

**FONEl** 

e-mail: [info@fonel-audio.de](mailto:info@fonel-audio.de)  
[www.fonel.de](http://www.fonel.de)





## **FONEL - electronics for those who can listen!**

**Fonel - Audio GmbH** develops, with great attention and love, electronics for those who are not just searching for anything special but are able to hear that special and appreciate it.

To say that we produce the best things at the market would be easy but very subjective, at the same time – it's, indeed, the fact that parents believe their children to be the best. It is very much so that there's somebody who won't like our electronics. The only thing we can say with certainty in such a case: "Before giving an appraisal it is necessary to compare nevertheless, and only then to make up conclusions, deferring to your own ear!"

We all hear rather differently, everyone has own culture of listening and own preferences in music. As a result, it is just enjoyment from purity and correctness of music sounding that is decisive both at an 'alive' concert and at listening to a recording! Just for that we put our knowledge and craftsmanship into developing devices that allow to get maximum pleasure during listening to music. The devices, which are able to convey not only the sound but emotions as well, and, in the end, to create true atmosphere. These are our objectives.

We reach those objectives at the expense of: elaborate circuit technique, laboriously selected components, high-quality processing. Numerous patents, copyrights on circuit technique and design, the results of independent testing and prize-winning places in reference class, got by our products are the evidence of that.

### **But there is another principal peculiarity of our products we want to tell our admirers about:**

– Every living creature vibrates and reacts to vibrations. Sound oscillations, and that was experimentally proved, can exert both negative and beneficial influence upon organisms. Pure and harmonious sound with comfort loudness favours our health, strengthens our nervous system. Our forefathers, who left us a lot of various musical instruments as heritage, knew about that very well. And, on the contrary, 'dirty' and especially loud sound destroys. Electronic sound devices do not reproduce 'living' sound – they just mechanically convert a sound signal with this or that accuracy. And that is why it does not assist in sanitation, at the best. We spent long fourteen years on realization of this hopeless, as it should seem idea – to create devices able to reproduce 'living' sound after all. As a result, we have succeeded in it! And our customers, as a rule, hear that. Therefore, our devices do not only clearly and harmoniously reproduce a sound, but they help supporters of healthy way of life to keep their health and longevity.



#### Technical Parameters

Inputs :	
RCA	3
XLR	1
Connection of acoustic pairs	2
Headphones connection	1
Output power	2x25W
THD :	< 0.02%
at P <sub>nom</sub> ,	
at P=1 W,	< 0.005%
Consumed power	<150W
Signal-to-noise ratio	-98 dB
Input resistance	47 kOm
Supply voltage	230/115 V, 50-60 Hz
Dimensions	430 x 132 x 432 mm
Weight	29,2 kg

## Hybrid tube and transistor amplifier of Class A Fonel “Emotion”

### Tsunami of Emotions!

This amplifier, in spite of its relatively small output power 2 x 25W, is able to «stir up» any acoustic systems with normal sensibility, to convey, using the poetic language, lightness of a butterfly's wing wave as well as a tsunami of emotions, and to ensure the sufficient loudness, acceptable in a dwelling, at that.

A very high definition, lightness and airiness of high frequencies combined with lively medium ones and soft but saturated and controlled bass turn any listening into audiophilic delight.

#### Features of engineering solutions, realized in Fonel “Emotion” class A:

- usage of original circuits, working in Class A, without common negative feedback; usage of high-quality components only;
- a relay with gold-plated leads in the switching unit;
- a power source of high stability with a toroidal transformer;
- multilevel protection system, providing overload protection of acoustic systems and the amplifier; remote control and control keys on the front panel;
- adjusted brightness of indication elements;
- an opportunity of connecting two pairs of acoustic systems, headphones;
- a special antiresonance case design;
- multilayer varnish coating and hand-made polishing.

Ornamental elements of the construction, as remote controllers, are made of natural wood of high quality and a customer may choose of three standard variants: ash, mahogany, walnut. The version in black piano-lacquer and other types of wood is made to special orders.





## Stereo amplifier with the power 300 W/channel - Fonel „Emotion” Class AB

### Power & Accuracy

Much can be achieved with the help of charm, keen mind and kind force. Such is our amplifier – it combines the high output power, sounding transparency without any hint of abruptness, and high reliability.

Its parameters permit it to be an ideal partner for any acoustic systems.

### Features of engineering solutions, realized in Fonel Emotion class AB Fonel “Emotion” класс AB :

- the amplifier circuit is executed on the principal of 'double mono'; the bipolar amplifier prestage works in Class A;
- the output stage is executed on matched pares of MOSFET transistors, providing essentially expanded range of line work, lesser distortion, and in some parameters of their capabilities are very close to tubes;
- original stages circuit design, using the best qualities of the transistors of both types successfully, allows to get high linearity and stability of amplifier work; massive heatsinks with big gills ensure effective heat removal even during continuous amplifier's work at maximum capacity;
- usage of high-quality components only;
- relays with gold-plated leads in the commutation channel;
- a powerful toroidal transformer with reduced active resistance and fully insulated windings of both channels from the firm «NORATEL». It is designed by Fonel specially for the circuit 'double mono' ;
- multilevel protection system provides overload protection of acoustic systems and the amplifier;
- an opportunity of controlling the amplifier with remote controller or buttons on the front panel;
- adjusted brightness of indication elements;
- an opportunity of connecting two pairs of acoustic systems and headphones; a special antiresonance case design;
- multilayer varnish coating and hand-made polishing;
- the amplifier retains its performance specifications and high quality of sound at the load resistance drop to 2 Ohm.

