# PA Amplifiers iNUKE NU12000DSP/NU6000DSP/ NU3000DSP/NU1000DSP/NU12000/ NU6000/NU3000/NU1000



# NU12000DSP Ultra-Lightweight, High-Density 12000-Watt Power Amplifier with DSP Control and USB Interface

 Delivers 2 x 6000 Watts into 2 Ohms, 2 x 3000 Watts into 4 Ohms and weighs less than 26.5 lbs / 12 kg

# iNUKE NU6000DSP—

# Ultra-Lightweight, High-Density 6000-Watt Power Amplifier with DSP Control and USB Interface

 Delivers 2 x 3100 Watts into 4 Ohms, 2 x 1600 Watts into 8 Ohms and weighs less than 12 lbs / 5.5 kg

# iNUKE NU3000DSP— Ultra-Lightweight, High-Density 3000-Watt Power Amplifier with DSP Control and USB Interface

 Delivers 2 x 1500 Watts into 2 Ohms; 2 x 900 Watts into 4 Ohms; 3000 Watts into 4 Ohms (bridge mode) and weighs less than 8 lbs / 3.5 kg

# iNUKE NU1000DSP — Ultra-Lightweight, High-Density 1000-Watt Power Amplifier with DSP Control and USB Interface

 Delivers 2 x 500 Watts into 2 Ohms; 2 x 300 Watts into 4 Ohms; 1000 Watts into 4 Ohms (bridge mode) and weighs less than 8 lbs / 3.5 kg

# **Common features**

- Ultimate reliability through revolutionary cool-running High-Density Class-D technology with "near-zero" thermal buildup
- Ultra-efficient switch-mode power supply for noise-free audio, superior transient response and low power consumption

Our light-as-a-feather iNUKE power amps have been wildly successful, and we've sold truckloads of them all over the world! Why? Because they are ultra-dependable, put out massive amounts of power, yet weigh so very little thanks to our revolutionary highdensity Class-D technology and ultraefficient switch-mode power supplies. But we think we may have outdone ourselves with the new iNUKE NU12000, which packs a whopping 12,000-Watt total output! Yes, that's right - a stereo power amplifier with 6,000 Watts output per channel @ 2 Ohms, or 2 x 3,400 Watts @ 4 Ohms - and it weighs less than 26.5 lbs. / 12 kg. This groundbreaking amplifier is also available in a USB-addressable DSP version, the iNUKE NU12000DSP.

# Superb transient response

We spent years fine-tuning the high-density Class-D technology that gives the iNUKE Series its oomph. By carefully selecting transistors with extremely high slew rates and optimizing other proprietary parts of our circuitry, these amps react instantly to even the most demanding bass impulses.

When this amazing amplifier technology is combined with our state-of-the-art switching-mode power supplies, these amplifiers provide tremendous punch. And because they are so much more efficient than conventional designs, they run cooler and don't require the massive heat sinks and heavy toroid transformers typically associated with their conventional counterparts.

# Sublimely simple operation

The front panel controls and indicators provide your system's vital signs at a glance. After pressing the Power button, the Power LED lights to show the amp is ready for action. All channels feature positive-detent Gain controls with Signal LEDs that light when a signal is present, as well as clip LEDs to indicate when the signal is distorted and you need to reduce the input signal.

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- High-performance DSP and 24-bit/96 kHz converters deliver ultimate signal integrity and extreme dynamic range
- DSP section features sophisticated delay, crossover (3 filter types, up to 48 dB/octave), EQ (8 parametric, 2 dynamic), dynamics processing and lockable security settings
- Front panel LCD display enables setup and adjustment without PC
- Can be set up, controlled and monitored via front panel USB connector. Powerful remote software downloadable at behringer.com
- "Zero-Attack" limiters offer maximum output level with reliable overload protection
- Built-in Subwoofer/Satellite crossover for perfect subwoofer operation
- Detented and illuminated gain controls for precise level setting
- Precise 4-segment Signal and Limit LEDs to monitor performance
- XLR and ¼" TRS combination input connectors for compatibility with any source
- Professional twist-lock speaker connectors for ultimate reliability
- Independent DC, LF and thermal overload protection on each channel automatically protects amplifier and speakers without shutting down the show
- "Back-to-front" ventilation system prevents thermal buildup for reliable operation
- High-quality components and exceptionally rugged construction ensure long life
- Conceived and designed by BEHRINGER Germany

