

**ACUHORN**

*Polonaise, pour le piano, dédiée à Monsieur Auguste Leo, par  
Leipzig Breitkopf et Haertel. Paris Schlesinger. Londres Wenzel et Stapleton*

*Maestoso*



*acuhorn*

*acuhorn*

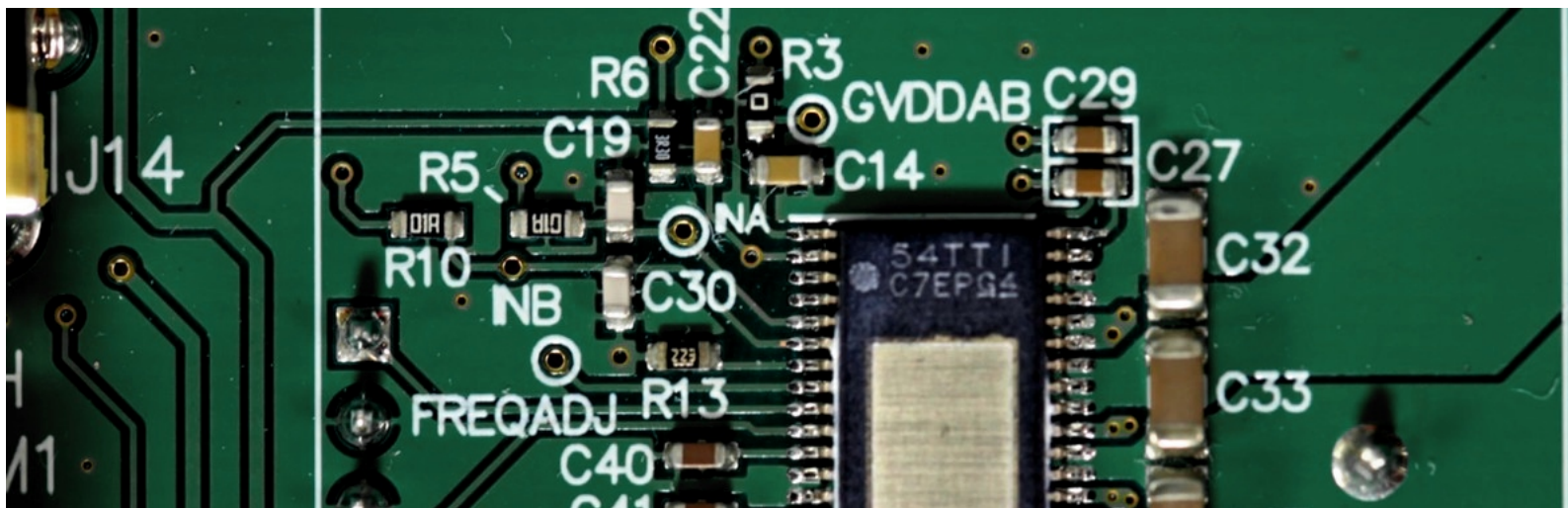
**RATE**  
**ACUHORN**

OWNER'S MANUAL  
ENGLISH

## RATE

STEREO AUDIOPHILE CLASS-D POWER AMPLIFIER  
MONOLITHIC CHIP TEXAS INSTRUMENTS  
LINE INPUT LUNDAHL TRANSFORMER  
NICHROME THIN FILM RESISTORS VOLUME CONTROL  
POWER SUPPLY VICORPOWER

ACUORN RATE. I HAVE THE PLEASURE TO PRESENT A TRULY AUDIOPHILE SOLUTION TO THE MODERN AMPLIFIER DESIGN. THE WORLD'S HIGHEST PERFORMING, HIGH-POWER, MONOLITHIC CLASS-D STEREO AMPLIFIER CHIP BY TEXAS INSTRUMENTS. WORKING TOGETHER WITH THE POWER SUPPLY THAT IS THE LATEST DEVELOPMENT OF THE BEST VICORPOWER. ANALOG INPUT BY LUNDAHL HIGH IMPEDANCE TRANSFORMERS AND WELWYN NICHROME THIN FILM RESISTORS SMD ARE USED FOR VOLUME CONTROL. ECO-FRIENDLY, THE BEST EFFICIENCY OF THE AMPLIFIER ON THE MARKET. HERE IS THE AMPLIFIER WITH PERFORMANCE BETTER THAN EVER BEFORE.