### Technical Characteristics

Frequency Range	5-100000 Hz
Output power (Pnom)	up to 300W/ channel
THD at Pnom, no more than	0.005%
at P=1 W, no more than	0.001%
Consumed power, no more than	750 W
Input resistance	47 kOhm
<b>Inputs:</b>	
RCA	3
XLR	1
Connection of acoustic pairs	2
Headphones connection	1
Supply voltage	230/115 V, 50-60 Hz
Dimensions	430 x 132 x 432 mm
Weight	33,4 kg

FONEL





### Technical Characteristics

Output power, Class A  
Frequency Range  
Inputs:  
XLR  
RCA  
Sensitivity adjustment, levels  
Supply voltage  
Dimensions  
Weight

90 W/45 W (4 Ohm/8 Ohm)  
5-100 000 Hz  
1  
1  
3  
230/115 V, 50-60 Hz  
430 x 132 x 432 mm  
32,4 kg / piece

### Class A "Royal"-hybrid mono-power amplifiers

**Better all expectations!**



The factory tests of the new mono-power amplifiers FONEL Class A shown that quality of their sounding is better than all our expectations and better than we anywhere can listen. There are: accuracy, detailing, lightness, power, emotions, harmony, and depth of sound and scenes- all this in the mono-power amplifiers **FONEL class A "Royal"**.

#### Features of engineering solutions, realized in mono-power amplifiers FONEL class A "Royal":

- original hybrid tube-transistor construction, working in Class A, without common negative feedback;
- stabilized high power source with a toroidal transformer;
- sensitivity adjustment;
- multilevel protection system, providing overload protection of acoustic systems and amplifiers;
- FONEL-Link function;
- brightness adjusted of indication;
- usage of high-quality components only;
- antiresonance case construction;
- multilayer varnish coating and hand-made polishing.

Ornamental elements of the construction made from natural high quality wood in three standard versions: ash, mahogany and walnut. Piano-black version and others made by special orders.



## Integrated hybrid stereo amplifier in class A

- with 5.1 Home Cinema inputs/outputs and 192 kHz/ 24 bit DAC **FONEL „Integra“**  
**Many-sided talent – the only one of its kind**

The integrated amplifier **FONEL „Integra“** combines unique solutions, many of which have never before been used in any amplifier:

- hybrid tube-and-semiconductor construction with output stages, working in the pure class A;
- tone and balance controls and built-in MM/MC phono-preamplifier, made on the basis of **unique tube triodes-nuvistors**;
- the interface of own design **FONEL-Link**, which, combined with the control circuit, gives a possibility of efficient use of **«Integra»** combined with three-way amplifier **„Trinité“**, in cinema and multi-channel audio-video systems 5.1;
- DAC-input, similar to the one used in the **CD-Player FONEL „Simplicité“** that was given **Fairadio -«AWARD 2008»** for its peerless sounding;
- 1 digital USB inputs, asynchronous.

**FONEL- „Integra“ enables its owner to create an audio-video system of the highest quality and , at the same time:**

- 1)to do without buying a separate cinema system; to use the advantages, the best opportunities of available components and various data formats: during listening to stereo and multi-channel music, viewing concerts and movies;
- 2)to connect to the amplifier various external digital devices, for example: CD-players, CD-transports, docking stations of «iPod» type, computers and to get, meanwhile, splendid sounding due to usage of high-quality DAC;
- 3)6 special RCA-inputs permit to connect different 5.1 sources to the amplifier, for instance: DVD-players, surrounding sound processors for creating a 5.1 system with a splendid dynamic sound.

### Technical Parameters

#### Analog inputs:

RCA  
3  
XLR  
MM/MC RIAA RCA  
THEATER RCA 5.1  
TAPE

#### Digital inputs :

S/PDIF  
TOSLINK  
USB, asynchronous

#### Outputs:

PREOUT  
REC

THEATER RCA

Connection of acoustics pairs

Headphones

Output power

THD : at Pnom,

at P=1 W,

Power consumption

Signal-to-noise ratio

Input resistance

Line voltage

Dimensions

Weight

4

2

1

2 x 25W

< 0.02%

< 0.005%

<150W

- 98 dB

47 kOm

230/115 V, 50-60 Hz

430 x132 x 432 mm

33,2 kg

Features of engineering solutions, realized in FONEL- „Integra“:

- a possibility of work with a wide range of digital sound signal sources, having discretization frequency up to **192 kHz**,
- an adaptive power source,
- microprocessor operating all operation modes of the amplifier, protection and commutation,
- XLR, RCA inputs and outputs, USB inputs,
- remote control,
- usage of gold-plated relays in the commutation channel,
- usage of separate toroidal transformers for analogue and digital circuits, control schemes,
- multilevel protection system,
- RF-filter in the input switch and the system of AC network interference filtration,
- possibility of connecting two pairs of acoustic systems, headphones,
- the amplifier case is made of steel no less than 3 mm, what provides improved shielding of electronic components, reliable damping and minimization of mechanical resonance.