The rear panel is just as elegant, with combo XLR and 1/4" TRS input connectors making the iNUKE compatible with virtually any source, balanced or unbalanced. Professional twist-lock speaker sockets are provided to ensure every drop of output power gets to your loudspeakers. The rear panel is also where you'll find the switches that enable iNUKE amps to work in either dual mono, stereo or mono bridge mode. A built-in CROSSOVER switch enables the amp to operate in biamp mode, sending low frequency content to passive subwoofers, while the high frequency output is channeled to fullrange loudspeakers (CH1>100 Hz / CH2<100 Hz or FULLRANGE).

**iNUKE DSP** 

For sound engineers requiring high-level control capability, iNUKE DSP Series amplifiers come ready for action right out-of-the-box. The built-in DSP and 24-bit/96 kHz converters ensure the ultimate signal integrity with an extremely broad dynamic range. DSP functions include a sophisticated delay for delay-line loudspeakers, crossover, EQ (eight parametric, two dynamic), and dynamics processing with lockable security settings. A convenient front panel LCD display allows you to setup and make adjustments directly at the amplifier, without the need for a PC. All iNUKE DSP models can be set up, controlled and monitored via the front panel USB connector.

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## iNUKE NU6000/NU3000/NU1000

## **Front Panel**



# Rear Panel



# iNUKE NU12000 Ultra-Lightweight, High-Density 12000-Watt Power Amplifier

 Delivers 2 x 6000 Watts into 2 Ohms, 2 x 3400 Watts into 4 Ohms and weighs less than 26.5 lbs / 12 kg

## iNUKE NU6000— Ultra-Lightweight, High-Density 6000-Watt Power Amplifier

 Delivers 2 x 3000 Watts into 4 Ohms, 2 x 1500 Watts into 8 Ohms and weighs less than 12 lbs / 5.5 kg

# iNUKE NU3000— Ultra-Lightweight, High-Density 3000-Watt Power Amplifier

 Delivers 2 x 1500 Watts into 2 Ohms; 2 x 880 Watts into 4 Ohms; 3000 Watts into 4 Ohms (bridge mode) and weighs less than 7 lbs / 3.3 kg

# iNUKE NU1000— Ultra-Lightweight, High-Density 1000-Watt Power Amplifier

 Delivers 2 x 500 Watts into 2 Ohms; 2 x 300 Watts into 4 Ohms; 1000 Watts into 4 Ohms (bridge mode) and weighs less than 7 lbs / 3.3 kg

## **Common features**

- Ultimate reliability through revolutionary cool-running High-Density Class-D technology with "near-zero" thermal build up
- Ultra-efficient switch-mode power supply for noise-free audio, superior transient response and low power consumption
- "Zero-Attack" limiters offer maximum output level with reliable overload protection

## Value

Sporting massive output ratings, lightweight Class-D technology, an equally lightweight price tag, and all the amenities a professional audio engineer could ask for, BEHRINGER iNUKE amplifiers are serious amps for the most demanding applications.

## iNUKE NU6000DSP/NU3000DSP/NU1000DSP

## **Front Panel**



GAIN CONTROLS adjust input level

# **Rear Panel**





- Built-in Subwoofer/Satellite crossover for perfect subwoofer operation
- Detented and illuminated gain controls for precise level setting
- Precise 4-segment Signal and Limit LEDs to monitor performance
- XLR and ¼" TRS combination input connectors for compatibility with any source
- Professional twist-lock speaker connectors for ultimate reliability
- Independent DC, LF and thermal overload protection on each channel automatically protects amplifier and speakers without shutting down the show
- "Back-to-front" ventilation system prevents thermal buildup for reliable operation
- High-quality components and exceptionally rugged construction ensure long life
- Conceived and designed by BEHRINGER Germany



