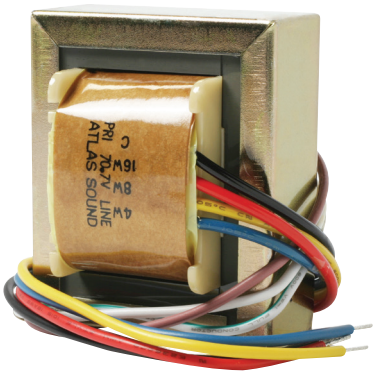
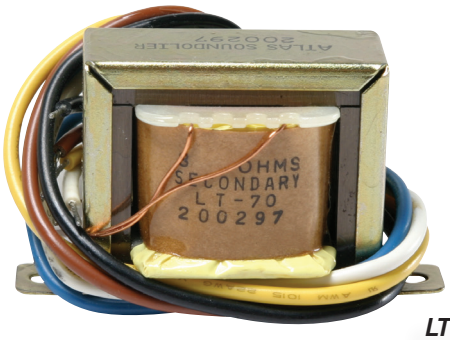
Line Matching Transformers

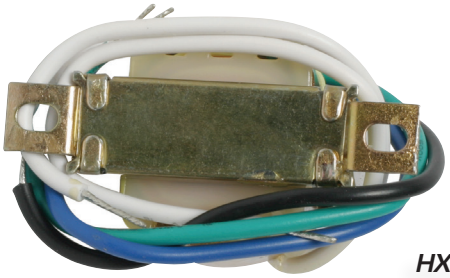
HT, LT, & HX Series



HT167



LT70



HX33-4525

16 Watt Transformer & Optional Mounting Bracket

HT167 High quality line matching transformer with 0.6dB insertion loss assures efficient loudspeaker matching in distributed 70.7V systems. Unit is constructed of audio grade laminations and has primary taps at 4, 8, and 16 Watts. The secondary impedance is 4Ω and 8Ω. Frequency response is +1dB from 40Hz – 15kHz.

CX188329 Dedicated mounting bracket facilitates installation of the HT167 transformer to standard mounting holes 8" loudspeaker baskets. The bracket uses standard hardware and is compatible with systems utilizing loudspeaker Series: C5A, C10A(LWA), C803A (all versions), C883, and CP802.

8 Watt Transformers

HT87 High-efficiency transformers have a maximum insertion loss of 0.6dB for application in distributed sound systems. Units are constructed of audio grade laminations and have a full range frequency response of +1dB from 50Hz – 15kHz. The primary taps are 1, 2, 4, and 8 Watts. The secondary impedance taps are 4Ω and 8Ω. Model HT87 is designed for 70.7V lines.

5 Watt Transformers

LT70 General purpose transformers provide economical matching of loudspeakers for most distributed sound applications. The insertion loss does not exceed 1.5dB and the frequency response is +1.5dB from 100Hz –10kHz. Primary taps are .5, 1, 2, and 5 Watts. Secondary impedance is 8Ω. Model LT70 is designed for 70.7V lines and LT25 for 25V systems.

4 Watt Transformers

LT72 Quality dual-voltage transformer equipped with terminals for 70.7 and 25V line application is recommended for inventory reduction advantages. Primary taps are .25, .5, 1, 2, and 4 Watts. Secondary impedance is 8Ω. The primary and secondary employ lead wire terminations. Frequency response is +1.5dB from 100Hz – 10kHz. Insertion loss does not exceed 1.5dB.

HT47/ HT42 Industry standard, high quality transformers with audio grade laminations offer low insertion loss and full-range frequency response. Insertion loss will not exceed 1.0dB and the frequency response is +1dB from 60Hz – 12kHz. Primary taps are .5, 1, 2, and 4 Watts. Secondary impedance is 8Ω. Model HT47 is designed for 70.7V lines and Model HT42 is for 25V lines.

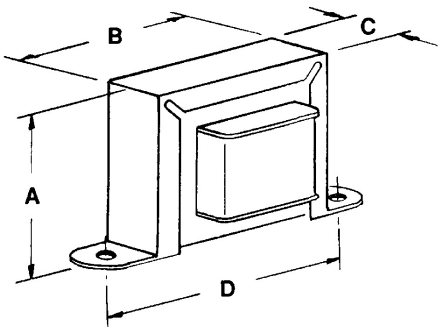
1 Watt Transformers

HX-33-4525 Specifically designed for intercom applications when connecting a 45Ω loudspeaker to a constant voltage system. The small size of these transformers makes them ideal for use in compact spaces. The insertion loss will not exceed. 1.5dB and the frequency response is +2dB from 150Hz-9kHz. The primary taps are .5 and 1 Watt. Secondary impedance is 45Ω. Model HX33-4525 for 25V lines.