Standard version of wooden panels: ash, mahogany, walnut. Black piano-lacquer and other types of wood are performed to order.

A remote control in a case perfectly made of wood. Multilayer lacquering and hand-made polishing.



## Three channel hybrid power amplifier Class A FONEL „Trinité“

### Top-class sound in 5.1 and 2.1 systems

Viewing films at home has its advantages and conveniences. At that, an enormous role in creating really exciting atmosphere of cinema is played by the high sound quality. Very often, it occurs that it is necessary to use a subwoofer in addition to the available acoustic systems in order to get stereo sound of really high quality.

To satisfy good sound connoisseurs' high demands of 5.1 and 2.1 systems, we have created three-channel amplifier **FONEL «Trinité»**, supplementing the line of amplifiers **Class A «Emotion»** and **«Integra»** and having 3 Class A amplifying channels, equal in their parameters and made according to the hybrid TUBE-MOSFET technology, standard for this line of amplifiers.

It perfectly combines with the integrated amplifier **FONEL «Integra»**, helping create a multichannel 5.1 audio-video system. **«Trinité»** is connected to the integrated amplifier through **FONEL-Link** interface and switched on automatically as soon as a source of 5-channel (5.1) sound is selected. At that, adjustment of signal level of all six channels is carried out by the integrated amplifier **«Integra»**.

As a separate power amplifier **«Trinité»** will successfully secure the functioning of 2.1 system (stereo speakers system + passive subwoofer) or front speakers + center speaker.

#### Features of engineering solutions, realized in FONEL «Trinité»:

- microprocessor controlling of the amplifier operating modes, protection and commutation,
- remote control, when **FONEL/Link** interface is used together with the amplifier integrated **«Integra»**,
- stabilized supply sourcei with toroidal transformers,
- multi-level protection system,
- special anti-resonance design of the case,
- multilayer varnish coating and hand-made polishing.



#### Technical Parameters

Analog inputs	3
RCA	3
Outputs: for loudspeakers	3 x 25W
output power	
THD :	
at Pnom,	< 0.02%
at P=1 W,	< 0.005%
Power consumption	<360W
Signal-to-noise ratio	-98 dB
Input resistance	47 kOm
Line voltage	230/115 V, 50-60 Hz
Dimensions	430 x 132 x 432 mm
Weight	35,2 kg

FONEL



## CD-player with audio-volume control FONEL "Simplicité"

### Everything brilliant is simple

**CD-player FONEL "Simplicité"** is the holder of **Fairaudio-Award 2008**. It does not only plays the audio-information, recorded on a CD, back extremely exactly, but allows to build a system, blameless in its sounding quality, with minimum number of included devices, via direct connection with power amplifier input or to active acoustic systems.

#### Features of engineering solutions, realized in Fonel "Simplicité":

- usage of high quality 24-bit DAC, combined with a clock-generator of own design, unique in its exactness;
- a fully balanced circuit of signal passage;
- presence of adjusted balanced XLR and non-balanced RCA outputs;
  - buffer storage device of digital information of large capacity, allowing to perform a prior read-out of information, its comparison with the original, its correction and error-free propagation to the output cascades;
- software update support;
- usage of a large graphical display with a clear imaging and information, well-read even from a long distance;
- an opportunity of adjusting the display brightness or its complete cutoff, for more comfort listening;
- multilayer varnish coating and hand-made polishing.

Ornamental elements of the construction, as remote controllers, are made of natural wood of high quality and a customer may choose of three standard variants: ash, mahogany, walnut. The version in black piano-lacquer and other types of wood is made to special orders.

### Technical Parameters

Frequency range	20...20 000 Hz
Signal-to-noise ratio	>95 dB
Outputs	RCA, XLR, optical, S/PDIF
Volume control	0...80 dB
Supply voltage	230/115 V, 50-60 Hz
Dimensions	420 x 335 x 89 mm
Weight	15,6 kg

FONEL





## CD player with audio-volume control and tube output - FONEL „Simplicité ” Tube

### Just Brilliant

Due to the usage of tube output stage, in the version **CD-player FONEL "Simplicité" – Tube** the necessity of usage of operational amplifiers and tight feedback has fallen away. As a result of such solution, the sounding of recordings became more natural, dynamic and colourful.

The functional equipment of **"Simplicité" – Tube** gives an opportunity to build a system, blameless in its sounding quality, with minimum number of included devices, via direct connection with power amplifier input or to active acoustic systems.

#### Features of engineering solutions, realized in FoneL "Simplicité" – Tube:

- usage of high quality 24-bit DAC, combined with a clock-generator of own design, unique in its exactness;
- signal injection from DAC straight to the tube output stage, implemented of 3 double triodes;
- a fully balanced circuit of signal passage;
- presence of adjusted balanced XLR and non-balanced RCA outputs;
  - buffer storage device of digital information of large capacity, allowing to perform a prior read-out of information, its comparison with the original, its correction and error-free propagation to the output cascades;
- software update support;
  - usage of a large graphical display with a clear imaging and information, well-read even from a long distance;
  - an opportunity of adjusting the display brightness or its complete cutoff, for more comfort listening;
- multilayer varnish coating and hand-made polishing.