System configuration is a breeze thanks to iNUKE's Amp Remote software (Available on iNUKE DSP models only)



Dynamic EQ combines the effects of equalization and side-chain compression to compensate for the perceived loudness of specific frequency ranges (Available on iNUKE DSP models only)



iNUKE's DSP crossover features 3 filter types (at up to 48 dB/octave) for the ultimate in versatility (Available on iNUKE DSP models only)



8 Parametric EQ filters make it easy to optimize system performance with just a few mouse clicks (Available on iNUKE DSP models only)



Save and recall frequently-used setups, complete with lockout codes for total system security (Available on iNUKE DSP models only)

# iNUKE NU3000 – Live Setup with PA and Floor Monitor



# **Concert Setup with Delay Line**







### Specifications

#### NU6000DSP

Output Power	
Maximum output power	
Stereo	
$8\Omega$ per channel, stereo	1500 W
$4\Omega$ per channel, stereo	3000 W
$2\Omega$ per channel, stereo	_
Bridged mono	
8 Ω	_
4 Ω	_
System	
Controls	
Front	Power switch, Gain controls (channels A and B) DSP sectior rotary push-encoder, Buttons for Process, Setup, Up/Down, Exit
Indicators	
Power	Amber backlit illuminated gain controls
Limit (per channel)	0 dB, full scale
Signal (per channel)	-24, -12, -6 dB
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Signal (per channel)	-24, -12, -0 ub
Digital Signal Processing (DSP)	
Display	LCD 128 x 32, amber backlit
Digital delay function (per channel)	0 - 300 ms
Digital crossover function	3 filter types, up to 48 dB/octave
Digital EQ function (per channel)	8-band parametric, 2-band dynamic equalizer
Digital dynamics function (per channel)	Zero attack limiter (peak)
Presets	20 total presets, 19 user-definable

### Connectors

Connectors	
Inputs	2 x combo jacks
Input impedance	10 k $\Omega$ unbalanced, 20 k $\Omega$ balanced
Outputs	2 x locking-style professional speaker connectors
Output circuit type	Class D
Distortion	<0.2%
Frequency response	20 Hz to 20 kHz, +0 / -2 dB
Damping factor	>140 @ 8 Ω
Signal-to-noise	>98 dB
USB	Front panel USB connector type B for remote control of DSP section
Circuit Protection	
Cooling	Continuously variable speed fan, Back-to-front air flow
Amplifier protection	Thermal and DC protection, Stable into reactive or mismatched loads
Load protection	On/off muting, DC-fault power supply shutdown
Power Supply, Power Consumptio Voltage (Breaker / Fuses)	on @ 1/8 Rated Power,
USA / Canada	120V~, 60Hz (25A)
UK / Australia / Europe	220-240 V~, 50/60 Hz, (12A)
Korea / China	220-240 V~, 50/60 Hz,(12A)
Japan	100 V~, 50/60 Hz, (25A)
Power consumption @ 2 ohms	_
Power consumption @ 2 ohms Power consumption @ 4 ohms	 620 W

Dimensions/Weight

Dimensions (H x W x D)	appr. 89 x 483 x 328 mm appr. (3.5 x 19.01 x 12.91")
Weight	appr. 5.2 kg (11.4 lbs)

#### NU3000DSP

Digital dynamics function

(per channel)

Presets

Output Power	
Maximum output power	
Stereo	
$8\Omega$ per channel, stereo	440 W
$4\Omega$ per channel, stereo	820 W
$2\Omega$ per channel, stereo	1520 W
Bridged mono	
8 Ω	1500 W
4 Ω	3000 W
C	
System	
Controls	
Front	Power switch, Gain controls (channels A and B) DSP sectior rotary push-encoder, Buttons for Process, Setup, Up/Down, Exit
Indicators	
Power	Amber backlit illuminated gain controls
Limit (per channel)	0 dB, full scale
Signal (per channel)	-24, -12, -6 dB
Digital Signal Processing (D	SP)
Display	LCD 128 x 32, amber backlit
Digital delay function (per channel)	0 - 300 ms
Digital crossover function	3 filter types, up to 48 dB/octave
Digital EQ function (per channel)	8-band parametric, 2-band dynamic equalizer

