# NAD®

# CI 580

## BluOS Network Music Player

BluOS Network Music Player **CI 580**

© NAD CI580v2

# Owner's Manual

# IMPORTANT SAFETY INSTRUCTIONS

**SAVE THESE INSTRUCTIONS FOR LATER USE.**
**FOLLOW ALL WARNINGS AND INSTRUCTIONS MARKED ON THE AUDIO EQUIPMENT.**

1  **Read instructions** - All the safety and operating instructions should be read before the product is operated.

2  **Retain instructions** - The safety and operating instructions should be retained for future reference.

3  **Heed Warnings** - All warnings on the product and in the operating instructions should be adhered to.

4  **Follow Instructions** - All operating and use instructions should be followed.

5  **Cleaning** - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6  **Attachments** - Do not use attachments not recommended by the product manufacturer as they may cause hazards.

7  **Water and Moisture** - Do not use this product near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

8  **Accessories** - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

9  A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

10  **Ventilation** - Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

11  **Power Sources** - This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. The primary method of isolating the amplifier from the mains supply is to disconnect the mains plug. Ensure that the mains plug remains accessible at all times. Unplug the AC power cord from the AC outlet if the unit will not be used for several months or more.

12  **Grounding or Polarization** - This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

13  **Power** - Cord Protection - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

14  **Outdoor Antenna Grounding** - If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

**NOTE TO CATV SYSTEM INSTALLER**

This reminder is provided to call the CATV system installer's attention to Section 820-40 of the NEC which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.
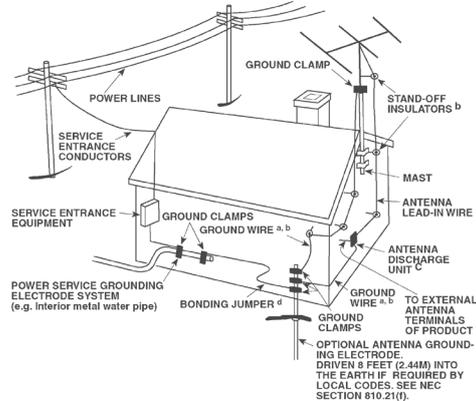


15  **Lightning** - For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

16  **Power Lines** - An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

17  **Overloading** - Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

18  **Object and Liquid Entry** - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.  Never spill liquid of any kind on the product.

**WARNING: THE APPARATUS SHOULD NOT BE EXPOSED TO DRIPPING OR SPLASHING, AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THE APPARATUS. AS WITH ANY ELECTRONIC PRODUCTS, USE CARE NOT TO SPILL LIQUIDS INTO ANY PART OF THE SYSTEM. LIQUIDS CAN CAUSE A FAILURE AND/OR A FIRE HAZARD.**

19  **Damage Requiring Service** - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  a)  When the power-supply cord or plug is damaged.
  b)  If liquid has been spilled, or objects have fallen into the product.
  c)  If the product has been exposed to rain or water.
  d)  If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
  e)  If the product has been dropped or damaged in any way.
  f)  when the product exhibits a distinct change in performance-this indicates a need for service.

20  **Replacement Parts** - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

21  **Safety Check** - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

22  **Wall or Ceiling Mounting** - The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

23  **Heat** - The product should be situated away from heat sources such as radiators, heat registers, stoves or other products (including amplifiers) that produce heat.

**WARNING**

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

**CAUTION**

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAYBE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.

THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

**CAUTION**

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The socket-outlet shall be installed near the apparatus and shall be easily accessible.

**CAUTION**

Changes or modifications to this equipment not expressly approved by NAD Electronics for compliance could void the user's authority to operate this equipment.

**CAUTION REGARDING PLACEMENT**

To maintain proper ventilation, be sure to leave a space around the unit (from the largest outer dimensions including projections) that is equal to or greater than shown below.

    Left and Right Panels: 10 cm
    Rear Panel: 10 cm
    Top Panel: 10 cm

**NOTES ON ENVIRONMENTAL PROTECTION**

At the end of its useful life, this product must not be disposed of with regular household waste but must be returned to a collection point for the recycling of electrical and electronic equipment. The symbol on the product, user's manual and packaging, point this out.

The materials can be reused in accordance with their markings. Through re-use, recycling of raw materials or other forms of recycling of old products, you are making an important contribution to the protection of our environment. Your local administrative office can advise you of the responsible waste disposal point.