#### Technical Parameters

Tube output cascade	3 double triodes
Frequency range	20...20 000 Hz
Signal-to-noise ratio	>94 dB
Outputs	RCA, XLR, optical, S/PDIF
Volume control	0...80 dB
Supply voltage	230/115 V, 50-60 Hz
Dimensions	420 x 390 x 89 mm
Weight	20 kg

**FONEL** 



## CD player + preamplifier + DAC in one case - FONEŁ „Simplicité plus“

### One for All!

«**Simplicité plus**» – is a preamplifier and a high-quality CD-player at the same time.

The design of the CD-player section in "**Simplicité plus**" is a complete analogue of the **CD-player «Simplicité»**, the holder of Award 2008 from Faraudio, known to experts with its exclusive sounding; and the section of preamplifier is a separate functional module embedded into the same case, with extra RCA, XLR, digital, Optical and USB inputs. It allows to use „**Simplicité plus**” as the preamplifier for analogue sources and as high-quality external DAC also. And to connect various computer sources with the USB input.

«**Simplicité plus**» allows to create audio-systems with minimum number of included devices, since you will be able to connect any extra sources to it, and the preamplifier itself – directly to the power amplifier or to active acoustic systems, ensuring their excellent sounding.

«**Simplicité plus**» is equipped with a convenient information display and a remote control device.

Ornamental elements of the construction, as remote controllers, are made of natural wood of high quality and a customer may choose of three standard variants: ash, mahogany, walnut. The version in black piano-lacquer and other types of wood is made to special orders.

### Technical Parameters

<b>Pre-amplifier inputs:</b>	
RCA	1
XLR	1
Optical	1
S/PDIF	1
USB	1
Pre-amplifier frequency range	5-100000 Hz
CD-player frequency range	20...20 000 Hz
CD-player signal-to-noise ratio	>95 dB
Pre-amplifier signal-to-noise ratio	>108 dB
THD	< 0.001%
Volume control	0...80 dB
Supply voltage	230/115 V, 50-60 Hz
Dimensions	420 x 335 x 89 mm
Weight	17,5 kg

FONEŁ





# Tube phono preamplifiers FONEL

## The living symphony

In the world you can hardly find many devices able to convey the beautifulness and naturalness of the music, recorded on vinyl LPs, so well as phono preamplifiers **FONEL** do. Components of the highest quality from the best manufacturers, originality of the design and thoroughness in the production, when every little thing is treated with the greatest attention and conscientiousness, allow these devices to be inimitable.

In the line, produced by **FONEL**, there are 3 variants of phono preamplifiers, intended for work with cartridges of different types:

- FONEL MM "Sonata"** - for MM-type cartridges;
- FONEL MC "Symphony"** - for MC-type cartridges;
- FONEL MM/MC "Appassionata"** - a universal phono preamplifier for all types of **MM** and **MC** cartridges.

### Features of engineering solutions, realized in phono preamplifiers FONEL:

- massive toroidal transformers in the power system;
  - stabilized tube heating supply, a reliable high voltage filter;
  - an original system of tube stage control, minimizing distortion and noise;
  - passive RIAA circuit, assembled on accurate film resistors and capacitors;
  - usage of high-quality tubes and MC-transformers "Sowter" in the input stage.
- The antiresonance steel case of phono preamplifiers **FONEL** with sides, cut of one-piece metal, is massive and filigree at the same time. Such design allows to reduce back acoustic coupling and microphonic effect in the operating mode, what raises sound quality of the phono preamplifiers substantially.
- The patented design of **FONEL** phono preamplifiers is not alike any of those, presented at the market. Its peculiarity is the assembly which allows a listener to see the tubes glow, what is a specific attribute of tube devices of **FONEL** line.
- Ornamental elements of the construction are made of natural wood of high quality and a customer may choose of three standard variants: ash, mahogany, walnut. The version in black piano-lacquer and other types of wood is made to special orders.



## Technical Parameters

Amplification at frequency 1 kHz	66 dB
Frequency range	20 Hz - 20 kHz
Signal-to-noise ratio	>80 dB
Nonlinear distortions	< 0.2 %, 1 kHz, 350 mV Out
Input impedance	200 Ohm
Output impedance	< 600 Ohm
Overload capacity	26 dB
Supply voltage	230/115 V, 50-60 Hz
Power consumption	30 Wt
Dimensions	420 x 89 x 335 mm
Weight	12.5kg





Tube preamplifier - FONEL „Renaissance“

Music, born anew

This preamplifier is rightly called „**Renaissance**“- Revival: music suddenly revives anew and breathes! A grandiose scene, lively, soft, three-dimensional and very natural sound – all these are provided by FONEL „Renaissance“. And now, the instruments appear to have 'bodiliness', the performers – emotionality, and the listener moves the magical world of music.

„**Renaissance**“ is built on low-noise tubes with excellent linear characteristics; that gives it advantages in sound quality as compared with other types of preamplifiers.