Zero attack limiter (peak)

20 total presets, 19 user-definable

#### Connectors Inputs 2 x combo jacks 10 kΩ unbalanced, Input impedance 20 kΩ balanced Outputs 2 x locking-style professional speaker connectors Output circuit type Class D <0.3% Distortion Frequency response 20 Hz to 20 kHz, +0 / -1 dB Damping factor >145@80 >98 dB Signal-to-noise USB Front panel USB connector type B for remote control of DSP section **Circuit Protection** Cooling Continuously variable speed fan, Back-to-front air flow Amplifier protection Thermal and DC protection, Stable into reactive or mismatched loads On/off muting, Load protection DC-fault power supply shutdown Power Supply, Power Consumption @ 1/8 Rated Power, Voltage (Breaker / Fuses) 120 V~, 60 Hz (T 10 A H 250 V) USA / Canada 220-240 V~, 50/60 Hz UK / Australia / Europe (T 6.3 A H 250 V) 220-240 V~, 50/60 Hz Korea / China (T 6.3 A H 250 V) 100 V~, 50/60 Hz Japan (T 10 A H 250 V) Power consumption @ 2 ohms 350 W Power consumption @ 4 ohms 210 W Mains connector Standard IEC receptacle Dimensions/Weight

Dimensions (H x W x D)	appr. 89 x 483 x 248 mm appr. (3.5 x 19 x 9.76")
Weight	appr. 3.1 kg (6.8 lbs)

#### NU1000DSP

# Output Power Maximum Output Power Stereo & Ω per channel, stereo 4 Ω per channel, stereo 2 Ω per channel, stereo 530 W Bridged mono & Ω 4 Ω 1050 W

System	
Controls	
Front	Front Power switch, Gain controls (channels A and B) DSP section rotary push-encoder, Buttons for Process, Setup, Up/Down, Exit
Indicators	
Power	Amber backlit illuminated gain controls
Limit (per channel)	0 dB, full scale
Signal (per channel)	-24, -12, -6 dB
Digital Signal Processing (DSP)	)
Display	LCD 128 x 32, amber backlit
Digital delay function (per channel)	0 - 300 ms
Digital crossover function	3 filter types, up to 48 dB/octave
Digital EQ function (per channel)	8-band parametric, 2-band dynamic equalizer
Digital dynamics function (per channel)	Zero attack limiter (peak)
Presets	20 total presets, 19 user-definable

#### Connectors Inputs 2 x combo jacks 10 kΩ unbalanced, Input impedance 20 kΩ balanced Outputs 2 x locking-style professional speaker connectors Output circuit type Class D <0.1% Distortion Frequency response 20 Hz to 20 kHz, +0 / -1 dB Damping factor >155@80 Signal-to-noise >98 dB USB Front panel USB connector type B for remote control of DSP section **Circuit Protection** Cooling Continuously variable speed fan, Back-to-front air flow Amplifier protection Thermal and DC protection, Stable into reactive or mismatched loads Load protection On/off muting, DC-fault power supply shutdown Power Supply, Power Consumption @ 1/8 Rated Power, Voltage (Breaker / Fuses) USA / Canada 120 V~, 60 Hz (T 6.3 A H 250 V) 220-240 V~, 50/60 Hz UK / Australia / Europe (T 3.15 A H 250 V) 220-240 V~, 50/60 Hz Korea / China (T 3.15 A H 250 V) 100 V~, 50/60 Hz Japan (T 6.3 Å H 250 V) Power consumption @ 2 ohms 150 W Power consumption @ 4 ohms 70 W Mains connector Standard IEC receptacle

