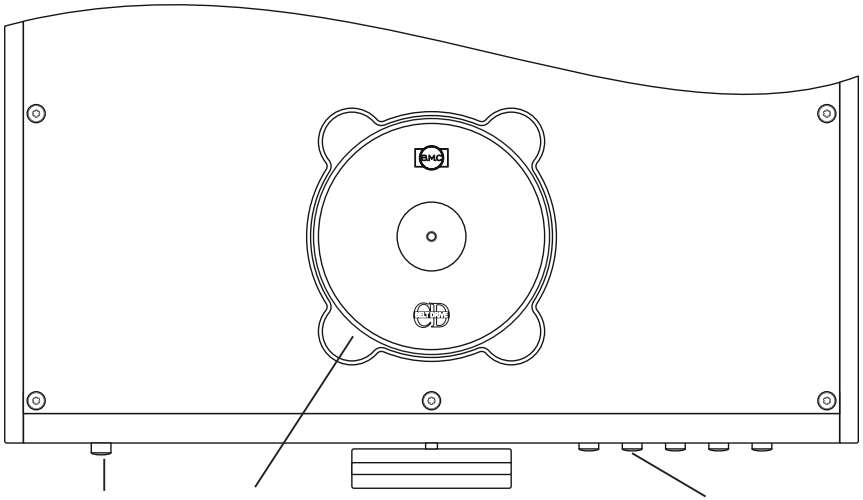
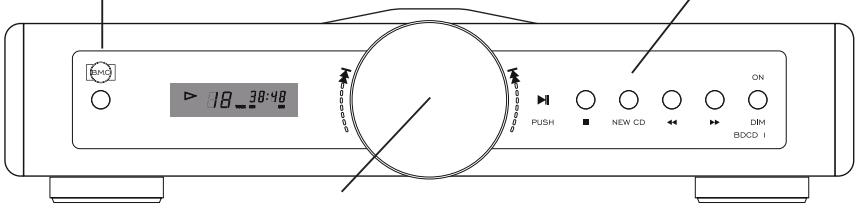
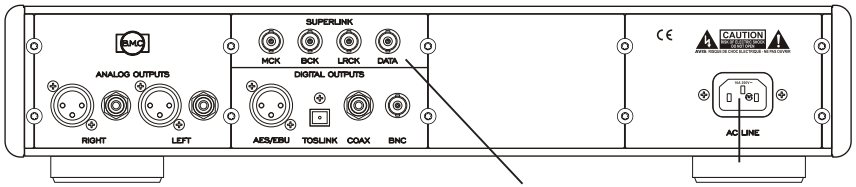
B.M.C. Audio BDCD 1
Quick Start



Power on the CD player, put on a CD with the stabilizer on top, press "NEW CD"



After Lead-In press the big wheel for PLAY and turn accordingly for skip



DAC-Output Analog (Optional)

SPDIF-Digital-Outputs (bottom side)

SUPERLINK-Digital-Output (top side)

AC Power Terminal
(Make sure the local AC power voltage is within the printed range)

Find a detailed description and illustration inside this owner's manual.

