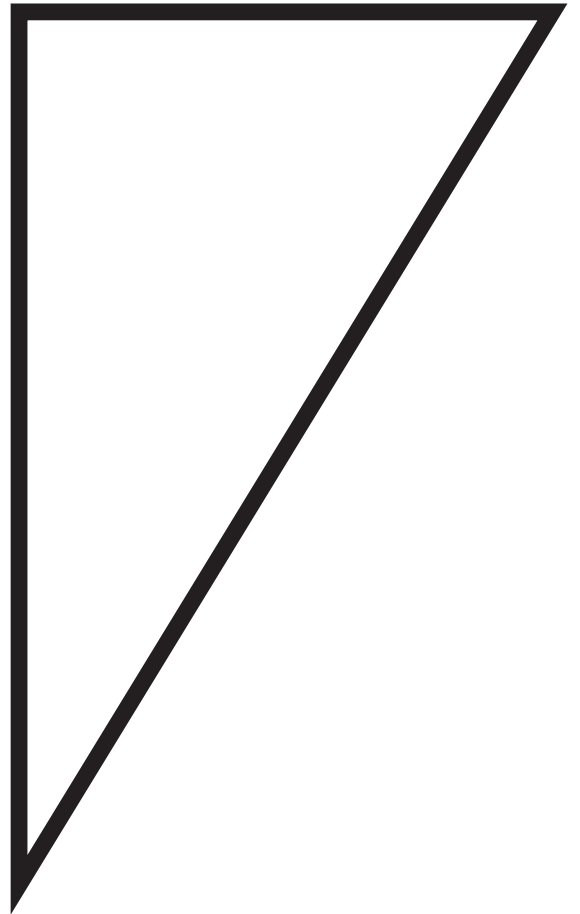


47 Laboratory



Only the simplest
can
accomodate
the most complex

Products



actual size of CD in proportion to the components



Model 4706 GAINCARD (Amplifier)



Model 4707 INPUT CHOOSER
(Selector Box)



Model 4712 PHONOCUBE
(MC Phono Equalizer)



Model 4708 OTA KIT
(Cabling System)



Model 4713 FLATFISH
(CD Transport/Player)



Model 4705 PROGRESSION
(DAC)



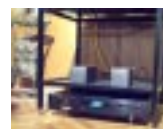
Model 4700 POWER HUMPTY
power supply for
4706 GAINCARD and
4712 PHONOCUBE



Model 4799 POWER DUMPTY
power supply for
4705 PROGRESSION and
4713 FLATFISH



MIYABI/47



Model 4715 SHIGARAKI (DAC)

Amplifier

Model 4706 GAINCARD



Model 4700
POWER HUMPTY

Features:

World's smallest number of parts - 9 parts per channel (excluding attenuators)

World's shortest signal pass length - 32 m/m (including the length of parts)

World's shortest NFB loop length - 9 m/m (including the length of the resistor)

World's smallest filter/condenser - 1000 μ F

Powerful voltage regulation with high capacity transformer - 170 VA cut-core transformer +-individual coils

Dual mono construction with each channel in a separate chassis.

Rigid and compact aluminum chassis construction to release vibrations smoothly.

Separate 12-position attenuators for each channel.

Can be up-graded into a pair of complete mono amplifiers by adding another Model 4700 POWER HUMPTY.

Specifications:

Output power: 25W+25W (8 Ohm) S Version: 50W+50W (8 Ohm)

Input impedance: 22kOhm (unbalanced only)

Attenuators: 12-steps for each channel

Output on and off switches for each channel

Dimensions: Model 4706 170(w)x40(h)x100(d)m/m

Model 4700 130(w) x195(d) m/m

To deliver the freshness of the sound

All the work that went into Model 4706 GAIN CARD and Model 4700 POWER HUMPTY was aimed at achieving this goal.

Extreme simplicity ----- minimum circuitry

The heart of sound lives in the point of contact where musician and instrument meet. To trace this point-of-contact sound wave, Model 4706 utilizes a filter/condenser with the smallest possible capacity and a minimum number of parts, and the shortest signal pass length ever. All the parts (except attenuators) are mounted on a circuit board measuring 45 x 30 m/m per channel.

