## Table of Contents

Chapter 1 – Overview............................................................................................................. 3

Chapter 2 – Quick Start Guide............................................................................................... 4

Chapter 3 – Interface and Controls....................................................................................... 5

3.1 Interface ........................................................................................................................... 5

3.2 Controls ........................................................................................................................... 9
Chapter 1 – Overview

The ASUS N-Series puts the power of Waves professional audio processing in your hands. Technologies by Waves, recipient of a 2011 Technical GRAMMY® award honoring its innovative professional music production software, are heard on hit records, major motion pictures, and top-selling video games the world over. Now, these same cutting-edge audio tools are at your fingertips, providing unprecedented control over the contours of your sound. The Waves MaxxAudio Master suite for the ASUS N-Series includes six intuitive precision processors that will improve every aspect of your listening experience.

- MaxxBass®
- MaxxTreble™
- MaxxEQ™
- MaxxStereo™
- MaxxDialog™
- MaxxVolume™

From 4-way dynamics control and 10-band EQ with multiple filter types to psycho-acoustic low frequency extension and multi-dimensional spatial enhancement, MaxxAudio gives you instant access to the very same tools used day in and day out in leading recording studios and production facilities. Whether you listen through headphones or a full PA system, with Waves MaxxAudio, you'll experience sound that's as good as it gets — and then some.
Chapter 2 – Quick Start Guide

MaxxAudio technologies are designed to provide precision tuning capabilities; however, some users might prefer to jump right in and experience a bit of instant “sonic gratification.” As a general rule, parameter settings may be changed using the knobs on the graphic user interface (GUI) or by manually entering numerical values. We encourage you to explore and experiment with the many sound enhancement possibilities offered by MaxxAudio. The following are a few basic guidelines to help you get started.

- MaxxBass: Set the Intensity control to 50, and play some music. Slowly raise the Cutoff Frequency from 20 upward, until a significant bass boost is heard. Then, lower the Intensity value to a level of 15-25 to remove any possible distortion effects.

- MaxxTreble: Set the Intensity control to 50, and play some music. Turn MaxxTreble off and on to hear the increase in high frequencies. Slowly raise the Cutoff Frequency value until the effect becomes less pronounced; the ideal setting will usually be about 1 kHz below that point. Typical Cutoff Frequency settings are between 10 kHz to 14 kHz.

- MaxxEQ: Use it as you would any multiband equalizer, to cut or boost specific frequencies or groups of frequencies. Its paragraphic (parametric/graphic) interface allows the activation and adjustment by dragging the EQ curve up and down as well as side to side.

- MaxxDialog: Use the Center control to boost dialog levels; use the Sides control to increase ambient sounds in movies or the stereo effect in recorded music.

- MaxxVolume: For higher output levels, increase the Intensity setting or use low-level compression to amplify soft passages without increasing overall output volume. Set the Dyn Range control to 40, and raise Gain to a value between 6 and 12.
Chapter 3 – Interface and Controls

3.1 Interface
MaxxAudio Views

**MaxxAudio Audio Wizard** offers controls for essential functions such as turning MaxxAudio on or off, and choosing operating modes.

![MaxxAudio Audio Wizard](image)

**Audio Wizard**

**MaxxAudio Basic View** offers controls for essential functions such as turning MaxxAudio on or off, loading presets, and changing basic parameters. In conjunction with the Preset system (see below), Basic view delivers maximum control with minimum know-how, and is suitable for most users.

![MaxxAudio Basic View](image)

**MaxxAudio Basic View**
MaxxAudio Advanced View unlocks the full power of MaxxAudio, enabling precision EQ control, processor modifications, dynamic adjustments and much more. Advanced view controls provide the means to make in-depth, 'surgical' adjustments to all MaxxAudio processor parameters.
Preset System

MaxxAudio is custom-tuned for each individual ASUS N-Series model, providing presets designed by Waves audio engineers to realize the full potential of your computer’s audio system. At any time, these presets may be restored by clicking the Music/Movies/Gaming buttons. Whenever MaxxAudio settings are modified, the Custom preset becomes active, while preserving current user settings.

Headphones/External Speakers

To ensure optimal headphone and external speaker performance, MaxxAudio includes specialized presets for external devices, categorized by device size.

The Headphones/External Speaker controls are grayed out by default, and become active when an external jack is connected to the Line-out input.
3.2 Controls

MaxxBass® virtual subwoofer technology uses the science of psycho-acoustics to deliver deep, thundering lows that you can really feel. Unlike traditional bass boost technologies which use EQ and can overpower your system, the patented MaxxBass process utilizes the scientific principle known as the *Phenomenon of the Missing Fundamental* to analyze audio content. Based on its calculations, MaxxBass delivers perceived bass response up to 1.5 octaves below the speakers’ physical low frequency limit. Best of all, the N-Series MaxxAudio interface gives you hands-on control over the frequency cutoff point and volume as well as the intensity of the MaxxBass effect.

MaxxBass Controls

- **On/Off**
- **Cutoff Frequency** determines the cutoff frequency of the MaxxBass effect.
  
  Range: 20 Hz to 650 Hz (in increments of 1 Hz)
- **Intensity** determines the intensity of the MaxxBass effect.
  
