

CI 9060 6-Channel Power Amplifier



- 6 x 80W Continuous Power (6 ohms), all channels driven simultaneously
- Multi-channel poweramp for custom installation
- Flex-Pad allows easy system configuration
- · Autologic turn on circuit
- · Output management circuit (OMC) ensures reliability
- · Individual input level controls
- · EIA rack mount kit included
- Quiet low-pressure cooling system

The NAD CI 9060 is a clean-sheet design 6 channel amplifier specifically engineered to meet the demanding requirements of the advanced custom installation market. The result of this intensive design effort is an amplifier that sets new standards for "bullet-proof" reliability and sonic performance in this specialized category.

Power

Many of the amplifiers designed for multi-zone distributed audio are just not powerful enough. The CI 9060 at 80 Watts Continuous power per channel, boasts nearly double the power of most other competing amplifiers. This is very critical, because unlike a normal hi-fi amplifier that only has to send its signal to speakers across room, custom installations often demand that the signal be sent from one end of the home to the other. The series resistance of long runs of speaker wire combined with impedance-matched volume controls can create special demands on an amplifier that the CI 9060 has been designed to overcome.

OMC

NAD's proprietary Output Management Circuit (OMC) ensures that the full power is available at any reasonable load impedance. If the load impedance falls below 3 ohms, indicating something other than a loudspeaker is connected to the amplifier channel, the OMC will limit the power flow and prevent the amplifier from overdriving or overheating. This is not only protects the amplifier, but it also prevents loads attached to the amplifier from heating up excessively, an important factor when the liability of an installed system is a consideration. When the OMC detects a potential fault situation and begins to limit current flow, an amber coloured LED illuminates on the front panel to alert the installer to a problem in the system. When the OMC is activated, the amplifier will continue to play without distortion, but the power level will be reduced to the amplifier channel that has the problem.

Reliability

Every design decision, both the electronic and mechanical, was made with absolute reliability as the primary goal. An auto-resetting protection circuit is also part of the CI 9060's design. The fast acting protection circuit jumps into action if the amplifier overheats or encounters a dead short circuit condition. A red front panel LED indicates that the protection circuit has been activated. When the condition is normalized the amplifier resets to Standby condition. In the unlikely event of amplifier failure, the CI 9060 is designed to be easily field serviceable with all amplifying circuitry mounted on plug-in modules.

Low pressure cooling

With the CI 9060's highly efficient low-pressure cooling system, it is very unlikely that the protection system will ever encounter an overheating situation. High-volume, low-pressure, fans keep both the power supply and the output stage cool, yet are essentially quiet in operation. Thermostatically controlled, the fans automatically adjust to the ambient temperature to insure the optimum operating conditions for the amplifier at all times.

Flexibility

The ideal Custom Installation amplifier not only has to have absolute reliability and great sound quality, but it also must be flexible enough to interface correctly with a variety of other devices, and often diverse system requirements. NAD has developed two unique features that endow the CI 9060 with exceptional flexibility.

Flex-Pad

The Flex-Pad allows the CI 9060 to drive from 1 to 6 independent zones, in any configuration of stereo or mono (or in mixed combination), without resorting to the confusion, sonic degradation, and questionable reliability of switches. Instead, the Flex-Pad uses the tried and true patch-bay concept to configure the amplifier channels. The configuration is visually obvious, making it easier for technicians to set up the system and to troubleshoot for system errors. The supplied patch cables can be easily reconfigured or replaced. This can be especially important and can greatly simplify future service calls years down the road (especially if system documentation is missing or incomplete).

ATO Logic

The CI 9060 can be turned on in any one of three ways, for complete system flexibility:

- 1. From the front panel switch.
- 2. Via the 12 volt trigger circuit.
- 3. By a switchable "sleep/wake" signal-sensing circuit.

This is managed by the Automated Turn-On Logic (ATO Logic) circuit that requires the amplifier to be switched back to standby in the same manner by which it was activated. In other words, if it is switched on via a 12V control signal, it cannot be switched to standby via the front-panel switch, it must wait for the 12V signal.

Summary

High power, bullet-proof reliability, absolute protection and safety, combined with flexibility and NAD sound quality make the CI 9060 unique in the world of custom installation. Very small physical size and the standard rack mount kit (3U) are just icing on the cake (The CI 9060's big brother, the 12 channel CI 9120 is the same physical size, making the future expansion easy). Individual level trims for each channel help make installation faster and easier. This is a new kind of amplifier that brings NAD's core values of performance, value, and simplicity to the custom installation market place.

SPECIFICATIONS	
Continuous Power, 20Hz-20kHz, all channels	6 x 80W
driven simultaneously at $4/6\Omega$	
Total Harmonic Distortion	0.03%
20Hz-20kHz at rated power	
Clipping Power (0.1% THD)	90W
IHF dynamic power at 6Ω	85W
IHF dynamic power at 4Ω	90W
IM Distortion (SMPTE 60Hz+7kHz)	>0.08%
IM Distortion (CCIR 19kHz+20kHz)	>0.08%
Damping factor (6Ω, 20Hz-20kHz)	31

Input impedance	25kΩ
Input sensitivity	1.1 volts for 8W/6Ω
Voltage gain	28dB
Frequency response -3dB at: 75W	5Hz to 45kHz
Signal/noise ratio; ref 1W	89dB
Physical Specifications	
Dimensions (W x H x D)	17 3/16 x 5 1/4 x 17 3/4"
	(435 x 133 x 450 mm)
Net Weight	58 lbs (26.4kg)
Shipping Weight	68 lbs (31kg)



