

# BluOS Enabled 4K Ultra HD Receiver with Immersive Sound

# Preliminary

# Introducing the T 778 A/V Surround Sound Receiver

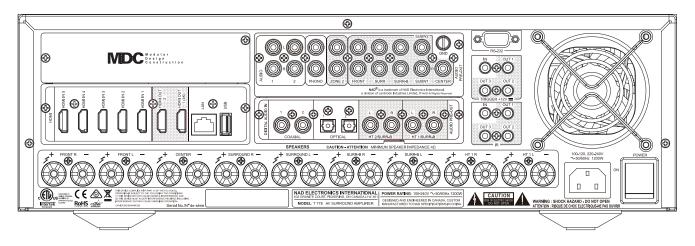
Surround yourself with perfection. The T 778 represents NAD's unwavering philosophy of real-world performance, simplicity of operation, and future upgradability. Only NAD offers Modular Design Construction (MDC), our proven method for preventing premature obsolescence. Dolby<sup>®</sup> Atmos<sup>™</sup> and DTS<sup>®</sup> Master Audio combine with Dirac Live<sup>™</sup> room correction to deliver hyper-realism that captures every dimension of a performance. Add bit-perfect UHD 4K video pass-through and the T 778 delivers the most accurate sound and image experience you've ever had. Musical performance is outstanding with High Res Multi-room streaming via BluOS and nine channels of high current amplification capable of powering any loudspeaker to its maximum potential. The T 778 is secondto-none in terms of flexibility and up-to-the-minute digital technology.

# Modular Design Construction (MDC)

With MDC all major digital circuits can be upgraded and replaced to keep the T 778 forever young and capable. This NAD innovation is a unique architecture that keeps pace with the fast-changing world of digital formats by allowing connectivity and feature upgrades as new technology becomes available. MDC defies premature obsolescence, so you can keep pace with the latest developments in high performance AV through dealer-installed modules. Your T 778 can be upgraded as your needs and tastes develop, and you only need to replace the module you want to upgrade, not the entire AV Amplifier.

# **FEATURES & DETAILS**

- 140 Watts FTC power at 8 Ohms and 170 Watts at 4 Ohms
- 9 x 85 Watts FDP (Full Disclosure Power), all channels driven simultaneously at full bandwidth at rated distortion
- 165 Watts IHF Dynamic Power at 8 Ohms and 280 Watts at 4 Ohms
- Hybrid Digital Amplifier Technology
- TFT touch screen and improved ergonomics for user-friendly operation
- UHD 4K video pass-through
- High-Res BluOS enabled Network Streaming
- Dirac Live Room Correction
- MQA decoding available on all digital inputs
- AirPlay2
- MDC (Modular Design Construction) offers ability to upgrade to future digital formats as they become available. Two MDC slots provided.
- CI friendly- RS232 Serial Control Port. 12V Trigger In/Out
- IR In with learning function
- 3U Low profile rack-mount chassis
- Gross Dimensions: 17  $^{1}\!/_{8}\,x$  6  $^{13}\!/_{16}\,x$  16  $^{3}\!/_{4}$  " (W x H x D)



## **Fully Featured Surround**

The T 778 carries on the enviable task of representing NAD's finest surround sound performance. It offers full HDMI video switching and surround sound decoding to 7.2.4 channels. Brimming with a full array of sophisticated features like the high resolution lossless surround formats from Dolby TrueHD and DTS Master Audio decoding, and now object-based audio with Dolby Atmos, the T 778 provides the highest levels of performance. The surround mode of the source material is automatically detected via the digital inputs of the T 778, and the most advanced form of decoding, based on your setup, is switched in. Conversion of the encoded digital bitstream is performed with high resolution and extremely linear D/A converters carefully selected for their performance capabilities.

#### Efficient Distortion-free Amplification

The T 778 features the latest developments in NAD's Hybrid Digital technology to create nine high current and high power channels of amplification. These amplifiers exhibit no 'crossover distortion,' sonically the most annoying form of distortion, and are able to provide very high peak current for dramatic crescendos and impactful action scenes. The silent black background and explosive dynamics afforded by this amplifier technology adds drama and excitement to your music and movies.

#### **Undistort Your Listening Room**

DIRAC Live room correction is now featured and offers a remarkable increase in fidelity by correcting both frequency response and time domain impulse response. When properly calibrated, DIRAC Live improves clarity, naturalness, and pinpoint imaging.

#### Multi-room Network Music Streaming

BluOS<sup>™</sup>, the high resolution audio multi-room music player shared with NAD's sister brand Bluesound, is included in the T 778 making it unique among high end AV Amplifiers. When connected to the Internet via Ethernet or Wi-Fi the T 778 has access to thousands of Internet radio stations and over a dozen high quality music services including Spotify, Tidal, Deezer, and many more. With full support for MQA the T 778 has the highest resolution audio performance available combined with the highest definition video performance.

## **Flexible Setup**

The latest HDMI features, including HDCP 2.2, 4:4:4 color resolution, High Dynamic Range and Dolby Vision video support, plus CEC/ARC, are all included. Digital inputs are available in both coaxial and optical formats to make it easy to attach all your digital sources. With BluOS<sup>™</sup> we have also made it easy to add more speakers for listening to music in additional rooms. IR repeaters, 12V triggers to automatically switch amplifiers on and off, and an RS-232 data port makes it easy to connect to highly advanced automated control systems, such as Crestron and Control4. Thoughtful features like discrete On and Off codes, direct access to inputs and music presets facilitates the integration of the T 778 into elaborate remote-control systems.