1006-EN

BDCD 1
Owner's Manual

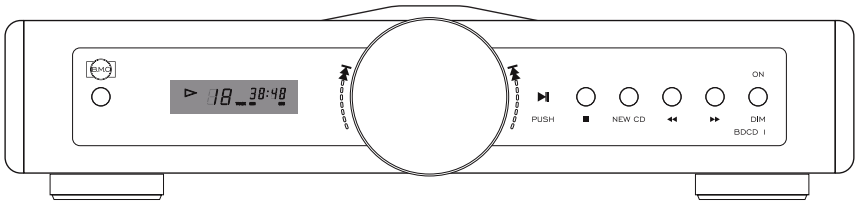


Table of Content

Technical Specifications B.M.C. BDCD1

Frequency Response 20Hz – 20kHz DF Flat	**+0 / - 0.3dB**
Frequency Response 20Hz – 20kHz DF Pulse	**+0 / - 2.5dB**
Output Impedance	**50 Ohm**
Output Voltage at 0dBFS	**4Vrms**
THD+Noise	
0dBFS	**0.006 %**
-6dBFS	**0.004 %**
-10dBFS	**0.003 %**
-20dBFS	**0.006 %**
Signal to Noise ratio	**-115dB**
Power Consumption	**16-20 W**
Dimensions Enclosure (W x H x D)	**435 x 78 x 320mm**
Dim. Incl. Knobs, legs, terminals, stabiliser	**435 x 99 x 350mm**
Weight	**9 Kg**

Note: Technical specifications are subject of change without notification. All sepcifications without warranty.

Technical specifications just have a limited meaning about the overall quality. The main purpose is to ensure some technical standards, but better specs not necessarily result in better sound quality. Although B.M.C. audio always put highest priority on sound quality and just use negative-feedback-free circuitry, excellent technical specifications have been achieved.

Content of Packing

- BDCD1 unit
- CD-Stabilizer
- Power Cable
- 4 SUPERLINK BNC-75-Ohm-Cable
- Remote Control Handset + 2 AAA-Batteries
- Owner's Manual

Please keep the packing for eventual later transportation.

Introduction

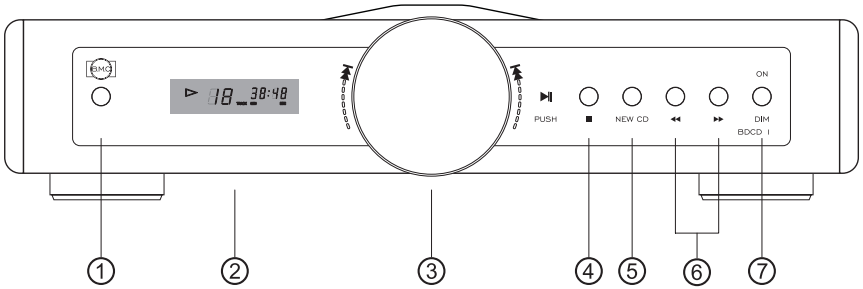
Congratulations for purchasing this exceptional belt-drive CD transport! We like to thank you for supporting the puristic SUPERLINK interconnection system by this purchase.
It makes more sense and thus it is easier to reduce jitter when having the "Master-Clock" inside the Digital to Analogue converter, just the way SUPERLINK is doing. The separate transmission of the "Master Clock", the "Bit Clock" and the "Left-Right Clock" also avoids degredations by coding and later decoding such signals to a single stream, like SPDIF transmission is doing. As long as your DAC supports SUPERLINK this is the best interconnection to a CD player.

By it's design nature BDCD1's transport jitter is lower compred to standard transports. Specifically high and middle frequency jitter is smaller by the basic design idea, as the flywheel effect of the CD stabilizer is much higher compared to standard CD transports, the precision bearing is significantly superior to standard motor bearings and furthermore the belt filters any kind of motor vibrations. This way an exceptionally smooth rotation is achieved. A servo circuit designed for belt-drive operation matches the rotational speed to the required data rate in a sensible way. Additionally the CD stabilizer avoids vibrations and vertical unevennesses of the CD itself. Compared to usual CD constructions this is a much better foundation for a quiet and low-jitter readout of a CD - and this difference is audible!

Using SUPERLINK is the most consequent way of connecting a CD transport to a DAC and the result is a step closer to the original performance. Due to the separate digital signal transmission four 75-Ohm BNC cables are required.
Due to compatibility reasons of course the transports offers also the common balanced, coaxial and optical SPDIF digital interconnections.

Optionally the BDCD1 can be equipped with an internal digital to analogue converter und thus serves as CD player. The musical core of this DAC is the negative-feedback-free analogue section. With the CI-input (CI = Current Injection) it delivers the DAC chip an optimum interface and filters digital noise passively. An LEF output driver buffers the analogue signal voltage and delivers a low-impedance output. The LEF (Load Effect Free) circuit is a balanced and cascoded single-ended-class A circuit with separate current and voltage stages.