**INFORMATION ABOUT COLLECTION AND DISPOSAL OF WASTE BATTERIES (DIRECTIVE 2006/66/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL OF EUROPEAN UNION) (FOR EUROPEAN CUSTOMERS ONLY)**

**Pb**

**Hg** **Cd**

Batteries bearing any of these symbols indicate that they should be treated as "separate collection" and not as municipal waste. It is encouraged that necessary measures are implemented to maximize the separate collection of waste batteries and to minimize the disposal of batteries as mixed municipal waste.
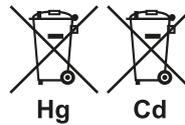
End-users are exhorted not to dispose waste batteries as unsorted municipal waste. In order to achieve a high level of recycling waste batteries, discard waste batteries separately and properly through an accessible collection point in your vicinity. For more information about collection and recycling of waste batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

By ensuring compliance and conformance to proper disposal of waste batteries, potential hazardous effects on human health is prevented and the negative impact of batteries and waste batteries on the environment is minimized, thus contributing to the protection, preservation and quality improvement of the environment.

**RECORD YOUR MODEL NUMBER (NOW, WHILE YOU CAN SEE IT)**

The model and serial number of your new CI 580 are located on the back of the cabinet. For your future convenience, we suggest that you record these numbers here:

Model no: . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Serial no.: . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

# INTRODUCTION

## GETTING STARTED

### WHAT'S IN THE BOX

Packed with your CI 580 you will find
- Two detachable mains power cord
- 1 piece of 6-position terminal block (for +12V TRIGGER/IR IN)
- 1 piece of 4-position terminal block (for System Interrupt)
- Quick Setup Guide

### NOTE

*Follow enclosed Quick Setup Guide to help you get started with your CI 580.*

### SAVE THE PACKAGING

Please save the box and the packaging that came with the CI 580. Should you move or need to transport your CI 580, this is the safest container to use. We've seen too many otherwise perfect components damaged in transit for lack of a proper shipping carton. So please, save that box!

# IDENTIFICATION OF CONTROLS
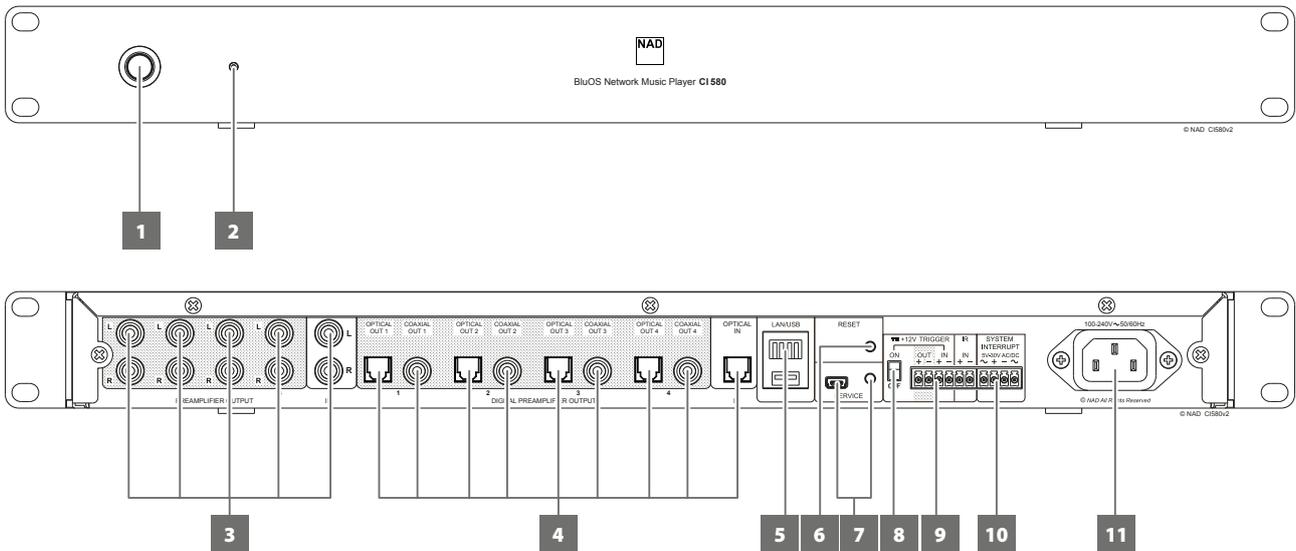


## 1 STANDBY BUTTON
- Press and hold this button to bring CI 580 to standby mode. CI 580 is not accessible via BluOS app while at standby mode.
- Press this button to switch CI 580 from standby mode to operating mode - LED status indicator will turn red to flashing green if there is no wired internet connection or turn to red, flashing green and then solid blue with wired internet connection.

