

## TRANSFORMERS MOSTLY USED IN PRO AUDIO APPLICATIONS

R230405

### Line input transformers

Type	Turns ratio	Level (@50 Hz)	Usage / Comment
LL1531	1+1 : 1+1	+20 dBU	Line input. Small size
LL1540	1+1 : 1+1	+30 dBU	High level line input
LL1544A	1+1+1+1 : 2+2	+20 dBU	Line input. Amorphous core
LL1545A	1+1+1+1 : 2+2	+24 dBU	Line input
LL1545E	1+1:1+1	+24dB	Line input, based on LL1545A
LL1592	1+1 : 1+1	+30 dBU	High quality line input.
LL1922	1+1 : 4+4	+26 dBU	Line step-up input. Similar to UTC LS-10
LL1952	1 & 4 : 4	+7 dBU+19 dBU	Mic & Line input transformer
LL6404	1 : 1	N/A (High!)	Zero Field line input
LL7101	1+1 : 1.37	N/A (High!)	Zero Field line input
LL7901	1+1+1+1 : 1+1+1+1	+34 dBU	Very high level line input

### Line output transformers

Type	Turns ratio	Level (@50 Hz)	Usage / Comment
LL1517	1+1,ct : 1+1	+28 dBU	With Faraday shields. General purpose.
LL1524	1+1 : 1+1	+28 dBU	Balanced drive. Very low leakage inductance.
LL1539	2 : 1+1	+31 dBU	Balanced drive
LL1555	1+1+1+1 : 2+2	+27 dBU	Balanced drive
LL1560	2+2 : 1+1+1+1	+26 dBU each secondary	Balanced drive. 4 output active split.
LL1582	1+1 : 1+1	+30 dBU	With Faraday shields. General purpose. Size optimized for Euroboard
LL1585	1+1 : 1+1	+31 dBU	With Faraday shields. General purpose.
LL2734	1+1 : 1.4 + 1.4	+30 dBU	Solid State Single End
LL2811	1+1 : 1+1	+30 dBU	Balanced drive. Low leakage inductance. Size optimized for Euroboard
LL5402	2 : 1+1	+22 dBU	Unbalanced drive
LL7401	1+1 : 1+1	+24 dBU	Balanced drive. Low profile. Very low leakage inductance.

### General purpose transformers, for splitting and electrical isolation.

Type	Turns ratio	Level (@50 Hz)	Usage
LL1527	1+1 : 1+1	+16 dBU	Split 1 : 1 direct + 1 isolated. Audio isolation
LL1527XL	1+1 : 1+1	+19 dBU	Split 1 : 1 direct + 1 isolated. Audio isolation
LL1532	1+1 : 2	+10 dBU	Mic input. Audio isolation
LL1570	1+1 : 1+1	+16 dBU	Split 1 : 1direct + 1 isolated. Audio isolation
LL1570XL	1+1 : 1+1	+19 dBU	Split 1 : 1direct + 1 isolated. Audio isolation
LL1581XL	1 : 1+1	+13 dBU	Splitting 1 : 1 direct + 2 isolated
LL1583	1 : 1+1	+8 dBU	Splitting 1 : 1 direct + 2 isolated. Small size
LL1588	1+1 : 1+1	+22 dBU	High level line isolation transformer
LL1590	1 : 1+1+1	+15 dBU	Splitting 1 : 1 direct + 3 isolated
LL1591	1+1 : 1+1	+16 dBU	Low price audio isolation transformer
LL1593	1+1 : 2	+12 dBU	Small, low price audio isolation transformer
LL1944	1+1 : 1+1+1+1	+28 dBU	Mic split for speaker box etc.
LL7902	1+1+1+1 : 1+1+1+1	+28 dBU	For high level applications, input and output.
LL7904	1 : 1+1	+23 dBU	High level splitting 1 : 1 direct + 2 isolated

### DIN units. Transformer units with screw connectors for audio installations

Type	Max level @ 50 Hz	Usage / Comment
DIN1527	+16 dBU	Galvanic isolation and balanced-unbalanced conversion
DIN1581XL	+13 dBU	Splitting 1 direct + 2 isolated
DIN1588	+22 dBU	High signal level galvanic isolation etc.