Front



① POWER
Press for powering on and off the unit

② DISPLAY
The display shows information about functional status, track number and time.

③ PLAY / PAUSE und SKIP
Press the knob for toggling PLAY and PAUSE.
Turn the knob for skipping a track forward or backward.

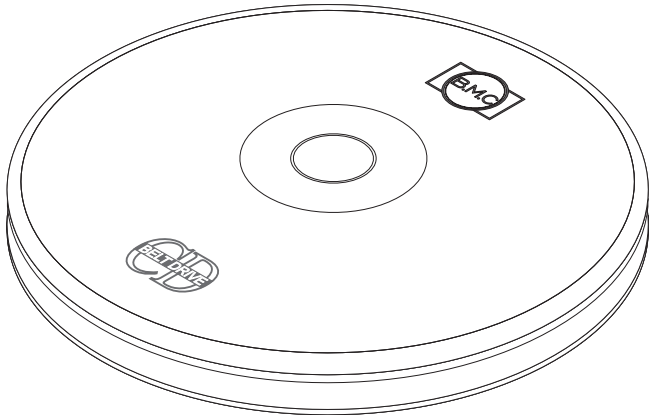
④ STOP
Press the knob for stopping the CD playback.

⑤ NEW CD
After placing a new CD "NEW CD" is flshing in red.
Press the knob to start reading the table of content of the CD. After this procedure you can press the big PLAY knob for starting the playback.

⑥ FBW/FFW
Knobs for fast backward or fast forward search during playback.

⑦ DIM
Press this knob to reduce the illumination intensity of the whole display. Press again for returning to normal brightness.

CD-Stabilizer



The stabilizer must be placed on the CD before starting any playback!
Please handle the stabilizer with care. It is heavy and may damage the unit, table or floor when dropped.

CE / FCC declaration, Recycling

CE Declaration of Conformity
B.M.C. AUDIO GmbH declares that this product is in conformance with the Low Voltage Directive 73/23/EEC and Electromagnetic Compatibility 89/336/EEC as amended by 92/31/EEC and 93/68/EEC.
The conformity of this product with the regulations of Directive number 73/23/EEC (LVD) is proved by full compliance with the following standards:

Standard number	Date of issue	Test type
EN60065	2002	General requirements
		Marking
		Hazardous radiation
		Heating under normal conditions
		Shock hazards under normal operating conditions
		Insulation requirements
		Fault conditions
		Mechanical strength
		Parts connected to the mains supply
		Components
		Terminal devices
		External flexible cords
		Electrical connections and mechanical fixings
		Protection against electric shock
		Stability and mechanical hazards
		Resistance to fire

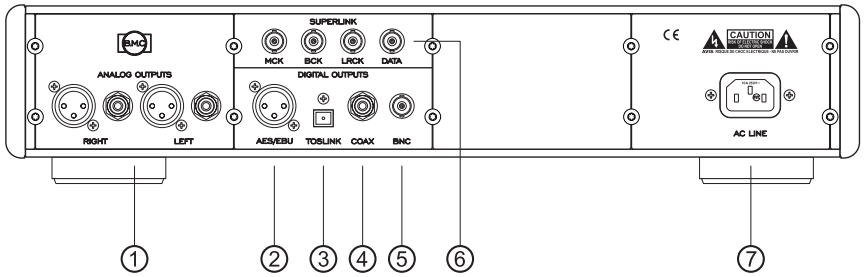
The conformity of this product with the regulations of Directive number 89/336/EEC (EMC) is proved by full compliance with the following standards:

Standard number	Date of issue	Test type
EN55013	2001	Conducted emissions
EN55013	2001	Absorbed emissions
EN55020	2002	Immunity

FCC notice
Note: This equipment has been tested and found to comply with the limits for Class B digital devices, according to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio communications. There is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
Connect this unit to a different outlet than the receiver.
Relocate or reorient the receiving antenna.
Increase space between this equipment and receiver.
Consult your dealer or an experienced radio/TV technician.