Features of engineering solutions, realized in the Fonel „Renaissance“:

- a balanced dual mono circuit without global feedback;
- a high-quality 192kHz/24bit DAC with 2 x S/PDIF, asynchronous USB and optical inputs;
- a high-quality asynchronous 192kHz/24bit USB DAC;
- a clock-generator of own design unique in its exactness;
- a tubed MM/MC phono stage;
- relays with gold-plated leads in the commutation channel;
- a stabilized power supply with 3 toroidal transformers for independent supply of channels and stages;
- a microprocessor control of the amplifier circuit ensuring stable work of the power supply system and minimization of interference and distortions;
- adjusted brightness of indication elements;
- a motorized ALPS volume control;
- a possibility of commutation with external processor;
- multilayer varnish coating and hand-made polishing;
- the steel case with milled of one-piece metal side parts for minimizing of mechanical resonances and external electromagnetic distortions.

Ornamental elements of the construction, as remote controllers, are made of natural wood of high quality and a customer may choose of three standard variants: ash, mahogany, walnut. The version in black piano-lacquer and other types of wood is made by special orders.

Technical Parameters

Inputs analog:	7
XLR	2
RCA	4
MM/MC phono tubed	1
Inputs digital:	5
S/PDIF	2
USB 192kHz/24bit, asynchronous	1
Optical	1
Outputs:	5
RCA	3
XLR	1
Headphone output	1
Amplification factor	18 dB
Balance adjustment	±6 dB
Frequency Range (level -3 dB)	3 Hz. 40 κHz
Signal-to-noise ratio	-98 dB
THD	< 0.05 %, 1 kHz, 2 V Out
Supply voltage	230/115 V, 50-60 Hz
Consumed power	50 Watt
Dimensions	430 x 105 x 340 mm
Weight	16 kg





**4-band active speaker system - FONEl „La Grande“**

**Music in all its splendour**



**Technical Parameters**

Technical Parameters	active, 4-band, closed box
Frequency range	20 - 35000 Hz
Channels (bands) number	4
Number of speakers	5
<b>Inputs :</b>	
XLR	1
RCA	1
Power (Pnom)	700W
Sensitivity adjustment	6 steps, 0.2 – 4 V
Level adjustment, in every band	3 steps, ± 3 dB
Supply voltage	230/115 V, 50-60 Hz
Dimensions	1120 x 330 x 250 mm
Weight	65 Kg (each)

In its new generation the active 4-band active speaker system „**La Grande**“ has not acquired its new outward design only, but a new, more perfect technical concept, as well.

This pair of acoustics is very dynamic, fast, musical. The playback turns out soft, alive, full of energy. With the first times of music already, you begin feeling that positive emotions start winning out. Every time you will look forward to joy, knowing that „La Grande“ and your favourite music are waiting for you at home.

**Features of engineering solutions, realized in FoneI „La Grande “:**

- acoustic execution as a closed box, with high-quality paper loudspeakers, what is the best solution for the quality of sound;
- a high quality phase-linear crossover of our own design is responsible for dividing a signal into 4 bands: subwoofer, woofer, midrange and treble. It allows to get a perfect bands adapting and evenness of amplitude-frequency characteristic;
- the cases of the speaker systems are made of 22 mm MDF, with a lot of fixing bulkheads; outer surfaces are coated with natural veneer, lacquer and leather, and inner surfaces are worked with special damping materials that provide resonance minimization;
- automatic switching the acoustic systems on/off at inputting or absence of a sound signal is provided;
- every channel is provided for a separate amplifier, executed by an individual technology, subject to characteristics peculiar to the given frequency range. Such technology allows to realize the capabilities of every loudspeaker most definitely and to get the highest fidelity of sound;
- quality power sources, with 2 powerful line transformers and big capacitors in every speaker;
- microprocessor operating protection system, signal monitoring, supply voltage, heatsinks temperature and other system parameters;
- step-by-step sensitivity control, allowing harmonizing acoustic systems and any types of signal sources;
- a possibility of amplification level adjustment for each band separately.



3-band active speaker system **FONEL "La Ronda"** has retain the most of the best peculiarities of flagship's system **FONEL "La Grande"** sounding but has smaller dimensions and half pries only. Therefore **"La Ronda"** will be very good high-quality solution for compact home and professional studios.

**FONEL "La Ronda"** is very similar for **FONEL "La Grande"** in basic sound parameters as dynamic, responsiveness, musicality, energy, emotionality, etc.

#### Features of engineering solutions, realized in FoneL "La Ronda":

- Acoustic execution as a closed box, with high-quality paper loudspeakers, what is the best solution for the quality of sound;
- The cases thickness is 22 mm with a lot of fixing bulkheads and with special damping materials that provide resonance minimization;
- A high quality phase-linear 3 bands **Fonel** crossover. It allows to get a perfect bands adapting and evenness of amplitude-frequency characteristic;
- Automatic on/off switching of speaker systems;
- ; - Every channel is provided for a separate special amplifier, executed by an individual technology, subject to characteristics peculiar to the given frequency range. Such technology allows to realize the capabilities of every loudspeaker most definitely and to get the highest fidelity of sound;
- Quality power sources, with 2 powerful toroidal transformers and big capacitors in every speaker;
- Microprocessor operating system with signal, protection, supply voltage, heatsinks temperature and other system parameters monitoring;
- Step-by-step sensitivity control, allowing harmonizing acoustic systems and any types of signal sources;
- A possibility of amplification level adjustment for each band separately.