## Microphone transformers

Type	Turns ratio	Level (@50 Hz)	Usage / Comment
LL1528	1+1 : 2.5+2.5	+10 dBU	200Ω : 5k microphone input
LL1530	1+1 : 3.5+3.5	+10 dBU	DI (Direct Input) 10k : 200Ω
LL1538*	1+1 : 5	+10 dBU	200Ω : 5k microphone input
LL1538XL*	1+1 : 5	+13 dBU	High level 200Ω : 5k microphone input.
LL1550	1+1+1+1 : 4+4	+6 dBU	Special application input. Amorphous core
LL1571	1+1 : 1.75+1.75	+10 dBU	200Ω : 2k5 microphone input
LL1576*	1+1 : 7	+10 dBU	200Ω : 10k microphone input
LL1577*	1+1 : 14	+4 dBU	50Ω : 10k microphone input
LL1578*	1+1 : 10	+4 dBU	50Ω : 5k microphone input
LL1578XL*	1+1 : 10	+7 dBU	High level 50Ω : 5k microphone input.
LL1587	1+1 : 4	+0 dBU	Small size 200Ω : 3k2 microphone input
LL1636	1+1+1+1 : 10+10	-2 dBU	Special application input. Amorphous core
LL1926	1+1+1+1 : 4+4	+13 dBU	Mu metal version of LL1550
LL1927A	1+1 : 55 + 55		Very high turns ratio. For ribbon mics.
LL1935	1+1 : 5 + 5	+7 dBU	DI (Direct Input) 20k : 200Ω
LL1936	(2+1) + (2+1) : 4+4	+14 dBU	75Ω, 150Ω, 300Ω and 600Ω : 1200Ω
LL1940	9 : 1+1	45V RMS	Tube mic output with "character"
LL1951*	1+1 : 14	+4 dBU	Improved LL1577
LL1968	2 : 1	+15 dBU	Flying leads. With CT on the "1" side
LL1969	23 + 1 : 6	+18 dBU	For U67 replicas. Same structure as the BV12.
LL2912	1 : 37	-30 dBU (1:37)	For ribbon microphones. Amorphous core.
LL2913	1+1+1+1 : 37	-30 dBU (1:37)	For ribbon microphones. Amorphous core.
LL2914	1+1+1+1 : 37	-30 dBU (1:37)	For ribbon microphones. Mu metal core.
LL2915	1 : 37	-30 dBU (1:37)	For ribbon microphones. Mu metal core.
LL2916	1+1 : 55 + 55		Mu metal core version of LL1927A
LL7903	1+1+1+1 : 2+2+2+2	+28 dBU	Very high level mic/line input.
LL7903Ag	1+1+1+1 : 2+2+2+2	+28 dBU	Silver wire version of LL7903
LL7906	1+1+1+1 : 5.6 + 5.6	+16 dBU	High level mic/line input.

Transformers marked with \* have compatible pinout.

## XLR-XLR problem solvers units (all units with turns ratio 1 : 1)

Type	Max level @ 50 Hz	Usage / Comment
LL6810-phmphm	+15 dBU	Isolation transformer unit Phono - Phono w. 6 ft cable
LL156X-3FX3MX	+24 dBU	XLR female to XLR male line input
LL156X-3FXPHM	+24 dBU	XLR female to Phono male line input
LL156X-3FXNP2C	+24 dBU	XLR female to 2 pole 1/4" plug line input
LL156X-PHF3MX	+24 dBU	Phono female to XLR male line input
LL1584-3FX3MX	+16 dBU	XLR female to XLR male general purpose
LL1584-3FXPHM	+16 dBU	XLR female to Phono male general purpose
LL1584-3FXNP2C	+16 dBU	XLR female to 2 pole 1/4" plug general purpose
LL1584-PHF3MX	+16 dBU	Phono female to XLR male general purpose
SIB15	+12 dBU	Stereo Isolation and Balancing unit (PC to Pro)

## Miscellaneous transformers

Type	Turns ratio	Usage / Comment
LL1572	110 : 110 ohms	Digital audio isolation. Replaces LL1566
LL1573	110 : 110 + 110 ohms	Digital audio split, 2 isolated out.
LL1574	110 : 75 ohms	Digital Audio AES/EBU : SPDIF interface
LL1575	1 : 1	Composite video isolation
LL1589	110 : 110 + 110 + 110 ohms	Digital audio split, 3 isolated out.
LL2410	2+2+2+2 : 1+1+1+1+1+1+1+1	General purpose 100V loudspeaker transformer
LL6702	N/A	Telephone hybrid transformer