  Range: 0 to 100 (in increments of 1)
MaxxTreble™ is an intelligent high frequency enhancement process that harnesses the dual power of multiband compression and dynamic equalization. Once you define the high end frequency range and the amount by which to accentuate, MaxxTreble works behind the scenes to bring out every nuance of music and movies, with crisp, breathtaking detail and unparalleled clarity.

MaxxTreble Controls

- **On/Off**
- **Frequency** determines the treble shelf frequency at and above which amplitude is intelligently increased.
  Range: 500 Hz to 20,000 Hz
- **Intensity** determines the intensity of the high frequency enhancement.
  Range: 0 to 100 (in increments of 1)
MaxxEQ™ is an advanced 10-band equalizer that gives you the power to shape your sound with pinpoint precision. Based on Waves award-winning professional Q10 paragraphic processor, MaxxEQ features a full range of audiophile-quality filter types, with band pass, low shelf, high shelf, low pass and high pass filters available for each band, plus variable Q settings that let you adjust the width of each processed frequency range, all with unprecedented accuracy.

MaxxEQ Controls

- **On/Off**
- **Band Frequency** determines the midpoint of the frequency range being equalized.
  Range: 16 Hz to 21875 Hz (in increments of 1 Hz)
- **Band Gain** determines the amount of amplitude boost or attenuation for its frequency range.
  Range: +/-18 dB (in increments of 0.1 dB)
- **Band Q** determines the width (Q) of the equalization filter. Higher values result in a wider Q, meaning more of the frequencies surrounding the selected frequency are affected.
  Range: 1.00 to 3.00 (in increments of 0.01)
- **Filter types per band**: Band pass, high pass, low pass, high shelf, low shelf
MaxxStereo™ is a spatial enhancer which improves the perceived separation of your speakers. Not only does MaxxStereo enable you to enlarge “sweet spot” by manipulating signal width, it even lets you adjust its symmetry and balance to create an expansive, immersive multi-dimensional experience that feels and sounds wider than your laptop itself. With MaxxStereo, you get the best seat in the house – wherever you are.

**MaxxStereo Controls**

- **On/Off**
- **Intensity** determines the amount of stereo enhancement effect.  
  Range: 0 to 100 (in increments of 1)
- **Low Frequency Tolerance** filters out bass content to preserve a more natural sound.  
  Range: 0 to 10 (in increments of 1). 0 is the least tolerant of low frequencies, removing more of them; a setting of 10 is most tolerant, leaving low frequencies mostly intact.
- **Span** customizes MaxxStereo performance according to speaker placement.  
  Range: Narrow, Normal, Wide
- **Mode** customizes MaxxStereo performance for speakers or headphones.  
  Range: Speakers, Headphones. *(In Headphones mode, Span and Tolerance controls have no effect.)*
**MaxxDialog™** is a powerful dialog booster that dramatically increases the detail and definition of dialog levels. Based on Waves' innovative Center technology, MaxxDialog lets you adjust dialog levels in movies and games, relative to background content, so you can bring the dialog up-front and center – exactly where you want it. With MaxxDialog, you’ll enjoy clear, intelligible dialog that doesn’t disappear behind loud music and special effects, without affecting the rest of your audio mix.

![MaxxDialog Controls](image)

**MaxxDialog Controls**

- **On/Off**
- **Center Boost** determines the amount of level boost or cut applied to center-panned content such as dialog.
  Range: 0 to 100, in increments of 1. (50 indicates no change.)
- **Sides Boost** determines the amount of level boost or cut applied to side-panned content.
  Range: 0 to 100, in increments of 1. (50 indicates no change.)
MaxxVolume™ is a 4-way dynamics processor that works its magic using a combination of high level compression, low level expansion, gating, and leveling, plus expert presets designed by top sound engineers as well as customizable parameters for each function. High level compression keeps louder sounds under control, while low level expansion brings up the relative volume of quieter passages. MaxxVolume’s noise gate silences unwanted background and system interference, while its MaxxLeveler™ function smoothes out volumes, automatically adjusting differences in level for richer performance at all volumes. From program to program, station to station, song to song – just set it and forget it; MaxxVolume will keep your levels in check.

MaxxVolume Controls

- On/Off

- Gain determines the amount of compression and automatic gain compensation (boost) added to the signal.
  Range: 0 to 20 dB (in increments of approximately 0.5 dB)
- Dynamic Range controls the system’s dynamic range, which determines the expansion threshold (the point at which low level gain boost begins.)
  Range: 20 to 80 dB (from lowest/most compression to highest/no compression)

- Low Level Gain determines the amount of expansion (low level gain boost.)
  Range: 0 (no boost) to 40 dB (maximum boost)

- Noise Gate determines the noise gate threshold. Signals below this threshold are silenced or "gated."
  Range: -140 to -30 dB

- In/Out determine the overall input and output levels to and from MaxxAudio. These are generally set once when first using MaxxAudio.

- Leveler On/Off

- Leveler State toggles between Quiet and Loud modes.
  Range: Quiet (low boost), Loud (high boost)
**Compressor Type** toggles between Soft and Hard knee types. When set to Soft, compression occurs faster once peak levels have been reached, resulting in lower output level. When set to Hard, compression occurs more slowly, resulting in increased output level.

**Output Meter** displays left/right output levels. When measuring audio levels in the digital domain, 0 dBFS is the loudest possible signal before distortion begins. (dBFS = decibels, full scale)
Range: -24 to 0 dBFS