Waste Electrical and Electronic Equipment (WEEE) Directive
Waste Electrical and Electronic Equipment Directive Directive 2002/96/EC of the European Parliament and of the Council.
The bin symbol is shown on this product. It indicates that the product should not be disposed of with regular household waste, but should be disposed of separately.
Electrical and electronic equipment may contain materials that are hazardous to the environment or human health and therefore should be disposed of at a designated waste facility or returned to your retailer for appropriate recycling.
If you wish to dispose of this unit and it still functions, please consider recycling/reusing it by selling it, trading it in at your dealer for new equipment, giving it away to friends or donating it to a charity shop.

Rear Functions



ANALOG OUTPUTS

① Analog-Outputs (optional)
As an optional feature the BDCD1 can be equipped with a digital analog converter, offering analog outputs with fixed level. Balanced XLR as well as un-balanced RCA outputs are available. This optional module can also be added afterwards to the BDCD1 by the B.M.C. service.

DIGITAL OUPUTS

② AES/EBU
Balanced XLR terminal for 110-Ohm interconnection according to AES/EBU standard.

③ TOSLINK
Terminal for optical digital "TosLink" interconnection.

④ COAX
RCA terminal for 75-Ohm coaxial cable interconnection.

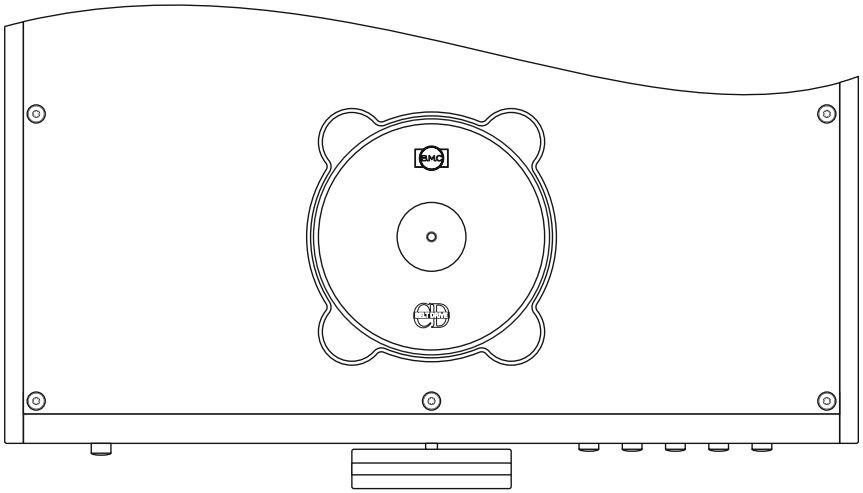
⑤ BNC
BNC terminal for 75-Ohm coaxial cable interconnection.

⑥ SUPERLINK
The highest grade of digital interconnection for the BDCD1, using 4 separate 75-Ohm BNC cables. This is the recommended connection to any SUPERLINK compatible DAC.

POWER SUPPLY

⑦ AC LINE
Terminal for connecting the AC power line. BDCD1 works with any local voltage in the range of 100V - 240V / 50-60Hz.

CD-Section



TOPLADER

BDCD1 is an open CD-Transport with belt-drive, precision bearing and CD-stabilizer. Consequently the handling differs compared to common CD players.

Insert a New CD

Place the CD on the turntable, place the stabilizer on the CD. Alternately you can place the CD on the stabilizer in your hand and place both items together on the turntable.

Start New CD Playback

By an optical sensor the BDCD1 finds the newly inserted CD and signalises by flashing "New CD" on the front panel. Due to very different individual time requirement for the insertion procedure the reading of the CD's table of content (TOC) must be started manually, just by pressing the "New CD" bottom. Afterwards the playback can be started by pressing the large wheel in the centre of the unit.