## 3-band active speaker system "La Ronda"

### Harmony and completeness

#### Technical characteristics

Speaker system type	active, 3-band, closed box
Frequency range	22 - 35000 Hz
Channels (bands) number	3
Number of speakers	4
Inputs: XLR	1
XLR	1
Power (Phom)	280W
Sensitivity adjustment	6 steps, 0.2 - 4 V
Level adjustment, in every band	3 steps, $\pm$ 3 dB
Supply voltage	230/115 V, 50-60 Hz
Dimensions	1050 x 330 x 250 mm
Weight	46 Kg (each)





## 3-band speaker system FONEL "Eureka"

### Musicality and universality



### Technical characteristics

Sensitivity	91,5 dB
Speaker system type	passive, 3-band, closed box
Frequency range	22 - 35000 Hz
Nominal power	260 W
Level adjustment of active subwoofer's part	3 steps, $\pm$ 3 dB
Supply voltage	230/115 V, 50-60 Hz
Dimensions	1050 x 330 x 250 mm
Weight	32 Kg (each)



91,5 dB of sensitivity and active subwoofer's part to get for the new **3-band speaker system FONEL "Eureka"** real universality. It has perfect compatibility with different tube and transistor amplifiers.

The sound of **"Eureka"** are dynamic, responsiveness, musicality, energy and emotionality.

The universality of **"Eureka"** also consists in its compactness which very good for small rooms and in its big nominal power which very good for large halls. In addition **"Eureka"** well proved self as front or rear speakers in home cinema systems.

### Features of engineering solutions, realized in FoneL "Eureka":

- Acoustic execution as a closed box, with high-quality paper loudspeakers, what is the best solution for the quality of sound;
- The cases thickness is 22 mm with a lot of fixing bulkheads and with special damping materials that provide resonance minimization; outer surfaces are coated with natural veneer, lacquer and leather;
- A high quality FoneL crossover with film capacitors and air coils;
- Automatic on/off switching of the active subwoofer's part;
- Quality power sources, with powerful toroidal transformer and 50 000 &micro;F capacitors in every speaker;
- Microprocessor operating system with signal, protection, supply voltage, heatsinks temperature and other system parameters monitoring;
- A level adjustment of the active subwoofer's part.

Compact active audio system FONEL «La Viva!»

Astonishing as life itself!

«What to do?!» a lot of music-lovers and audiophiles traditionally ask that question if they want to listen to their favorite music for always, even, for example, in a studio, in a small office or a bedroom.

Perhaps, there was no answer before, since the equipment with the high quality of sound was very bulky and needed free space and room fit for it. And namely they lack most. Mini-equipment needed much less space but, and it's the most important, it did not ensure the high quality of sound and, besides, it did not allow to connect at the same time several sound sources (eg. a CD-player, a LP player, a tuner and a computer) to it.

And now, after a compact audio-system FONEL «La Viva!» has appeared, and with its help, the problem of equipping small rooms with devices of high sound quality can be solved.

- «La Viva! » is developed with usage of new patented method of sound amplifying and has several properties, necessary for small rooms, and namely:
- It has quite small outer dimensions, comparable with computer sets;
  - A new model of the **Fonel "La Viva!"** has the improved remote wireless control which working on a big range - even from the next room
  - .- In the amplifying device of **"La Viva!"** is applied a high-quality **192 kHz/24 bit DAC** from Cirrus Logic and a clock-generator of own design unique in its exactness.



Technical characteristics

<b>Inputs:</b>	
USB asynchronous, 192kHz/24bit	1
Wireless, 48kHz/16 bit	1
S/PDIF	1
Optical	1
RCA	1
Mini-jack	1
Amplifier module frequency range	5 - 100 000 Hz,
THD Pnom	< 0.005%
bei P=1 W,	< 0.001%
Acoustic system frequency range	20-35000 Hz
Number of bands	3
Type of acoustic execution	a closed box
Supply voltage	230/115 V, 50-60 HzPhase control adjustable
Automatic on/off switching	
<b>Dimensions:</b>	
Acoustic systems	250 x 170 x 145 mm
Subwoofer	410 x 350 x 355 mm
Set weight 2.1/5.1	34 kg



Integrated amplifier and 192 kHz/24 bit DAC in the case of a subwoofer + active speakers

**- is let out in a new design and with a new specification;**  
for «Apple» style fans is especial model of the "La Viva!" - with a white finish.



- "La Viva!" works as active acoustic system and have multichannel amplifying system when everyone driver has a special separate amplifier. Therefore **"La Viva!"** has rather powerful, live and dynamical Hi-End class sound!

- A new digital Wireless 48 kHz/16 interface which has applied in a new FoneL "La Viva!" will allow to listen music by external computer sources without wires at all.

- Presence at the "La Viva!" of various external digital inputs (S/PDIF, Wireless, a high-quality asynchronous 192 kHz/24 bit USB DAC and optical inputs) allows to its owners to listen different digital sources without purchase of an external DAC: FoneL "La Viva!" receives digital data from external digital sources and then transforms them to a sound signal with high accuracy and quality. And to external RCA inputs can connect various analogue sources from tuner to LP player.