## 2 STATUS INDICATOR
This is an indicator of network connectivity. Below is a table of the LED blink codes and their corresponding descriptions.

| LED BLINK CODE | DESCRIPTION |
|---|---|
| Short red flash, then flashing green | Powering up, rebooting |
| Alternate flashing red and green | Upgrading… |
| Flashing green | Connecting to network shares |
| Solid red | Cannot boot; drive error |
| | Upgrade mode |
| Red pulse | No internet gateway |
| Flashing red | Factory reset in progress |
| Solid white | Indexing |
| White pulse | Software update available |
| Solid blue | Connected to Network – ready to use with Bluesound App |
| Flashing blue | Mute mode |

## 3 ANALOG IN
- Input for line level sources such as CD player, tuner or any compatible devices. Use a twin RCA-to-RCA lead to connect the source device's left and right "Audio Output" to this input. The source will appear as an "Analog Input" in the navigation drawer of the BluOS App.

### PREAMPLIFIER OUTPUT (1-4)
- Use a twin RCA-to-RCA lead to connect the left and right "Audio Input" of a power amplifier or processor to a particular PREAMPLIFIER OUTPUT port.
- Connect any or all preamplifier output ports to corresponding audio input ports of compatible amplifiers, receivers or processors.
- Audio output for each preamplifier output is dependent upon the current or selected source of the particular Player. This is configurable via the BluOS App.
- Refer to the sample table below showing selected sources for particular Players and their corresponding preamplifier or optical/coaxial audio output. The selected Source shown is an example only. The Source can be any media available from the BluOS App's navigation drawer.

| SELECTED SOURCE FROM NAVIGATION DRAWER | PLAYER | PREAMPLIFIER OUTPUT | | | | OPTICAL/COAXIAL OUTPUT | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Analog input | CI580-XXXX | ✓ | | | | ✓ | | | |
| Optical input | CI580-XXXX-2 | | ✓ | | | | ✓ | | |
| Library | CI580-XXXX-3 | | | ✓ | | | | ✓ | |
| Music Streaming Service | CI580-XXXX-4 | | | | ✓ | | | | ✓ |

**4  OPTICAL IN**
- Connect to the corresponding optical digital output of sources such as CD or BD/DVD players, digital cable box, digital tuners or any compatible devices. The source will appear as an "Optical Input" in the navigation drawer of the BluOS App.

**DIGITAL PREAMPLIFIER OUTPUT (OPTICAL/COAXIAL 1-4)**
- Connect any or all digital preamplifier output ports to corresponding optical or coaxial input ports of compatible amplifiers, receivers or processors.
- Audio output for each digital preamplifier output is dependent upon the current or selected source of the particular Player. This is configurable via the BluOS App.
- Refer to the same sample table above showing selected sources for particular Players and their corresponding preamplifier or optical/coaxial audio output.

**5  LAN**
- LAN connection must be setup for wired connection to be established. Set up a Wired Ethernet broadband router with broadband internet connection. Your router or home network should have a built-in DHCP server to consummate the connection.
- Using a standard straight-through Ethernet cable (not supplied), connect one end of the Ethernet cable to the LAN port of your wired Ethernet broadband router and the other end to CI 580's LAN port.

**NOTES**
- *NAD is not responsible for any malfunction of the CI 580 and/or the internet connection due to communication errors or malfunctions associated with your broadband internet connection or other connected equipment.*
- *Contact your Internet Service Provider (ISP) for assistance or the service bureau of your other equipment. Contact your ISP for policies, charges, content restrictions, service limitations, bandwidth, repair and other related issues pertinent to internet connectivity.*

**USB**
- Connect to this USB port USB mass storage devices formatted as FAT32, NTFS or Linux ext4. The connected USB device appears as a Local Source (USB) in the BluOS App.
- Access and playback music stored in the connected USB device by selecting "USB" from the BluOS App

**6  RESET**
- Use the RESET button to switch CI 580 from operating mode to standby mode.

**Switch from operating mode to standby mode:** While at operating mode, press and hold RESET button until the illuminated blue LED status indicator turns off. CI 580 is not accessible via BluOS app while at standby mode.