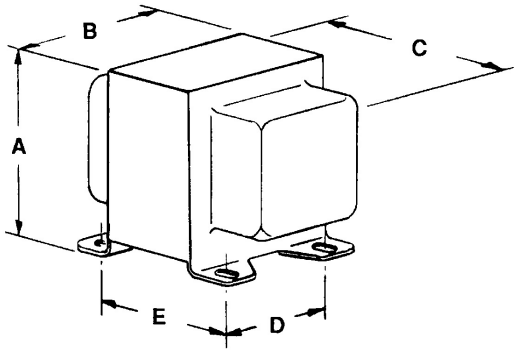
32 Watt Transformer

HT327 High power handling unit with minimal insertion loss and wide frequency response provides quality line matching of loudspeakers in high sound power systems. Unit is constructed of audio grade laminations and offers primary taps at 8, 16, and 32 Watts with secondary impedance of 4Ω and 8Ω. Insertion loss does not exceed 0.6dB and operates within a frequency range of +1dB from 30Hz – 15kHz. The transformer is designed for external mounting to surfaces other than the loudspeaker.

Model No.	Pri. Volts	Frequency Response	Primary Taps (Watts)	Secondary Impedance (Ω)	Maximum Insertion Loss	Primary Terminations	Secondary Terminations	Core Size	Power Rating (Watts)
HT600	70.7V	50Hz-15kHz, (±1dB)	150, 300, 600	4Ω & 8Ω	2dB	12" (305mm) Color Coded	12" (305mm) Color Coded	3 5/8" X 3 5/8" (32mm X 32mm)	600
HT327	70.7V	30Hz-15kHz, (±1dB)	8, 16 ,& 32	4Ω & 8Ω	.6dB	6" (152mm) Color Coded	6" (152mm) Color Coded	1 1/4" X 1 1/4" (32mm X 32mm)	32
HT167	70.7V	40Hz-15kHz, (±1dB)	4, 8, & 16	4Ω & 8Ω	.6dB	6" (152mm) Color Coded	6" (152mm) Color Coded	1" X 1" (25mm X 25mm)	16
HT87	70.7V	50Hz-15kHz, (±1dB)	1, 2, 4, & 8	4Ω & 8Ω	.6dB	6" (152mm) Color Coded	6" (152mm) Color Coded	1" X 3/4" (25mm X 19mm)	8
HT47	70.7V	60Hz-12kHz, (±1dB)	.5, 1, 2, & 4	8Ω	1.0dB	6" (152mm) Color Coded	6" (152mm) Color Coded	5/8" X 5/8" (16mm X 16mm)	4
HT42	25V	60Hz-12kHz, (±1dB)	.5, 1, 2, & 4	8Ω	1.0dB	6" (152mm) Color Coded	6" (152mm) Color Coded	5/8" X 5/8" (16mm X 16mm)	4
LT72	70.7V/ 25V	100Hz-10kHz, (±1.5dB)	.25, .5, 1, 2, & 4	8Ω	1.5dB	6" (152mm) Color Coded	Com. Lead + Terminals	1/2" X 5/8" (16mm X 16mm)	4
LT70	70.7V	100Hz-10kHz, (±1.5dB)	.5, 1, 2, & 5	8Ω	1.5dB	6" (152mm) Color Coded	3" (76mm) Self Leads	1/2" X 5/8" (13mm X 16mm)	5
HX33-4525	25V	150Hz-9kHz, (±2dB)	.5 & 1	45Ω	1.5dB	6" (152mm) Color Coded	4" (102mm) Color Coded	3/8" X 3/8" (10mm X 10mm)	1