- In the patented amplifying system from FoneL the volume control works now by a high-quality motorized ALPS. Their applying provides sounding of Hi-End level and gives for FoneL "La Viva!" essential advantage over compact audio systems from other manufacturers.



- Besides a new "La Viva!" have the original system of a bass amplifying by FoneL and to get surprising depth and quality in a bass which very rare for compact active audio systems. It is possible also thanks to applying of a perfect powerful subwoofers driver with a long way.

- The sound quality is strongly depends from a power supply quality. Then in an advanced power supply of a new "La Viva!" are applied 3 separate power transformers - for digital, analogue and output stages.

- A new "La Viva!" has absolutely unique design and geometry of loudspeaker cases. This design has made "La Viva!" different from everything in the world, but also to lift a sound quality of on higher stage due to improved parameters of the sound signal, special orientation of drivers and minimization of acoustic distortions.

- Sides of FoneL "La Viva!" speakers made of natural wood of high quality. The internal design of speakers and subwoofer very strong also has the complex configuration providing a low level of distortions and mechanical resonances.

- We patent all our products, but cheap copies from asian makers and expensive from other places happens. Then be careful by a purchase, please.

**FONEl**

**A compact active audio system FONEl «La Viva!»**







## 5.1 audio systems and Home Cinema

### Tube preamplifier FONEL “Suprema” with 5.1 and numerous digital and analog inputs – outputs

For creating 5.1 and stereo systems with a splendid dynamic sound of Hi-End class.

- RCA, XLR stereo and 5.1 inputs - outputs,
- A high-quality DAC 192 kHz/24 bit,
- A tube MM/MC phono stage,
- Optical, 2 x S/PDIF and high-quality asynchronous 192kHz/24bit USB DAC inputs,
- Frequency range: 3-40000 Hz,
- Weight: 16 kg



### 3-way active loudspeakers system Fonel “Center - Sub La Grande”

An active central channel speaker and a powerful subwoofer in the common case - the unique device by functions and possibilities.

- |   |               |
|---|---------------|
| - Power   | 500 W         |
| - Frequency range:                                    | 22 - 35000 Hz |
| - Speakers  | 5             |
| - Inputs, separate for central speaker and subwoofer: |               |
| XLR   | 2             |
| RCA   | 2             |
| - Weight:   | 46 kg         |



The unique 5.1 system working in the pure class A and providing sound of Hi-End class for stereo and Home Cinema.

- RCA, XLR stereo and 5.1 inputs - outputs,
- Output power in the pure class A: **5 x 25W**,
- Outputs for speakers connection: 5,
- A high-quality asynchronous 192 kHz/24 bit USB DAC,
- A tube MM/MC phono stage,
- Optical, 2 x S/PDIF and asynchronous 192 kHz/24 bit USB inputs,
- 5 built-in amplifiers working in the pure class A,
- Weight: **68,4 kg**

### 5.1 amplifier's system - FONEL "Integra" and FONEL "Trinité"



### Active subwoofer - FONEL “Maximus” Aesthetics of maximum power

"Maximus" – is a high powerful subwoofer, intended for lovers of music and sound special effects in a Home cinema for those who adore exciting experience.

- |                   |                                      |
|-------------------|--------------------------------------|
| - Power           | 800 W                                |
| - Driver          | 300 mm (12"),                        |
| - Frequency range | 17 Hz-200 Hz                         |
| - Inputs          | Line (LFE) -RCA, -XLR, high-voltage. |
| - Weight          | 65 kg                                |





## Compact loudspeaker stands

Fonel remains true to itself and supplements acoustics with ideal supports, also designed by designers from **FONEL**. These supports will harmoniously complete any system of compact sound-boxes. The supports are made of metal and combine solidity, reliability and lightness to perfection.

Dimensions: 490x290x440 mm

The new loader is developed by Fonel-Audio GmbH under feedback from our customers who not like a qualitative sound only but also appreciate a solidity of design of devices.

In a new design of a loader are applied guides from stainless steel, cases with additional damping and other know-how. Thanks to this detonation has essentially reduced and increased the general reliability of devices.

New loaders will be installed in CD players from Fonel since February, 2012.

Fonel-Audio GmbH is ready to make new loaders for other OEM manufacturers who are interested to apply qualitative but not very expensive loaders in their



FONEL devices are made in cases of two colours: black-matt and glossy golden-grey.

We make ornamental elements of the devices and also remote controllers cases of types of wood with definite and beautiful texture: ash, mahogany and walnut.

They are covered with several layers of high-quality black piano-lacquer or transparent glossy one. Then they are thoroughly polished by hand.

The customers can choose any combination of wood and case colour out of the conventional list without extra payment.

In addition, according to the customer's desire and ideas, at the agreed price, we can develop and manufacture devices, exclusive in their design, indicating the author's name if those desire and ideas do not run counter to our principles and production abilities.

## New optical loader for CD players from Fonel



## Personal design of FONEL cases

## Remarks and guidelines on arrangement of audio-systems using FONEL-devices

Even if there are enough financial resources, it is not quite easy to create an audio-system with excellent sound in home conditions. It is necessary to understand clearly that the quality of the sound will be determined by the 'weakest' device. And if you use something of mass-produced items from China or other country in your system, then even the most top-class and the most expensive devices won't be able to raise substantially the quality of its sound: it will be low-quality all the same.