## TRANSFORMERS FOR TUBE AMPLIFIERS AND OTHER AUDIOPHILE APPLICATIONS

### Tube amplifier output transformers

Type	Primary	Secondary	Comments
LL1620	3.3k, 6.0k or 11.5k	4, 8, 16 ohms	
LL1620CFB	3.3k, 6.0k or 11.5k	4, 8, 16 ohms	For cathode feedback 8 or 25%
LL1623	1.6k, 3.0k or 5.6k	4, 8, 16 ohms	
LL1627	650 ohms, 1.2k or 2.3k	4, 8, 16 ohms	
LL1663	5k	8 ohms	Small size
LL1664	3k	8 ohms	Small size
LL1679	2.6k, 4.5k, 9.7k	4, 8, 16 ohms	UL taps
LL1682	5.5k	5 ohms	Small size
LL1688	5.5k, 9.2k, 20.5k	4, 8, 16 ohms	Big size
LL1691	9k	8 ohms	Big size
LL1691B	18k	8 ohms	Big size
LL1693	600 ohms, 1k or 2.3k	4, 8, 16 ohms	High power
LL2735B	16k	8 ohms	For SE
LL2752	1.2k, 2.0k, 4.6k	4, 8, 16 ohms	Silver version available
LL2755	11k	8 ohms	Big size. For 813 etc.
LL2766	3k, 6k	4, 8 16 ohms	Small size
LL2768	0.68k, 1.2k, 2.7k	4, 8, 19 ohms	Big size
LL2769	4.7 k	5, 8 ohms	
LL2770B	3k	5,8 ohms	For 300B SE amplifiers
LL2785C	3k	5, 8 ohms	For SE applications
LL3720	6k	8 ohms	For SE applications
LL3723	4.3	4, 8	For PP applications
LL9202	6.5k, 11k, 23k	4, 8, 16 ohms	

Most transformers also available with **amorphous iron C-core**. Some transformers available with silver wire.

### Headphone output transformers

Type	Usage	Comment
LL2754	Solid state (low impedance) primary	For 32/50 and for 600 ohm headphones
LL2765	5k primary impedance	For 32, 150 and 600 ohms headphones
LL2774	3 k primary impedance	For 16, 64 and 300 ohms headphones

### Interstage and tube line output transformers

Type	Usage	Comment
LL1621	Non-inverting interstage transformer	
LL1630	Line output	7.2 : 1 line output
LL1635	Interstage transformer	1+1 : 1+1
LL1660	Interstage / line output transformer	2.25 + 2.25 : 1+1+1+1
LL1660Ag	Interstage / line opt transformer. Silver	2.25 + 2.25 : 1+1+1+1.
LL1660S	Interstage with phase splitting	2.25 + 2.25 : 1+1+1+1
LL1671	Interstage / line output transformer	2+2 : 1+1+1+1
LL1677	High current interstage transformer	For 300B <u>driver</u> tube.
LL1680	Line output transformer	Replacement for UTC LS-27 transformer
LL1689	Line Output Transformer	9+9 : 1+1+1+1 Line output version of LL1660
LL1689Ag	Line Output Transformer. Silver	9+9 : 1+1+1+1 Line output version of LL1660
LL1692A	Interstage / Line output transformer	1.75+1.75 : 1+1+1+1
LL2731	Line output, low impedance source	1+1 : 1 + 1
LL2745	Line output	2.8+2.8 : 1+1+1+1
LL2746	Interstage stepup	1 : 2 for two stage tube amp.
LL2747	Line output	1+1+1+1 : 2 for low impedance tubes
LL2753	Interstage SE -SE 1:1	20 – 60mA. Improved bandwidth
LL2756	Interstage SE -SE 1:1	10 -40mA . Improved bandwidth
LL2762	Interstage SE-SE 1:1	10 – 50mA, LL1660-size
LL2763	Line output	4+4 : 1+1+1+1
LL2793NC	Nanocrystalline core line output	4+4 : 1+1+1+1

Most transformers also available with **amorphous iron C-core**. Some transformers available with silver wire.