Dimensions/Weight		
Dimensions (H x W x D)	appr. 89 x 483 x 248 mm appr. (3.5 x 19 x 9.76")	
Weight	appr. 3.1 kg (6.8 lbs)	

#### NU12000

# Output Power Maximum output power

maximum output ponte		
Stereo		
$2\Omega$ per channel, stereo	2 x 6000 W	
$4\Omega$ per channel, stereo	2 x 3400 W	
$8\Omega$ per channel, stereo	2 x 1700 W	

#### System

Controls	
Front	"Power switch Gain controls (channels A and B)"
Rear	"Mode switch (stereo / mono) Crossover switch (LF / fullrange / HF) Circuit breaker"
Indicators	
Power	Amber backlit illuminated gain controls
Limit (per channel)	0 dB, full scale
Signal (per channel)	-24, -12, -6 dB
Input sensitivity	
V RMS @ 8 Ω	0.75 V (-0.3 dBu)
Connectors	
Inputs	2 x combo jacks
Input impedance	10 kΩ unbalanced, 20 kΩ balanced
Outputs	2 x locking-style professional speaker connectors
Output circuit type	Class-D
Distortion	<0.2 %
Frequency response	20 Hz to 20 kHz, +0 / -2 dB
Damping factor	>100 @ 8 Ω
Signal-to-noise	>100 dB
Circuit protection	
Cooling	"Continuously variable speed fan Back-to-front air flow"
Amplifier protection	"Thermal and DC protection Stable into reactive or mismatched loads"
Load protection	On/off muting, DC-fault power supply shutdown

Power Supply, Voltage (Breake	r)
USA / Canada / Japan	100-120 V~, 50/60 Hz, (50 A 250 VAC)
UK / Australia / Europe / Korea / China	220-240 V~, 50/60 Hz, (25 A 250 VAC)
Power consumption @ 2 $\Omega$ , 1/8 rated power	1300 W
Power consumption @ 4 $\Omega$ , 1/8 rated power	760 W
Mains connector	Neutrik powerCON 32 A
Dimensions/Weight	
Dimensions (H x W x D)	appr. 94 x 482 x 436 mm appr. (3.7 x 19 x 17.2")

appr. 12 kg (26.5 lbs)

#### NU6000

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Weight

Output Power		
Maximum Output Power		
Stereo		
$8\Omega$ per channel, stereo	1500 W	
$4\Omega$ per channel, stereo	3000 W	
$2\Omega$ per channel, stereo	—	
Bridged mono		
8 Ω	—	
4 Ω	_	

System	
Controls	
Front	Power switch Gain controls (channels A and B)
Rear	Mode switch (stereo/mono) Crossover switch (fullrange/100 Hz)
Indicators	
Power	Amber/red backlit illuminated gain controls
Limit (per channel)	0 dB, full scale
Signal (per channel)	-24, -12, -6 dB

#### Connectors Inputs 2 x combo jacks 10 kΩ unbalanced, 20 kΩ balanced Input impedance 2 x locking-style professional Outputs speaker connectors Output circuit type Class D Distortion <0.2% Frequency response 20 Hz to 20 kHz, +0 / -2 dB Damping factor >140@80 >100 dB Signal-to-noise **Circuit Protection** Cooling Continuously variable speed fan Back-to-front air flow Amplifier protection Thermal and DC protection Stable into reactive or mismatched loads Load protection On/off muting, DC-fault power supply shutdown Power Supply, Voltage (Breaker/Fuse)

USA / Canada	120V~, 60Hz (25A)
UK / Australia / Europe	220-240 V~, 50/60 Hz, (12A)
Korea / China	220-240 V~, 50/60 Hz,(12A)
Japan	100 V~, 50/60 Hz, (25A)
Power consumption @ 2 $\Omega$	_
Power consumption @ 4 $\Omega$	620 W
Mains connector	Standard IEC receptacle

Dimensions/Weight	
Dimensions (H x W x D)	appr. 89 x 483 x 328 mm appr. (3.5 x 19 x 12.91")
Weight	5 kg (11 lbs)