Powerful voltage regulation

If energy supply depends on the capacity of filter/condensers, you can easily lose the freshness of sound. The high capacity transformer of Model 4700 (170 VA) regulates enough energy to support the extremely small filter/condenser (1000 F) of Model 4706, enabling it to trace avalanches of fff.

True values of NFB

Today's amplifier design trend tends to eliminate the use of NFB in circuitry. However, for those speakers with long strokes, NFB is still an effective device. But the length of NFB loop creates a time delay between the original and the return signals and allows noises to enter. To take full advantage of NFB, we shortened the length of the feedback loop on Model 4706 to 9m/m, which includes the length of the resistor. We achieved this breakthrough by utilizing power IC and intricate point-to-point hand wiring.

Rigid and compact chassis structure

The Model 4706 chassis is constructed from two tubular aluminum frames (40 x 80 m/m section) and front and rear panels of 10m/m thick machined aluminum plate. Each left and right channel circuit is encased in a separate chassis to eliminate interference between them and to achieve dual mono structure. Model 4700's chassis is also made out of 130 m/m aluminum tube and has 10 m/m thick front and rear machined aluminum panels. Both models contain no damping materials at all.

compatibility:

Most of commercially available speakers. Unless you have a very large listening room and inefficient speakers, GAINCARD can drive most of the speakers to a satisfying sound level without strain. Often people do not believe that it is actually 25W/25W.

You can also use GAINCARD with any pre-amplifier if you choose to do so.

Selector Box



Model 4707 INPUT CHOOSER

Features:

Complete mono structure with each channel encased in a separate chassis.

Rigid and compact aluminum chassis construction to ensure quick and smooth release of vibrations.

Separate grounding for each position.

Point-to-point hand wiring with 0.4 m/m solid OFC copper wire.

Specifications:

Input: 4 positions, unbalanced

Output: 2 pairs, unbalanced

Dimensions: 170(w) x 40 (h) x100(d) m/m

compatibility:

Any associated components with RCA connectors.

MIYABI/47



MIYABI / 47

Features:

Many of today's high-end cartridges beautifully trace the contour of the images, yet hardly succeed to present the content of that image which is the energy of the musician itself. Legendary MIYABI designer, Mr. Haruo Takeda and 47Lab collaborated on MIYABI/47 project to reproduce this concentration of energy which is the life of music. Instead of a long and thin cantilever tracing the groove, MIYABI/47's rather bold aluminum alloy cantilever holds all the resonant energy inside and pours them into the phono-equalizer. It is a true rare breed and hardly seen in the current high-end market.

Specifications

- Stylus: Line Contact
- Cantilever: Special aluminum Alloy
- Magnet: Alnico Magnet
- Coil Material: Copper
- Output Voltage: 0.3mV
- Internal Impedance; 2 ohm
- Recommended Tracking Force: 2 gm

To communicate the wealth of vinyl

LP playback is fascinating in its rich presence and freshness of the sound. It quietly demonstrates superiority of its logical simplicity. However, we are not satisfied with the sound of today's LP playback systems; most of them sound too neat and clean, even tasteless, like distilled water.

With 'PHONO CUBE', our intention is to enhance the richness of LP sound, and differentiate it even more from the sound of a CD.

The sound that 'PHONO CUBE' creates is the target for our DA converter and CD transport, which will be launched in the very near future.

Input impedance 0

Most of currently available phono equalizers are designed to amplify the voltage that appears at both ends of a resistor when a current generated by the cartridge is carried to the ground through this resistor. Our 'PHONO CUBE' has a unique and original circuitry (with input impedance of 0), which enables all of the current generated by the cartridge to flow directly into the amplifying circuit.

Unique equalizing circuit with advantages of both NF and CR types

Although NF type circuitry is known for its high S/N ratio, a rise in the high frequency is always inevitable. The unique equalizing circuit of 'PHONO CUBE' allows the same level of high S/N ratio while maintaining the smooth and accurate equalizing character of the CR type.

Extreme simplicity --- minimum circuitry

To preserve the freshness of the sound, we reduced the number of parts as much as possible, 25 per channel, and achieved the shortest signal pass length ever (44 m/m).