**Mains transformers, mains isolation transformers and power supply chokes**

Type	Usage	Secondaries	
LL1648	Mains transformer	350V,	2 x 5.9V + 2 x 6.6V
LL1649	Mains transformer	230V,	4 x 6.6V
LL1650	Mains transformer	350V,	4 x 6.6V
LL1651	Mains transformer	500V,	4 x 6.6V
LL1655	Mains isolation transformer	2 x 115V,	300VA total
LL1658	Mains isolation transformer	2 x 115V,	100VA total
LL1662	Mains isolation transformer with stepup/stepdown	2 x 115V	2 x 10V , 300VA total
LL1665	Mains transformer	530-0-530V,	4 x 6.6V
LL1669A	Mains transformer	340V,	110V and 4 x 6.3V
LL1683	Preamp mains transformers	250V,	48V , 2 x 6.6V and 2 x 5.2V
LL2738	Filament current mains transformer	8 x 6.6V (3A) ,	1 x 110V (0.1A)
LL2740	Mains transformer	350V,	2 x 6.6V, 2 x 5.9V, 1 x 48V
LL2741	Mains transformer	290V,	4 x 6.3V
LL2748	Mains transformer	443V,	2 x 5.4V, 2 x 6.7V
LL2749	Low voltage mains transformer	4 x 20V	
LL2758	Mains transformer	250-0-250V,	4 x 6V, 1 x 30V
LL2760	Mains isolation transformer	2 x 150-0-150V	
LL2792	Mains transformer	350-0-350V,	150V, 6.1V, 3x4.7V

**Chokes, all types**

Type	Usage	Inductance and current	
LL1638	Mains choke	1 – 8 H,	800 – 200 mA
LL1667	Anode choke	5 – 40mA,	800 – 100H
LL1668	Anode choke	10 – 60mA,	250 – 40H
LL1670	Grid choke	0.8mA,	540H
LL1673	Mains choke	8 – 20H,	250 – 100 mA
LL1685	Preamp mains choke	10 – 17H,	160 – 100 mA
LL1694	Filament current choke	1 – 4 A,	30 – 240mH
LL2733	Filament current choke	1 – 4 A,	80 – 700mH
LL2742	Power supply choke	100 – 600mA,	42 – 3H
LL2743	Anode choke	10 – 100mA,	440 – 40H
LL2751	Choke	0.5 – 2A,	200 – 25mH
LL2771	Choke	0.5 – 2A,	6 – 0.7H
LL2772	High current choke	1 – 6A,	250 – 20mH
LL2773	High current choke	2 – 10A,	160 - 16mH

**MC transformers and other audiophile type transformers**

Type	Usage	Comment
LL1674	Mic/line input transformer	1+1 : 4+4 Amorphous core
LL1676	Mic/line input transformer	1+1 : 2+2 Amorphous core
LL1678	MC input. Amorphous core	1+1+1+1 : 16 + 16
LL1681	MC input. Mu-metal core	1+1 : 13 + 13
LL1684	Audio isolation transformer.	General purpose. With amorphous core
LL1690	Line input . Amorphous core	1+1 : 1+1. Excellent for phase splitting.
LL1930	Tube preamp line output	Mu metal core. For DC decoupled output
LL1931, LL1931Ag	MC input. Amorphous core. Ag = silver	1:8, 1:16. Medium impedance cartridge
LL1933, LL1933Ag	MC input. Mu metal core. Ag = silver	1:8, 1:16 Medium impedance cartridge
LL1941, LL1941Ag	MC input. Amorphous core. Ag = silver	1:16, 1:32 Low impedance cartridge
LL1943, LL1943Ag	MC input. Mu metal core. Ag = silver	1:16, 1:32. Low impedance cartridge
LL1948, LL1948Ag	Line input, Amorphous core. Ag = silver	1+1 : 1+1 Amorphous core
LL1949	Stepdown line input	2+2 : 1+1 Cardas copper wire.
LL1961	MC input, Amorphous core	1:3.2, 1:6.4 For solid state phono stage
LL1963	MC input, Mu metal core	1:3.1, 1:6.2 For solid state phono stage
LL1971	MC input, Amorphous core	1:12, 1:24 The Swedish Compromise
LL9226	MC input. Amorphous core	1+1+1+1 : 10 + 10
LL9226XL	MC input. Amorphous core. Bigger core L9226	1+1+1+1 : 10 + 10