Remove a CD

First stop the playback and wait until the CD rotation stopped.
Remove the CD together with the stabilizer holding both on the edge. Holding this way the CD can be easily inserted into the CD-box and once the CD is clamped the stabilizer can be removed from the CD.

General Saftey Precautions

1. Read this owner's manual.
2. Keep the owner's manual.
3. Pay attention to all important safety informations and warnings.
4. Follow the manual instructions.
5. Never use the unit close to water or in a humid sourrounding, like basin, a humid basement, swimming pools...
6. For cleaning use a dry micro-fiber cloth exclusively.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. If placed in a shelf make shure to keep about 10cm to each side and 20cm to the top. Do not place the unit in a way covering the bottom plate like a sofa, a bed, thick carpets or blankets.
8. Do not install the unit near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not spoil the safty meaning of earthed AC power cables! The earth contact pin serves your safety. In case the attached cable does not match to your AC-Line wall socket, please ask an electrician to replace such outdated wall outlet.
10. Protect the unit's power cord from being walked on or pinched, especially around the plugs, convenience receptacles, and where it exits BDCD1's casing.
11. Only use attachments/accessories specified by the manufacturer.
12. Only use the unit with a cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the unit. If using a cart, exercise caution when moving the cart unit combination to avoid injury from it tipping over.
13. Unplug the unit during lightning storms or when leaving it unused for extended periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the BDCD1 itself, its power-supply cord, or plug has been damaged in any way, when liquids have been spilled onto the unit, when foreign objects have fallen into the unit, when the unit has been exposed to rain or moisture, when the unit does not operate normally, or when the unit has been dropped.
15. Plug the AC power cord into an easily accessible AC wall outlet, so it can be quickly unplugged in case of emergency.
16. Remove the AC wall plug for seperating the unit from the AC power line. The AC plug should always be accessible.
17. Do not expose the unit to drips or splashes. Do not place any objects filled with liquids, such as vases, on the unit.
18. Do not place any open fire close to the unit, like candles.
19. BDCD1 was designed to work properly in a temperature range from 15°C to 30°C and a maximum of 80% humidity.
20. Please handle the stabilizer with care! It is heavy and may damage the unit, furniture or floor if dropped.

Important Safety Information

Decription of used symbols:

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to potential shock hazards within the product's enclosure.

The exclamation point within an equilateral triangle, is intended to notify the user to the presence of important operating and maintenance (servicing) instructions in the accompanying documentation.

CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER OR REAR PANEL. IT DOES NOT CONTAIN ANY USER-SERVICEABLE PARTS. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
ANY FUSE WITHIN THE PHONO MCCI SHOULD JUST BE REPLACED BY QUALIFIED SERVICE PERSONNEL. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

WARNING :
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Power Cord
The units is equipped with a power cable matching to the local AC power line sockets in the country of sale. Just the attached power cord is specified for the use with BDCD1.
In case of quiestions please ask an electrician.

SUPERLINK

SUPERLINK consequently transmits all neccessary digital audio clock- and data-signals separately. The "Master-Clock" is inside the DAC unit and located close to the dac section, so transportation loss Jitter does not occour.
This interconnection deliveres the highest level of naturalism in sound quality and makes expensive SPDIF interconnection cables obsolete.