## FEATURES

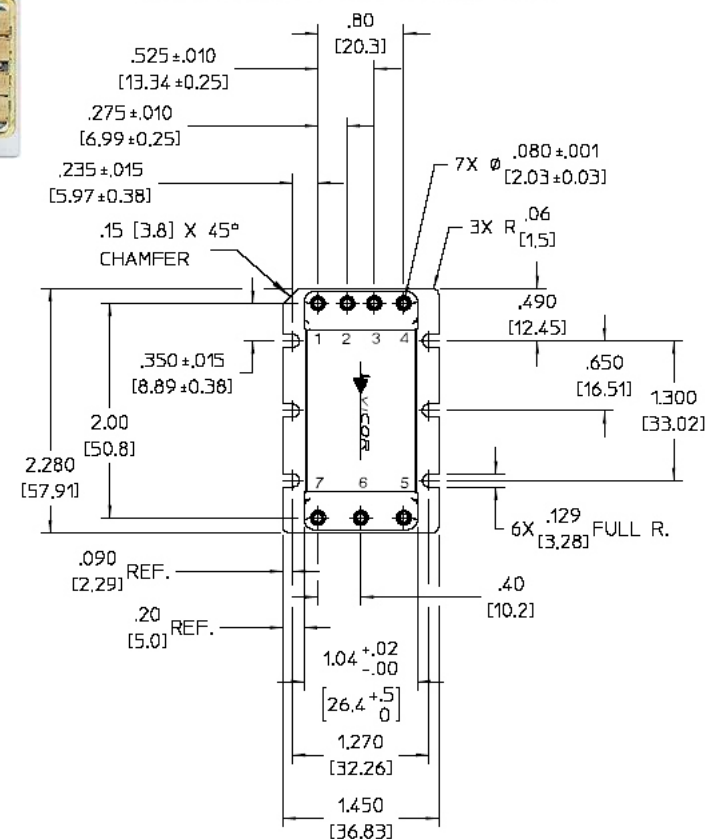
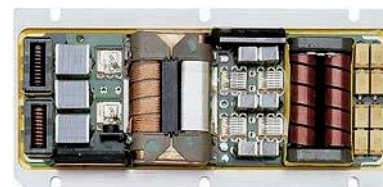
MONOLITHIC CLASS-D STEREO AMPLIFIER CHIP BY TEXAS INSTRUMENTS  
THE INTEGRATED SOLUTION CAN OFFER A REDUCTION IN SIZE  
RELIABILITY ONLY A FEW COMPONENTS ON THE BOARD  
THE AUDIOPHILE SELECTION OF EACH COMPONENT IS A LISTENING SESSION

ADVANCED PUREPATH™ ULTRA-HD TECHNOLOGY  
UP TO 90% EFFICIENT WITH 60 MICRO OHM MOSFETS  
AUDIO BANDWIDTH 100KHZ  
TOTAL HARMONIC DISTORTION + NOISE <0.005%  
OUTPUT NOISE, A-WEIGHTED <60UV  
SIGNAL TO NOISE RATIO >111DB (A WEIGHTED)  
DYNAMIC RANGE 115DB  
PROTECTION OF BOTH AMPLIFIER AND SPEAKERS

STEPPED ATTENUATORS ARE THE MOST PREFERRED SOLUTION IN HIGH END AUDIO  
HIGH QUALITY PRECISION 0.1% THIN FILM NICHROME CHIP RESISTORS  
SUBSONIC BASS, LOW BASS AND BASS ARE THE BEST WITH THIS TYPE OF RESISTORS  
OUTSTANDING SOUND CLARITY, PRECISE SIGNAL AND SOUNDSTAGE

LUNDAHL TRANSFORMERS IS A WORLD LEADING OF HIGH PERFORMANCE AUDIO  
THE AMPLIFIER INPUT IS ISOLATED HIGH IMPEDANCE INPUT TRANSFORMER  
SPECIALLY SELECTED FOR WORK WITH DIRECT OUTPUT FROM THE R2R DAC LADDER  
EXTREME AUDIO PATH HIGH QUALITY AND TRANSPARENT SOUNDING

POWER SUPPLY IS THE BEST VICORPOWER MODULES  
DC-DC CONVERTERS PROVIDES HIGH POWER DENSITY AND LOW NOISE  
HIGH FREQUENCY MHZ SWITCHING  
ADVANCED POWER PROCESSING IN A SMALL SIZE  
AUTORANGING 90-264VAC NETWORK VOLTAGE, FOR WORLDWIDE USE



## CONNECTING

NECESSARY IS AC POWER PLUGS MUST BE CONNECTED TO THE EARTH (GROUND).

