

STEREO POWER AMPLIFIER M-8f

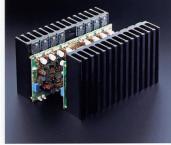


# The exciting force feeling and beautifully lingering charm. Power crowned with "f" meaning supremacy.

The power of sound that pursues the boom of music full of passion and could reach everywhere. The essence of M-8f is to supply a grandeur music feeling which could bring a overwhelming scale as large as  $250W+250W/8\Omega$  of effective output stereo and a instantaneous maximum output of 1KW/2  $\Omega$ . But the output scale of power amplifier is not only for increasing the volume. The real value of M-8f also lies in its power quality that could guarantee the tiny nuance hidden in the background of music be felt in case of small sound volume. With the installing of innovative ODNF circuit, the expression power of music is marching to a new field. It is an unparalleled power amplifier which could obtain broader dynamic range of new generation's sources, as well as could extremely tap the potential of overall speakers.

### The drivability with a boundless big output capacity as large as 250W+250W

The boundless driving ability of M-8f could be felt in its overwhelming reproduction power of full orchestra at the climax, as well as in the aesthetic feeling of lingering charm when silence reigns supreme The effective output stereo is  $250W+250W/8\Omega,~BTL$  monaural,  $750W/8\Omega,~still,~the instantaneous maximum output is 1KW when the impedance is <math display="inline">2\Omega$  It is not only a boast about the power scale, but also achieved a high-grade reproduction of the music



Heat sink and power block

#### The innovative ODNF circuit intimate to the life of music

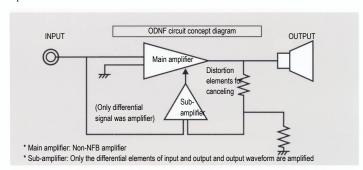
The colorful sound of violin and grand sound color of viola are melted in the ensemble of rich stringed music. Only by clearly distinguishing the existence feeling of varieties of music instruments, could the rich music interests be gained. In freshly reproducing the nuance of each sound, the speed of initial slewing rate which could catch the instant when the sound being generated is pursued. In addition, for gaining the reproduction of more natural music, it is necessary to realize the smooth connection unified the sound colors in the overall bands from low end to the high end. This is the ODNF circuit that pursues the high-level music reproduction and was developed by fundamentally restudying the relations between music signal and the distortion.

Luxman has, first of all, developed the super-broad band, high slewing rate, lower distortion circuit which needs no phase correction because of the amplification circuit of music signal. Thus the phase correction that could not be avoided in the former negative feed back circuit was cancelled. In addition, the attention was paid to the existence of NFB. For eliminating the distortion occurred to music signal, the NFB method so far has brought the limit of band and the shortage of music information volume. Here, only the distorted elements from output are fed back to the final section of amplification.

circuit, and only the distorted elements are removed form the waveform of output By

separating the NFB method from the music signal, the high speed of initial slewing rate at the moment when sound

was instantaneously generated and a super-broad band could be gained Furthermore, the DC servo amplifier used for the super-lower band control which has become the factor offering non-natural coloration to the lower band in NFB circuit was removed. Thus, the reproduction of natural music unified the sound colors in the whole bands could be realized.



#### The high inertia power source excitedly responding to the instant sound

Enjoying the orchestral music of R Strauss is like something enjoying the dazzled drama of sounds. The earth-shaking great sound lasts for only a moment, then falls into the delicate quietness. Here comes out the high inertia power source born from the idea of creating a power source highlighting the ever-changing dynamism than any other things. The ordinary method conducting control over the power supply for matching to the music signal has become a delay control lagging behind the real time music, and become the factor blocking the leaping felling of music. The special electrolytic condenser with the excellent instantaneous discharge feature was built in the high inertia power source. By keeping the sufficient energy in power source, the delay control was kept to the minimum extent. The high inertia power source supplying energy for meeting the rising and falling of the instantaneous sound could release the lively life feeling of music as it was