However, the presence of expensive and good (in experts' opinion) devices does not guarantee the quality sound of the system in whole, since the used devices should be matched with each other in their characteristics and sound quality. But knowing the technical parameters only is not enough to match such devices – the devices can, however, 'mismatch' normally.

In this respect, the FONEL-devices advantageously differ from others. More than that they are conceived and designed as devices for arranging all kinds of systems, the quality of their work allows to keep the good, present in the sounding of other devices in the system'. Exactly because of that reason the professionals, who have our devices, use them as test or reference ones. That allows them not only to hear all failings of tested devices, but to identify all the virtues of their sound.

While adjusting and checking the quality of our devices we have encountered the fact that a lot of CD and LP recordings made by professionals however do not allow to get playback of high quality. That is why do not hurry to blame your system; first make sure that you have listened to a quality recording.

Another general problem is loudspeakers. We adjust our CD-players, for instance, on 4-band active loudspeakers of our own design – Fonel „La Grande“, because loudspeakers from other manufacturers do not allow to receive so clear image about the functioning of CD-players. In addition, it is very complex to find passive loudspeakers well combined with low-power and tube amplifiers. We have solved this problem also released 3-band loudspeakers FONEL "Eureka" with active bass section and 91,5 dB of sensitivity.

The loudspeakers on sale, known to us, as a rule are inferior to the electronic components of audio systems in sound playback quality, at that passive type systems 'sound' better than active. This phenomenon is explained with several factors, among which there is a tradition: the developers and manufacturers of loudspeakers and electronic devices (amplifiers, players, preamplifiers and so on) are different firms; each of them is strong in its sphere. And active acoustics does not demand high quality from only loudspeakers proper, but from electronics, serving it. As practice has shown, it isn't quite easy to develop an amplifier for a loudspeaker which is not worse than a 'stationary' one. Our developers and designers have solved this problem. In our opinion, active loudspeakers are more promising for home usage if their arranging and appearance conform to user's requirements. Since frequency separation, resonance elimination and essential distortion reduction in the connection circuits, characteristic of them, allow to realize a very even amplitude-frequency characteristic and, as a result, to improve the sound quality sharply. And, besides that, there appears an opportunity of arranging systems of less number of devices.

These are general remarks on arrangement of audio-systems we have formulated for ourselves on the ground of our own experience and in testing products from practically all leading audio-equipment manufacturers.

### Guidelines at building an audio-system of high quality:

1. Purchase devices after having listened to them previously by all means.
2. Try to build your system of components of approximately the same quality: no single device of even the most outstanding quality will be able to provide the high quality of sounding if there is even one device of low quality in the system.



3. Select any quality recording for you and use it as a test one while listening to your new devices or testing the old ones.
4. Weight the power of your system and the size of the room. Do not strive for 'arming yourselves' with super-power devices for too loud sound generates an extra stress on your nervous system, which is not so easy to be compensated.
5. Pay more serious attention to the design: too bright colours, fanciful shape draw your attention but when perceiving them continually, there can arise negative reactionsl.
6. We advise to be much more attentive towards small professional firms – manufacturers of Hi-End Class equipment. Big and known companies like Sony, Panasonic, LG, Samsung and others are interested in getting maximum profit and therefore they keep big design departments. Their equipment is of good development, but they won't bring each device to perfection – it is economically unprofitable. Besides, they do not cater for the real connoisseurs, relatively not numerous, but the general consumers, most people are reckoned among. This customers is not very experienced in estimating advantages and disadvantages of the offered goods; they trust to advertising more than to their own opinion – and the giants exploit this, allocating enormous money to their products advertising. And mass conveyor production permits them to offer attractive prices for their products, especially if the Chinese assembly is used. But true high quality cannot be got on the conveyor if the matter is about highly engineered products, the Hi-End class devices are related to, the devices that need individual and very laborious adjustment, what distinguishes firms like **Fonel-Audio GmbH**.
7. You may be assisted in orientating yourselves in the world of Hi-End by independent experts among which there are many professionals, really devoted to their work. For them such notions as depth or height of the stage, sound purity and fullness, linearity of response, dynamics of sound are not idle words but quite tangible sound characteristics. On pages of specialized magazines, there are the results of independent tests, reflecting the results of the comparison of the characteristics for equipment from different firms. Those results were got during testing and that can be of considerable help for you when selecting new devices. We'll give the German Internet-magazine «**Fairaudio**» ([www.fairaudio.de](http://www.fairaudio.de)) as an example.
8. If it is possible, arrange your system of the products, produced by the same company if its creative and technological concepts do for you.

### **Warning**

We would like to warn all music lovers, who set their choice on **FONEL**: we have already registered several attempts to 'borrow' our technical solutions and one attempt to misappropriate our brand. We want to warn that it is possible to imitate our design though we protect it with patents; it is more difficult with the circuitry because we protect it technically besides patents. But it's impossible to reproduce our quality of sounding. It will be necessary to find the same gifted specialists, whose labour makes **FONEL** what it is – the equipment of living sound. And if you begin to doubt about the authenticity of the devices, offered to you, you may feel free to apply for information to us, and we will help you to arrive at the truth.