Rigid and compact chassis construction

The chassis of 'PHONO CUBE' is constructed from two aluminum tubular frames (40 x 80 m/m section) and front and rear panels of 10 m/m thick machined aluminum. Each circuit of left and right channels is encased in a separate chassis to eliminate interference between them and to achieve ideal dual mono structure. The chassis of Model 4700 POWER HUMPTY is made out of a 130 f m/m aluminum tube and 10 m/m thick front and rear machined aluminum panels.

compatibility:

Most of MC cartridges available in the current market, except the ones with an extremely small output level (Dennon 103 series, etc.). Please ask for high gain version for those cartridges. Its gain is set at 75db. Since it is a current amplification device with 0 ohm input impedance, output level is determined by the output amperage of the cartridge (output voltage divided by internal impedance).

CD Transport/Player



Model 4713 FLATFISH



Specifications

Digital output: 2 Coaxial (RCA) outputs

Analog output: 1 Unbalanced (RCA) output

Dimensions: Model 4713 170(w)x60(h)x245(d)m/m Model 4799 130()x195(d)m/m

Features

Full-hard-suspention system

The platform/casing of FLATFISH is a 2/3 inch thick, machined aluminum board. All the driving mechanisms, pick-up mechanisms and the circuits are directly mounted on this one piece of aluminum board. The huge difference between the mass of the mechanisms and that of the platform (150g against 1200g) enables to cut off the vibrations caused by the slight off-centering of the disks and the tracing mechanisms returning to the bit-tracing lens itself, allowing us to minimize the amount of servo control dramatically. This rigid and compact structure of the platform has a very small surface area to receive the vibrations, and its large mass helps to reduce the vibrations smoothly and effectively without any extra damping or suspensions. As a result, storage of vibration energy was minimized, letting us achieve a refreshingly quick transient response. Compared to the conventional box-type chassis/casings, this platform is almost completely free from any stress of construction. Now, you can hear how much harmony and bottom-end information was obscured under those mechanical stresses.

An extremely simple digital output circuitry to release the digital signals from any stress

Model 4799 POWER DUMPTY, a capable 120VA power supply

One POWER DUMPTY can power up both FLATFISH and PROGRESSION DAC at the same time.

4xoversampling, 1bit DAC on board

FLATFISH contains its own 1bit DAC with it. You can start your digital front end with FLATFISH as a CDplayer and up-grade it by just adding PROGRESSION unit without another power supply.

DAC



Model 4705
PROGRESSION



Model 4799
POWER DUMPTY

Features:

Non-Oversampling, No digital filter

No analog filter

World's shortest signal pass length 35mm

World's smallest number of parts 20 parts

Two piece chassis/casting made out of machined aluminum block

Specifications:

Input sampling frequency: 32kH, 44kH, 48kH (selected automatically)

Output voltage: 2.1V

Digital input: 1 Coaxial

Analog output: 1 pair, Unbalanced

Dimensions: Model 4705 60(w)x70(h)x162(d) m/m

Model 4799 130()x195(d) m/m

To Experience the True Possibility of 16bit/44.1kHz Format

Non-Oversampling, Digital-filterless DAC

Non-Oversampling DAC concept was first proposed by Ryohei Kusunoki in late 1966. In recent interview, he states that "the issue is not either it is Non-Oversampling or Higher-rate-sampling, but the use of the digital filter can cause smearing in the time domain." We can confirm this smearing effect on the sound caused by the use of digital filter rather easily through listening experiments. This leads us to believe that the current problem with CD is not the limitation of 16bit/44.1kHz format, but the use of the digital filter which is preventing us to experience the true possibilities and the limitations of 16bit/44.1kHz format. The sound of PROGRESSION is enough to prove this matter.

Passive I/V conversion

In PROGRESSION, I/V conversion is handled by a passive device instead of an active one. The result is a superb transient response without any over-shooting, and still maintains the output voltage of 2.1V.

World's shortest signal pass length and smallest number of parts

Our design priority, "Shorter the signal pass length, smaller the number of parts, better the sound" is most effective on digital components. The signal pass length of PROGRESSION is 35m/m (including the length of parts), and the number of parts is 20. We are especially proud of achieving such a short signal pass length. We believe this defines the limit of short signal pass length on any production-model DAC.

2 piece machined aluminum-block chassis/casing

Chassis/casing of PROGRESSION is machined out of 2 pieces of solid aluminum block. The thick aluminum chassis/casing prevents the dispersion of digital noise and the use of only three screws in construction reduces the amount of stress on the chassis dramatically. These construction qualities all contribute to the quick transient response, totally stable imaging and the flat energy balance of the sound. The curved design of the top and bottom casing is no gimmick either. It holds a function as spike feet to release the vibrations smoothly and stabilize itself without any insulators underneath.