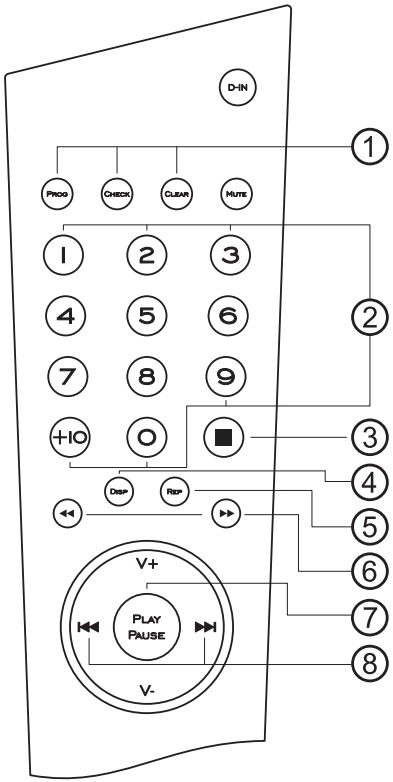
The connection terminals on the rear panel of the CD transport as well as the DAC are marked as followed: MCK, BCK, LRCK and DATA.
Before connecting any cable make sure both units are powered off and the AC-line cable is disconnected!
For each interconnection use a 75-Ohm BNC cable and connect identically marked terminals only. The included BNC cables have been tested for proper function and deliver an excellent sound quality.

In SUPERLINK the "Master-Clock" is inside the DAC unlike when using any other operation mode the "Master-Clock" is within the CD transport. Due to this difference in operation the CD transport must restart whenever changing the DAC input to SUPERLINK or from SUPERLINK. Automatically the CD transport will restart and after reading the TOC remain idle. For starting playback PLAY must be pressed.

SPDIF

SPDIF (Sony/Philips-Digital InterFace) is the common standard for digital audio transmission. It is used with 75-Ohm BNC or RCA connections, optical connections as well as a professional AES/EBU 110-Ohm version.

Remote Control



The keys not mentioned here are related to DAC1

① Programming

With **PROG** and numeric keys an individual playlist can be programmed.
CHECK is for confirming the tracks inside the playlist.
With **CLEAR** single tracks can be removed from the playlist.

② Numeric Keys

For direct access to any track.
Example: Track 28 ⇨ press **+10** twice and **8**

③ STOP

Stops the CD playback.

④ Disp

Changes the display mode: Elapsed time, remaining time, total remaining time.

⑤ Rep

Repeat disc playback on/off.

⑥ FBW / FFW

Fast backward / fast forward search.

⑦ PLAY / PAUSE

Start playback / pause playback

⑧ SKIP

Jump to the next / previous track

Whenever the usable range of the remote control gets smaller the batteries should be replaced with new AAA type ones. Insert the batteries according to the marking inside the battery holder.

CAUTION: Batteries may explode when putting into fire!
Displace used batteries according to you local recycling laws.

Troubleshooting

Whenever you suspect a malfunction of the unit, please first check a possible cause by proceeding the below list, before contacting the B.M.C. service.

No Function or Display
- Check the AC-power cable is connected at both sides.
- make sure there is AC power available at the wall outlet.
- Check the power switch position.

No Playback Start
- Lift the CD and the stabilizer and place again on the turntable. Press NEW CD and PLAY afterwards.

No start, no music, interrupted or distorted playback
- Check this is a standard audio CD without "special" copy-protection.
- Check the CD surface for scratches and cleanness.
- Just round CDs with standard 12cm diameter can be used for playback.
- Make sure the unit is placed an a stable vibration-free location.

CD plays, but no sound
- Check the interconnections of the audio system
- Check the DAC and amplifier input is set correctly.
- Make sure all units of the audio system are powered on.

Remote control non-functional
- Point with the remote handset to the remote sensor close to the power switch.
- Replace the remote handset batteries.

Note: Like any other CD player the BDCD1 has micro-computers inside which may "hang-up" due to static discharge or other voltage sparks. In this case power off the unit, wait for about 30 seconds and power on again.

Maintainance

- BDCD1 requires no user maintainance.
- Clean the unit with a dry micro-fiber cloth only.
- Take special care not to scratch the acrylic windows.

Service

In case you have to contact the B.M.C. service centre, please prepare the following information:

- Model-name and serial number.
- Date of purchase.
- Name, tel. and address of the dealer.
- Precise description of the malfunction.