#### **Customize with AV Presets**

The T 778's sleek TFT touch panel display makes setup and control easier than ever before. Unique features like AV presets and a completely flexible input setup allow unprecedented flexibility and ease of use. The T 778 offers five independent AV presets that store speaker level and tone control settings for instant recall, making it easy to custom tailor your system for different types of program material. Encoded surround modes like Dolby Digital and DTS are automatically selected if the program is so encoded. The T 778 also remembers your last used settings when switched in and out of Standby mode.

#### **Complete and Compact**

The T 778 combines all the control, decoding functions, and nine channels of amplification in one compact chassis that offers many options for installation in the home. Because of its highly efficient design the T 778 is compact and operates without fans that can add noise and is rack mountable for integration into complex home entertainment systems. The T 778 is an excellent example of the NAD Design Team's expertise in digital decoding stages, video engineering, and analogue amplification to offer the best overall performance. Along with the new touch screen and ergonomic refinements that simplify operation, the T 778 can be the dream command centre of your home entertainment system.

# **Specifications T 778**

AMPLIFIER SECTION		
FTC		140W (21.5 dBW) (1% THD, two channels driven, 8 ohms)
		170W (22.3 dBW) (1% THD, two channels driven, 4 ohms)
Full Disclosure Power (all channels driven simultaneously	У	9x85W (19.3dBW) (20Hz-20kHz, all channels driven, 4 ohms and 8 ohms)
at full bandwidth at rated distortion)		
IHF dynamic power;	8 Ohms	165W (22.2 dBW)
	4 Ohms	280W (24.5 dBW)
Total harmonic distortion at rated power		<0.08% (20Hz-20kHz)
IM distortion at 1/3 rated power		<0.03% (20Hz-20kHz)
Damping factor		>300 (20Hz-1kHz, 8 ohms)
Input sensitivity and impedance		1.12V (ref. 8 Ohms, VOL at 0dB for 85W)
Frequency response		±0.3 dB/-0.8 dB (ref. 1kHz, 20Hz-20kHz)
Signal/noise ratio		>100 dB (ref. rated power at 8 Ohms, A-WTD)
		>85 dB (ref. 1W at 8 Ohms, A-WTD)
PREAMPLIFIER SECTION		
Frequency response		±0.5dB (ref. 20Hz – 20kHz)
Signal-to-noise ratio		>100dB (ref. 2V, A-WTD)
Total harmonic distortion		<0.01%
Input sensitivity		245 mVrms (ref. 2V)
Maximum output level		>4.5Vrms
PHONO INPUT		
Input Sensitivity		6.2 mVrms (2V output)
Signal/noise ratio		>80 dB (2Vrms, A-WTD)
Maximum input level		>90 mVrms (1 kHz)
BLUOS SECTION		
Supported audio file format*		MP3, AAC, WMA, OGG, FLAC, ALAC, WMA-L, MQA, WAV, AIFF
Supported cloud services*		Spotify, Amazon Music, WiMP, Qobuz, IDAGIO, Deezer, Murfie, nugs.net, TIDAL, Napster, Bugs, KKBOX, Taihe Music ZONE, SOUNDMACHINE
Supported Operating Systems**		Music playback from network shares on the following desktop operating systems:
		Microsoft Windows XP, 2000, Vista, 7, 8 to current Windows Operating Systems and macOS
versions		
Free internet radio*		Tuneln, iHeartRadio, Calm Radio, Radio Paradise, Slacker Radio
User interface		Free BluOS Controller App available for download from the respective App stores of Apple iOS devices (iPad, iPhone and iPod), Android devices, Kindle Fire and Windows or macOS
		desktops
Integration partners		Control4, RTI, Crestron, URC, push, iPort, ELAN, Lutron, Roon, AirPlay2
Voice control integrations		Amazon Alexa and Google Assistant Skills
POWER CONSUMPTION		
Standby power		<0.5W (full standby)
		<8W (network standby)
Idle Power		>70W (120V version only)
		>63W (230V version only)
DIMENSION AND WEIGHT		
Unit Dimensions (W x H x D)		435 x 140 x 430 mm (Gross)*
		17 <sup>3</sup> /16 x 5 <sup>9</sup> /16 x 16 <sup>15</sup> /16 inches <sup>**</sup>
Net Weight		12.1 kg (26.7 lbs)
Shipping Weight		15.5 kg (34.2 lbs)

\* Gross dimensions include feet, extended buttons and rear panel terminals. \*\* Non-metric measurements are approximate. NAD Electronics will not assume any liability for errors being made by retailers, custom installers, cabinet makers, or other end users based on information contained in this document. Note: Installers should allow a minimum clearance of 55mm for wire/cable management.



NAD Electronics International reserves the right to change specifications or features without notice. NAD is a registered trademark of NAD Electronics International. All rights reserved. No part of this publication may be reproduced, stored, or transmitted in any form whatsoever without the written permission of NAD Electronics International. © 02/19 19-072 NAD Electronics International. www.NADelectronics.com