**Switch from standby mode to operating mode:** While at standby mode, short press RESET button – LED status indicator will turn red to flashing green if there is no wired internet connection or turn to red, flashing green and then solid blue with wired internet connection.

- Use RESET button to restore CI 580 to its factory default settings.
- Factory Reset is recommended if your CI 580 is not functioning or internet firmware upgrade has failed. All customization, configuration, file shares and saved playlists will be lost. They have to be re-created once factory reset is completed.

**FACTORY RESET PROCEDURE**
a  Disconnect AC power cord's plug from the mains power outlet.
b  Press and hold rear panel RESET button and while doing so reconnect the AC power cord's plug to the mains power outlet.
c  The front LED indicator turns red, immediately turns green and then back to red - do not release hold of the RESET button.
d  After about 30 seconds of holding down the RESET button, the front LED indicator blinks red.
e  Release the RESET button as soon as the front LED indicator blinks red.
f  Factory reset is completed once the front LED indicator turns solid blue.

**IMPORTANT NOTE**

*Releasing the RESET button at any time before the front LED indicator starts flashing red will cancel the factory reset and leave the CI 580 at Upgrade Mode. Just start again the procedure for Factory Reset.*

**7  SERVICE**
- This is not for consumer use. Only authorized service personnel can access this SERVICE port.

**8  +12V TRIGGER ON/OFF**
- This dual function switch alternates between sensing a +12V input as applied through the +12V TRIGGER IN and defeating +12V TRIGGER IN.
- At ON setting and with the +12V TRIGGER IN of CI 580 connected to a compatible external device that is equipped with a +12V DC trigger output, the CI 580 can be switched remotely from standby mode to operating mode and vice-versa. This is dependent upon the presence or absence of +12V DC supply at +12V TRIGGER IN (refer also to item about +12V TRIGGER IN).
- With +12V TRIGGER IN – ON/OFF switch set to ON, the CI 580 cannot be powered from standby to operating mode and vice-versa. The function of powering up/down the CI 580 is handled by the compatible external device where +12V TRIGGER IN is connected.
- +12V TRIGGER IN is disabled when +12V TRIGGER IN - ON/OFF switch is set to OFF. This is the default setting and allows the CI 580 to power up normally.

# IDENTIFICATION OF CONTROLS

**9 +12V TRIGGER IN/OUT/IR IN**

- The 12V TRIGGER/IR IN terminal block is divided into three sections - 12V TRIGGER IN, 12V TRIGGER OUT and IR IN.
- Connect +12V TRIGGER IN terminals to compatible external +12V TRIGGER source and +12V TRIGGER OUT terminals to compatible external equipment that is equipped with a +12V TRIGGER input.
- On the other hand, connect IR IN section terminals to the output of an IR (infrared) repeater (Xantech or similar) or IR output of a compatible device to allow control of CI 580 from a remote location.
- Install the wired up 12V TRIGGER/IR IN terminal block to CI 580's +12V TRIGGER/IR IN rear panel terminal.

**+12V TRIGGER IN/OUT**

- The +12V TRIGGER IN allows the CI 580 to be remotely switched from standby mode to operating mode and vice-versa by ancillary equipment such as a preamplifier, AV processor, etc. The controlling device must be equipped with a +12V trigger output to use this feature.
- The +12V TRIGGER OUT is used for controlling external equipment that is equipped with a +12V TRIGGER input. With +12V TRIGGER (ON/OFF) switch set to OFF, this output will be 12V when the CI 580 is at operating mode and 0V when it is at standby mode or powered OFF.
- Refer also to the item about "12V TRIGGER (ON/OFF)".

**IR IN**

- To program IR Remote commands into your CI 580 via IR IN, go to the Settings menu of the BluOS App, select Player and then IR remote. Simply select the function desired from the IR Remote menu, point an IR remote control at the IR repeater and press the button to perform that function. Once successful, a check-mark will appear beside the programmed function. You can now use the IR remote control to command the CI 580 with the programmed functions.

**10 SYSTEM INTERRUPT**

- Doorbells or fire alarms can be hooked-up via the supplied terminal connector block. Refer to your doorbell or fire alarm installation procedure for proper connection with the CI 580.
- Once installed and connected, doorbell or fire alarm activation will immediately interrupt current source and buzzer or alarm will be heard.