POWER DUMPTY to drive PROGRESSION with enough capacity

POWER DUMPTY, a brother of POWER HUMPTY, contains 120VA cut-core transformer, which has a capacity of 200VA, giving extra support to the deep, dimensional sound of PROGRESSION. It can also supply the power to our upcoming Model 4713 FLATFISH CD transport at the same time with the DAC. The user of PROGRESSION can make a complete CD player system by adding just the transport without extra power supply.

compatibility:

Any CDtransport/player with unbalanced digital output and any pre-amplifier/amplifier with unbalanced inputs.

Since it does not have any digital/analog filters, there is an energy concentration of about 1/3 of the operating musical power at around 22kHz where the return noise situates. In case your speaker has exotic tweeters(ribbon, piezzo, etc.) which extend far beyond 20kHz, check the tweeter's power handling capacity and the amplifier's power rating. If your amplifier's power rating exceeds far more than tweeter's power handling capacity, there is a possibility that the tweeters can be damaged at certain sound level. Please contact your dealer or SAKURA SYSTEMS before you connect PROGRESSION into your system if you have any concerns on this matter.

DAC



Model 4715 Shigarakhi

Features:

Non-Oversampling, No digital filter

No analog filter

Ceramic casing

Specifications:

Input sampling frequency: 32kHz, 44kHz, 48kHz (selected automatically)

Output voltage: 2.1V

Digital input: 1 Coaxial

Analog output: 1 pair, Unbalanced

Dimensions: Model 4715 100(w)x100(h)x100(d) m/m
100(w)x100(h)x100(d) m/m

Non-Oversampling, Digital-filterless DAC

Shiragaki employs the same basic principles that were successfully employed in our flagship DAC PROGRESSION.

Passive I/V conversion

In SHIGARAKI, the same as in PROGRESSION, I/V conversion is handled by a passive device instead of an active one. The result is a superb transient response without any over-shooting, and still maintains the output voltage of 2.1V.

Ceramic casing

Shiragaki employs ceramics for the casing as the result of painstaking search for a moderate cost solution that will not deteriorate the sonics of the unit, yet enable 47Laboratory to offer a product for audiophiles who strive for the best yet that can't afford Progression 4705 DAC.

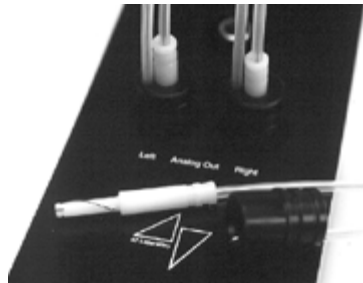
Not only that ceramic casing adds to unusual yet beautiful aesthetics of SHIRAGAKI, it also provides for very good mechanical energy dissipation.

Power Supply included

Simplified version of Power Dumpty in a separate ceramic housing of the same design is included with SHIGARAKI, making it a complete, probably the best and the most cost effective upgrade for your existing digital front end.

Cabling System

Model 4703 OTA KIT



Contents:

0.4 mm OFC copper wire 'STORATOS' ----- 50m
THE PLUG (set of machined soft plastic RCA plugs)
Manual

Features:

THE PLUG

How can we connect the cables directly to the connectors without letting the current go through solders brass and platings? Our answer is two piece machined soft plastic plugs. These plugs deliver the least colorations and the fastest speed.

STORATOS

Newly designed solid-core copper wire. Sufficiently thin solid-core single strand wire without plating. These are the necessary and sufficient requirements for a conductor suitable for audio cables. In other words, other characteristics do not matter. The wire used for 'STORATOS' is a single strand of 0.4 m/mf solid-core OFC copper wire. In combination with light and flexible tubing, this cable has a sensitive response to the rise and fall of signals, with uniform, even speed from the bottom end to the top end of audio frequency.

Outstanding cost/performance ratio

With this kit, you can make interconnects and speaker cables for whatever the length that suites your system. All you need is a pair of scissors and tweezers.

compatibility:

As an interconnect cable, with any components with RCA connectors. As speaker cables, between any amplifiers and speakers.

Do not use them as power cords!