THE AMPLIFIER WORKS WITH THE WORLD'S MAIN SUPPLIES ELECTRICITY (AC) VOLTAGES 90 - 265 VAC @50/60 HZ. MAINTENANCE FREE BY AUTORANGING MODULE.

AMPLIFIER IS READY FOR WORK AFTER CONNECTING THE CABLES, ALL THE SUPPORT FOR THIS AMPLIFIER IS ON THE REAR PANEL. REGION SPECIFIC 10A MAINS IEC CABLE, IT IS REQUIRED.

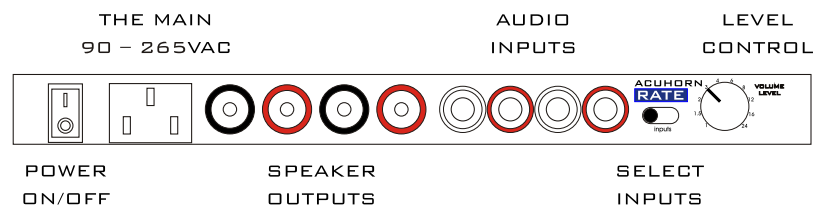
TO OPERATE, MAIN ROCKER SWITCH TO POWER THE AMPLIFIER. IT IS LOCATED NEAR THE POWER CORD.

STEREO SPEAKER OUTPUTS TERMINAL FOR BANANA OR SPADE PLUG AND WIRE. IT'S IN THE MIDDLE OF THE BACK. RED POSITIVE, BLACK NEGATIVE.

TWO PAIRS OF RCA INPUT, SELECTABLE BY THE TOGGLE SWITCH. RED RIGHT, WHITE LEFT CHANNEL. TO DRIVE THE FULL POWER NEED INPUT VOLTAGE 2.0 V RMS.

ROTARY SWITCH SELECTION TO USE FOR VOLUME CONTROL, 3 DB STEPS. HIGH QUALITY PRECISION 0.1% THIN FILM NICHROME CHIP RESISTORS.

SIGNAL INPUT IS ISOLATION BY LUNDAHL, HIGH IMPEDANCE, HIGH LEVEL LINE INPUT TRANSFORMER. USE IN COMBINATION WITH DAC, SACD, CD PLAYER OR PHONO PREAMPLIFIER AND OTHERS.



