

47 Treasure/47 Laboratory model 0247: Stereo Preamplifier with USB Interface DAC

# Original Construction Kit

Available for all over the world with the included transformer!



# 2ND 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 all discrete design (semiconductor) power amplifier, passive selector/volume, CD transport with I<sup>2</sup>S format DA converter, MC/MM phono equalizer pre-amplifier, AM/FM tuner and some valuable audio accessories.

Enjoy our simple structured and pure sound instruments. Only the simplest can accommodate the most complex. White LEDs light-up inside structure through aclrylic over plate.

# SPECIFICATIONS

POWER SUPPLY:	available for world wide!
	(AC100-120V, 200-240V)
INPUT SOURCES:	RCA pin jack (unbalanced) x3, selectable
	USB 'B' receptacle
USB-DAC:	USB 1.1, 32/44.1/48kHz, 16-bit
	Burr-Brown PCM2707 (self powered)
	fully compliant with USB 1.1 specification.
SENSIBILITY:	max 2.0V <sub>RMS</sub> (impedance: 50kΩ)
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: 16300 $\Omega$ )
DC OUTPUT:	less than 10mV (DC zero adjustable)
SIZE:	W250 x H40 x D175mm
WEIGHT:	1.8kg (without power supply cable)
OPERATION:	power switch, volume, input selector

## 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). Currently, English and Japanese manuals are available in the same CD-ROM.

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

- Solder, solder iron (ca 30W)
- Screw drivers, screw cap wrench (1.3mm, 2.5mm)
- Nipper, Plier
- Wire stripper
- Multimeter for measurement voltages

#### FEATURES

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

- All discrete design, using made in Japan selected and matched pair complementary semiconductors .

- 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 current feedback, high speed op-amp architecture.

- 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.

- With these circuit design, extraordinary and incredible sound can be created!

- Has CR type LPF (low pass filter) to block radio frequency interference.

- 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 me your country area. Some included parts are different depend on the power supply voltage.

# DEVELOPMENT/MANUFACTURE/SALES

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