RC-152	51/s	41/8	12-28	51/2	4	151/2
RC-175	53/4	47/6	1/4-20	71/s	4	22

#### **OUTPUT TRANSFORMERS**

Secondary Impedances: 500, 200, 16, 8, 5, 3, 1,5 ohms

Type No.	Imped. P. P. Ohms, Gverall	Typical Tubes	Max. Watts	Case No.
CG-15	8,000	6F6 triode, 6V6, 6AQ5	20	RC-100
CG-16	3,000/5,000	2A3, 6AS7G, 6L6, 6080	20	RC-100
CG-19	6,000/10,000	6V6, Triode: 6L6, 5881	20	RC-100
CG-710	14,000/20,000	7B5, 6AK6, 6K6GT	20	RC-100
CG-2L6	9,000	6L6's, A81, 5881	30	RC-125

### CG VARIMATCH OUTPUTS FOR P. A.

Universal units designed to match any tubes within the rated output power, to line or voice coll. Output impedance 500, 200, 50, 16, 8, 5, 3, 1.5 ohms. Primary impedance 3000, 5000, 8000, 7000, 8000, 10,000, 14,000 ohms.

Type No.	Audie Watts	Typical Tubes	Case No.
CVP-1	12	2A3, 25L6, 6V6, 6AQ5	RC-100
CVP-2	30	2A3, 6L6, 6V6, 807, 5881	RC-125
CVP-3	60	3008's, 6L6's, 807, 1614, 5881, 1625	RC-150
CVP-4	125	807's, 4-6L6's, 845's, 4-1614's, 6146, 6159	RC-152
EVP-5	300	242A's, 838's, 4-845's, ZB-120's	RC-175

## CG VARIMATCH LINE TO VOICE COIL TRANSFORMERS

The UTC VARIMATCH line to voice cell transformers will match any voice cell or group of voice cells to a 500 chm line. More than 50 voice cell combinations can be obtained, as follows:

2, 4, 5, 62, 1, 1.25, 1.5, 2, 2.5, 3, 3.3, 3.8, 4, 4.5, 5, 5.5, 6, 6.25, 6.6, 7, 7.5, 8, 9, 10, 11, 12, 14, 15, 16, 18, 20, 25, 28, 30, 31, 40, 47, 50, 63, 69, 75.

Where speakers are to be connected in groups to one transformer, it is preferable that parallel connection be used to eliminate the possibility of multiple resonance. If two speakers of different impedances are connected in parallel, the lower impedance speaker will develop greater power. If connected in series, the higher impedance speaker will develop greater power.

Type No.	Audio Watts	Primary impedance	Secondary Impedance	Gase No.
CVL-1	15	500 ohms	.2 to 75 ghms	9C-87
CVL-2	40	500 ohms	.2 to 75 ohms	RC-125
CVL-3	75	500 ohms	.2 to 75 ohms	RG-150

### CG VARIMATCH LINE AUTOFORMERS

UTC Varimatch Line Autoformer will match one to ten 500 ohm lines or CVL windings to the 500 ohm output of an audio amplifier. The CVL-10 autoformer has impedances of 500, 250, 167, 125, 100, 83, 71, 62, 50 ohms.

Type No.	 *.	Audio Watts	Case No.
CVL-10		15	RC-87