#### NU3000

Output Power	
Maximum Output Power	
Stereo	
$8\Omega$ per channel, stereo	440 W
$4\Omega$ per channel, stereo	880 W
$2\Omega$ per channel, stereo	1500 W
Bridged mono	
Ω 8	1500 W
4 Ω	3000 W
System	
Controls	
Front	Power switch Gain controls (channels A and B)
Rear	Mode switch (bridge/stereo/mono) Crossover switch (fullrange/100 Hz)
Indicators	
Power	Amber/red backlit illuminated gain controls
Limit (per channel)	0 dB, full scale
Signal (per channel)	-24, -12, -6 dB
Connectors	
Inputs	2 x combo jacks
Input impedance	10 kΩ unbalanced, 20 kΩ balanced
Outputs	2 x locking-style professional speaker connectors
Output circuit type	Class D
Distortion	<0.2%
Frequency response	20 Hz to 20 kHz, +0 / -1 dB
Damping factor	>160 @ 8 Ω
Signal-to-noise	>100 dB
Circuit Protection	
Cooling	Continuously variable speed fan Back-to-front air flow
Amplifier protection	Thermal and DC protection Stable into reactive or mismatched loads
Load protection	On/off muting, DC-fault power supply shutdown

Power Supply, Voltage (Breaker/Fuse)		
USA / Canada	120 V~, 60 Hz (T 10 A H 250 V)	
UK / Australia / Europe	220-240 V~, 50/60 Hz (T 6.3 A H 250 V)	
Korea / China	220-240 V~, 50/60 Hz (T 6.3 A H 250 V)	
Japan	100 V~, 50/60 Hz (T 10 A H 250 V)	
Power consumption @ 2 $\Omega$	350 W	
Power consumption @ 4 $\Omega$	170 W	
Mains connector	Standard IEC receptacle	
Dimensions/Weight		
Dimensions (H x W x D)	appr. 3.5 x 19 x 9.76" appr. 89 x 483 x 248 mm	
Weight	6.17 lbs / 2.8 kg	

## NU1000

Output Power		
Maximum Output Power		
Stereo		
$8\Omega$ per channel, stereo	150 W	
$4\Omega$ per channel, stereo	300 W	
$2\Omega$ per channel, stereo	500 W	
Bridged mono		
8 Ω	500 W	
4 Ω	1000 W	

System	
Controls	
Front	Power switch Gain controls (channels A and B
Rear	Mode switch (bridge/stereo/mono) Crossover switch (fullrange/100 Hz
Indicators	
Power	Amber/red backlit illuminated gain controls
Limit (per channel)	0 dB, full scale
Signal (per channel)	-24, -12, -6 dB

#### Connectors Inputs 2 x combo jacks Input impedance 10 kΩ unbalanced, 20 kΩ balanced Outputs 2 x locking-style professional speaker connectors Output circuit type Class D <0.1% Distortion Frequency response 20 Hz to 20 kHz, +0 / -1 dB Damping factor >155@80 Signal-to-noise >100 dB **Circuit Protection** Cooling Continuously variable speed fan Back-to-front air flow Amplifier protection Thermal and DC protection Stable into reactive or mismatched loads Load protection On/off muting, DC-fault power supply shutdown

Power Supply, Voltage (Breake	r/Fuse)
USA / Canada	120 V~, 60 Hz (T 6.3 A H 250 V)
UK / Australia / Europe	220-240 V~, 50/60 Hz (T 3.15 A H 250 V)
Korea / China	220-240 V~, 50/60 Hz (T 3.15 A H 250 V)
Japan	100 V~, 50/60 Hz (T 6.3 A H 250 V)
Power consumption @ 2 $\Omega$	150 W
Power consumption @ 4 $\Omega$	70 W
Mains connector	Standard IEC receptacle
Dimensions/Weight	
Dimensions (H x W x D)	appr. 3.5 x 19 x 9.76" appr. 89 x 483 x 248 mm
Weight	6.17 lbs / 2.8 kg

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