

47 Treasure/47 Laboratory model 0147A: Stereo Headphone Amplifier with Line Output

# Original Construction Kit

Available for all over the world with the included transformer!



White LEDs light-up inside structure through aclrylic over plate.

## **1ST DIY KIT FROM 47 LABORATORY!**

We, 47 Laboratory have found our original kit brand "47 Treasure" for world wide DIY builders. It is joy to build your own works to enjoy your favorite musics. They must be your presious treasures throughout your life.

We now prepare next DIY gears, such as power amplifier, CD transport, D/A converter, MC/MM phono equalizer preamplifier, PC digital audio interfaces and some valuable audio accessories.

Enjoy our simple structured and pure sound instruments. Only the simplest can accommodate the most complex.

SPECIFICATIONS	
POWER SUPPLY:	available for world wide!
	(AC100-120V, 200-240V)
INPUT SOURCES:	RCA pin jack (unbalanced) x3, selectable
	USB 'B' receptacle (optional)
SENSIBILITY:	max 2.0V <sub>RMS</sub> (impedance: $50k\Omega$ )
S/N:	very quiet (under measurement limit)
VOILTAGE GAIN:	about 14dB (x5.0)
FREQUENCY:	5Hz-120kHz (-3dB)
OUTPUT:	headphone jack (6.3mm standard plug)
	RCA pin jack (line pre-amplifier output)
POWER OUTPUT:	100mW or more (impedance: $16-300\Omega$ )
SIZE:	W250 x H40 x D175mm
WEIGHT:	1.8kg (without power supply cable)
OPERATION:	power switch, volume, input selector
USB-DAC (OPTIONAL):	
	USB 1.1, 32/44.1/48kHz, 16-bit
	Burr-Brown PCM2707 (self powered)

fully compliant with USB 1.1 specification.

## ALL COMPONENTS ARE INCLUDED IN ONE PACKAGE

- Rigid iron coated chassis, AC inlet, RCA pin jack
- Troid Transformer (Universal 115V/230V, 2x9V, 25VA)
- PCBs, semiconductors (matched pair) and other components
- Wires (solid copper wire, 0.4mm, 0.65mm)
- Bolts, Washers, Nuts

- High quality audio volume potentiometer (ALPS), selector switch, knobs

- AC power supply cable (47 Laboratory original)

- Step by step assembly manual with many pictures and photos, with each semiconductors technical information (CD-ROM, PDF files)



You can start construction soon to prepare basic tools as follows.

- Solder, solder iron (ca 30W)
- Screw drivers
- Nipper, Plier
- Wire stripper
- Multimeter for measurement voltages

#### FEATURES

- Very quiet (high S/N), vivid sound, real reproduction.

- All discrete design, using selected semiconductors (matched pair) .

- No IC component is used.

- No regulator IC for vivid and high speed sound with 25VA troid transformer and superfast recovery rectifiers.

- Voltage amplifier stage has minor loop NFB with JFET differential amplifier.

- Powerful output stage uses push-pull complementary inverted Darlington (so called "Sziklai pair") circuit.

- No global loop NFB to block out EMF from headphone voice coil.

- Available line pre-amplifier output from RCA pin jack.
- Most of the dynamic type headphones in the market can be driven (impedance:  $16-300\Omega$ ).

- With a hammertone finish, switch and knob produce retro and classical outlooks like antique tube amplifier. All of the future "47 Treasure" product line will be the same design.



#### HOW TO ORDER?

You can see our product information on our web shop. If you are interested in our kit version or technical questions, ask by e-mail to

## kit@47lab.co.jp

Tell us your country area. Some included parts are different depend on the power supply voltage.

#### DEVELOPMENT/MANUFACTURE/SALES

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