**11 AC MAINS INPUT**

- The CI 580 comes supplied with two separate AC mains power cords.  Select the AC mains power cord appropriate for your region. An adaptor may be necessary in certain regions.
- Always disconnect the plug from the wall outlet first, before disconnecting the other end from CI 580's AC mains input socket.
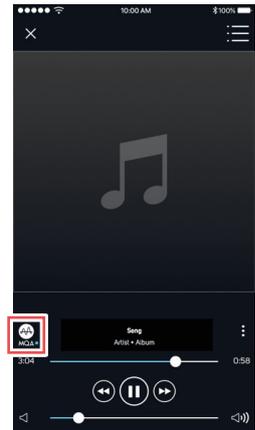
## MASTER QUALITY AUTHENTICATED



Master Quality Authenticated (MQA) is a revolutionary end-to-end technology built into CI 580 that captures and delivers master quality audio. CI 580 includes a powerful decoder and audio renderer for the MQA system. This ensures that MQA-encoded audio files sound exactly like the source.

In the BluOS app, the MQA indicator displays green or blue to indicate that the unit is decoding and playing an MQA file. It displays green to indicate decoding and playback of a MQA file and denotes provenance to ensure that the sound is identical to that of the source material. It displays blue to indicate playback of MQA Studio file that has either been approved in the studio by the artist/ producer or has been verified by the copyright owner.
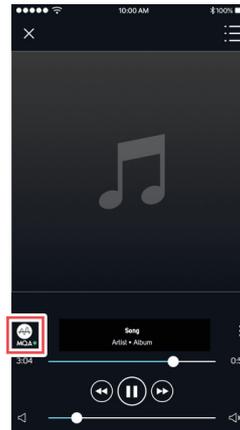


Green Indicator - Original MQA file     Blue Indicator - MQA Studio file

MQA® is a trademark of MQA Limited.

## MAKING THE MOST OUT OF YOUR CI 580

Download the BluOS Controller App from the respective App stores of Apple iOS devices (iPad, iPhone and iPod), Android devices, Kindle Fire and Windows or Mac desktops.

Launch the BluOS Controller App and explore everything from your streaming music services, internet radio stations, networked music collections and favorites with quick and easy single-search discovery.

Visit **support.bluesound.com** for more information about setup and operation guidelines of your CI 580.

# SPECIFICATIONS

| AUDIO | |
|---|---|
| Rated distortion | ≤0.005% |
| Signal-to-noise ratio | 110 dB |
| Sample rate | 32 - 192 kHz |
| Bit depth | 16-24 bit |
| 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* | TuneIn, iHeartRadio, Calm Radio, Radio Paradise, Slacker Radio |
| Integration partners | Control4, RTI, Crestron, URC, push, iPort, ELAN, Lutron, Roon, AirPlay 2 |

| CONNECTIVITY | |
|---|---|
| Input | Analog: RCA stereo |
| | SPDIF: Optical (TOSLINK) |
| | USB Type A: USB memory stick and supported peripherals - FAT32, NTFS or Linux ext4 formatted |
| | USB Type B: Computer audio interface |
| | +12V Trigger IN: 12V ± 20% |
| | IR IN |
| | Doorbell interrupt |
| Output | Analog: RCA Stereo x 4 |
| | SPDIF: Optical x 4 (TOSLINK), Coaxial x 4 |
| | +12V Trigger OUT: 12V ± 20% |
| Network | Ethernet/LAN: Ethernet RJ45, Gigabit |
| 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 |
| | Front panel Standby button |

| GENERAL | |
|---|---|
| AC power supply | 100 - 240V 50/60 Hz |
| Standby power | 6W (Network standby mode) |
| Unit dimensions (L x W x D)*** | 480 x 46 x 234 mm |
| | 18 $^{15}/_{16}$ x 1 $^{13}/_{16}$ x 9 ¼ inches |
| Shipping weight | 3.8 kg (8.4 lbs) |

\* - Supported audio file format, cloud services and free internet radio are subject to change without notice.
\*\* - Compatibility to latest versions is subject to future software update.
\*\*\* - Gross dimension includes feet, front panel Standby button and extended rear panel terminals

The CI 580 specifications may be subject to change without prior notice. Check out www.nadelectronics.com for the latest specifications and features of the CI 580.

**NAD**

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