ALL MODELS EXCEPT HT327



HT327

Transformer Dimensions

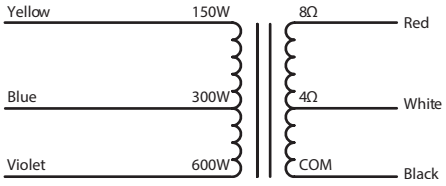
Model	A	B	C	D	E	Weight
HT600	3 3/16" (81mm)	3 3/4" (96mm)	3 5/8" (93mm)	3" (76mm)	2 7/8" (73mm)	6.22 lbs. (2.82kg)
HT327	3 1/4" (83mm)	2 1/2" (64mm)	3 1/4" (83mm)	2" (51mm)	2 1/4" (57mm)	4 lbs. (1.81kg)
HT167	3 1/8" (79mm)	2 9/16" (65mm)	1 3/32" (28mm)	3 1/8" (79mm)	-	2 lbs. (90.7g)
HT87	2 3/8" (60mm)	1 31/32" (50mm)	1 3/32" (28mm)	2 3/8" (60mm)	-	1.2 lbs. (544g)
HT47	1 5/8" (41mm)	1 31/32" (50mm)	23/32" (18mm)	2 3/8" (60mm)	-	.53 lbs. (240g)
HT42	1 5/8" (41mm)	1 31/32" (50mm)	23/32" (18mm)	2 3/8" (60mm)	-	.53 lbs. (240g)
LT72	1 3/8" (35mm)	1 23/32" (44mm)	23/32" (18mm)	2" (51mm)	-	.5 lbs. (227g)
LT70	1 3/8" (35mm)	1 23/32" (44mm)	23/32" (18mm)	2" (51mm)	-	.5 lbs. (227g)
HX33-4525	1 3/16" (30mm)	1 7/16" (37mm)	15/32" (12mm)	1 3/4" (44mm)	-	.2 lbs. (90.7g)

Architect and Engineer Specifications

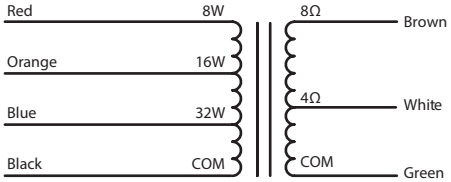
The transformer shall be Atlas Sound Model _____ and shall be capable of delivering its full rated power within +_____ _____Hz. The primary taps shall have power taps of _____ Watts. The secondary impedance shall be _____ Ohms. The insertion loss shall not exceed _____dB. The transformer shall be designed for _____ V lines.

Transformer Color Code Diagrams

HT600

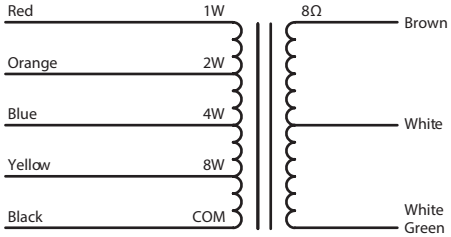


HT327
70.7V
LINE

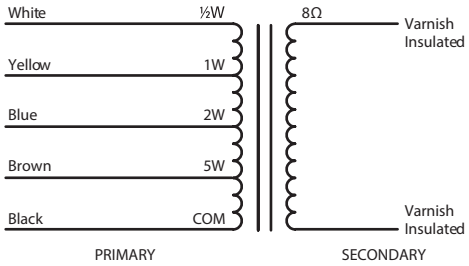


HT-8 7
70.7V

HT-8 2
25V

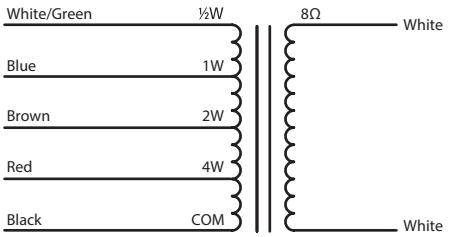


LT-100

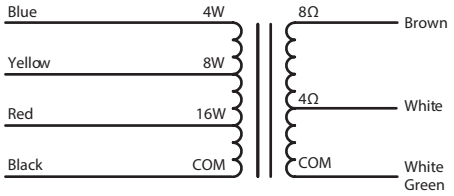


HT-4 7
70.7V

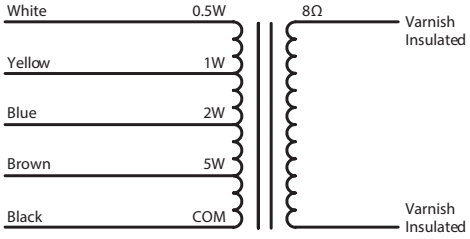
HT-4 2
25V



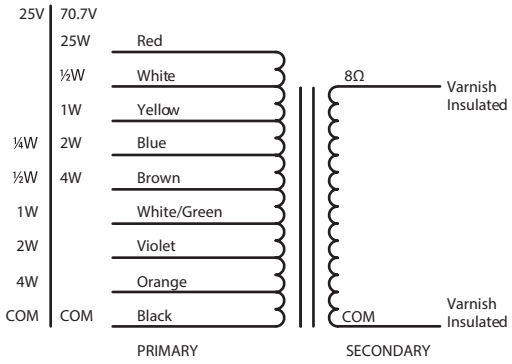
HT167
70.7V
LINE



LT70
70.7V



LT-72



HX32-4570
70.7V
LINE