Internal structure adopting box separating construction

### The power source part supporting the powerful power scale and with sufficient capacity

The music has become a drama with its sound not stopping even in the twinkling of an eye From the fever at the beginning to the quietness of connecting part, the necessary power supply volume for the amplification of signal should be usually kept stable, and the instant requirements should also be met at real time The power source of M-8f could get the supply capability following the dynamism of the music by integrating large-scale electrolytic condensers of  $22,000\mu F$  X 2 with the large-scale power transistor equipped with independent 4-wound wire with a large capacity of 800VA



Large-scale block condenser (22,000  $\mu F~{\rm X}~2)$ 



Independent 4 wound wire 800VA large-scale power transistor

### The countermeasure for completely eliminating noise and thoroughly protecting the pure and stainless sound.

It is a high rigidity and box-separating construction by adopting various countermeasures against noise and un-wanted vibration. With the 5-points earthing FRP chassis base which has an excellent mode of absorbed oscillation as the foundation, the parts are firmly fixed on the thick chassis, the case body construction at heavyweight level keeping off the vibration noise was obtained. In addition, by taking the layout without direct interference with each other of the power transistor, chemical condenser, amplifier block, and the separating of these blocks with shield plates, as well as the strengthening of internal filter, the flux and the interference of noise are cut down.

### The special custom-made parts group provided by Luxman is a "must" (product) for improving sound quality.

In the music, there hides a life of sound which was not yet heard by the

ears of human Based on this confidence, for completely exploring the music information hided in the source. Luxman has been

dedicating itself to the improvement of the reproduction at tiny level by adopting of custom-made parts. And the data and performance achieved through the development of high sound quality parts by years' efforts has given birth to the Luxman special custom-made parts. For making good resistor, the studies on the varieties of materials and methods from the selection of alumina used as the porcelain material, to etching, carbonization, terminal material, terminal shape, press-in method, etc. should be carried out on the basis of carbon film resistor with excellent sound effects. For rapidly increasing the transferring volume of information, the special resistor which could reproduce the music with rich expression was adopted. In addition, the custom-made parts filled with dedication to the high level technology and sensibility headed by power transistor, followed by electrolytic condenser, copper

styrol condenser, copper-made bus bar, high purity cable, etc are adopted In the fields of custom-made parts group that could be said the exclusive kingdom of Luxman, you could enjoy all the sensibility shown by Luxman on audio

#### The large-scale of power meter with more efforts being poured into the illuminant color was built in.

The logarithmic compression display method that could read the digits easily was adopted in the power display meter in the size of large-scale  $120 \times 100 \text{mm}$  Acryl thickness is 10 mm The efforts are also put into the illuminant color and illumination effect of brand log, so the high-grade audio space could be put into operation Still, the action of meters and the illumination are attached with the On/Off functions

#### The attenuators for changing input level of fixed resistors and the colorful input/output terminals

The independent left and right attenuators decided by the changing method of 6-point fixed resistor for matching to the balance/unbalanced situations are installed in input part So it could carry out the control at input level without exerting any influence on the sound quality Furthermore, under the consideration of the easy-of-use when integrating with other types of machines, the reference position which could pick up 100W output when the input was 1V was set up. In addition, except installing the 2 systems of balance terminal and RCA terminal at the input terminals, the high-grade and large-scale independently-developed speaker terminal

matching to the banana terminal was built in at the speaker's terminal



Input attenuator equipped with reference position



The large-scale speaker terminal matching to banana lug

#### The inexpugnable modeling beauty and high grade finish

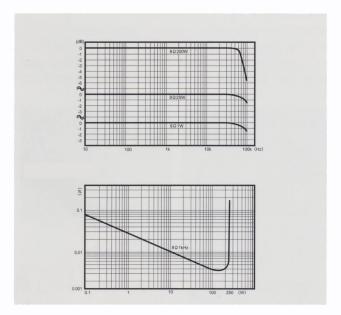
It is a forum so intimate to the colorful music space. Audio amplifier is pursuing such dignified beauty. The symmetrical design was adopted in C-8f for removing the surplus performances. It is a slim and clean front panel. The precise hair line processing that reflecting the grade of the articles of everyday use could give you a legend of the high processing level in the internal mechanical part.

## **LUXMAN**

#### STEREO POWER AMPLIFIER M-8f







M-8f SPECIFICATIONS