## TECHNICAL SPECIFICATIONS

INPUT VOLTAGE MAINS AUTORANGING 90-264VAC

MAXIMUM INPUT POWER 340W

MONOLITHIC CLASS D AMPLIFIER TYPE

STEPPED ATTENUATOR VOLUME CONTROL

LINE HIGH IMPEDANCE INPUT TRANSFORMER

INPUT SENSITIVITY 2V

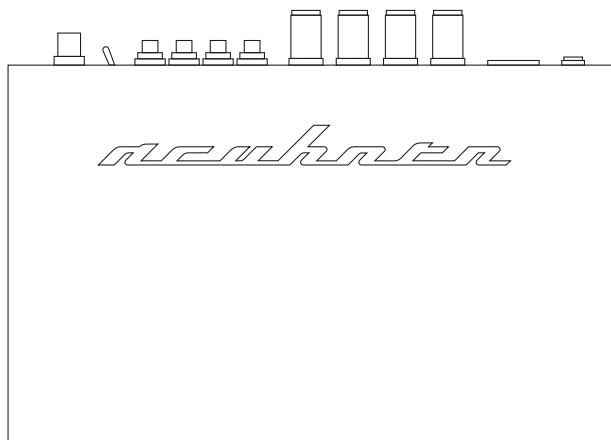
OUTPUT POWER 2X150W

INTERNAL CABLE OCC COPPER

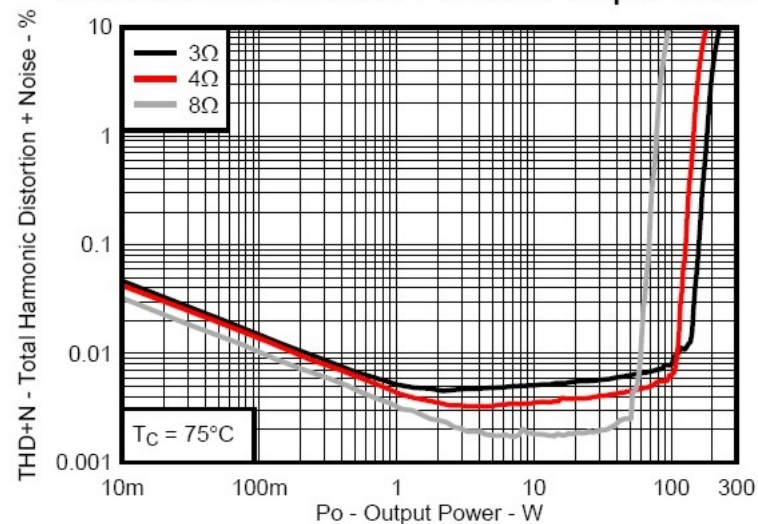
TERMINAL RHODIUM

WEIGHT 1,8KG

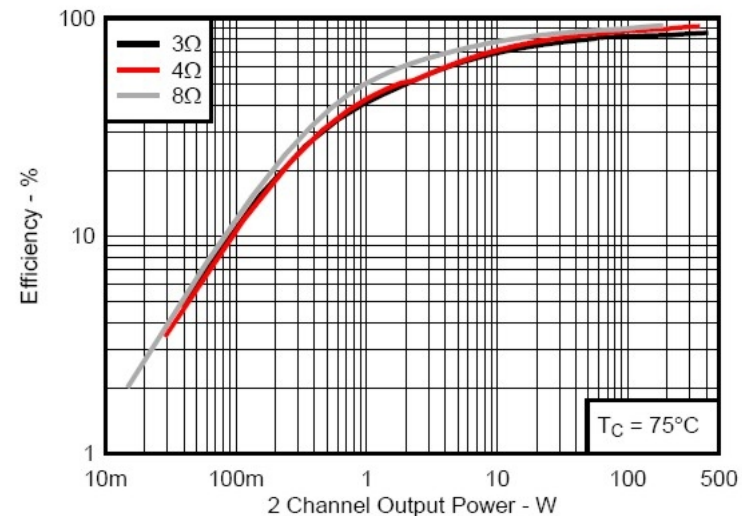
DIMENSIONS W 320 X D 200 X H 28MM



### Total Harmonic Distortion + Noise vs Output Power



### System Efficiency vs Output Power



# ACUHORN

## WOJCIECH UNTERSCHUETZ

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## ACUHORN PRODUCT HISTORY

2003 ACUHORN SECCO 145 CLASSIC

2004 ACUHORN ROSSO 135 CLASSIC

2004 ACUHORN NERO 125 CLASSIC **AWARD 2004 IN HIGH FIDELITY**

2005 ACUHORN GRAND BIANCO RE 155 CLASSIC

2006 ACUHORN ROSSO SUPERIORE 175 CLASSIC

2007 ACUHORN ROSSO SUPERIORE 175 IMPROVED AUDIO **AWARD 2007 IN HIGH FIDELITY**

2007 ACUHORN NERO 125 IMPROVED AUDIO

2010 NOWE AUDIO MONO 3.5 MONOBLOCK AMPLIFIER MOSFET **AWARD 2010 IN HIGH FIDELITY**

2012 ACUHORN GIOVANE 85 SUPERLEGGERA

2012 ACUHORN NERO 125 SUPERLEGGERA

2012 ACUHORN ROSSO SUPERIORE 175 SUPERLEGGERA

2013 ACUHORN STEREO 3 STEREO AMPLIFIER MOSFET

2013 ACUHORN MONO 6 MONOBLOCK AMPLIFIER MOSFET

2014 ACUHORN S1 STEREO TUBE AMPLIFIER OTL

2014 ACUHORN S2 STEREO TUBE AMPLIFIER OTL

2014 ACUHORN M2 MONOBLOCK TUBE AMPLIFIER OTL

2014 ACUHORN M4 MONOBLOCK TUBE AMPLIFIER OTL

2016 ACUHORN 15 BASS SPEAKERS

2016 ACUHORN TT ORIGINAL TUBE AMPLIFIER

2017 ACUHORN RATE CLASS-D AMPLIFIER **AWARD RED FINGERPRINT IN HIGH FIDELITY**

2017 ACUHORN R2R HI-TECH STREAMER **AWARD RED FINGERPRINT IN HIGH FIDELITY**