To our valued customer and music enthusiast,

With the purchase of your **DRIVE I – MK 2** from ACCUSTIC ARTS[®] you have opted for a product which incorporates the most modern technology to achieve excellent sound and quality. To make sure that you have pleasure for as long as possible with your CD-Transport we kindly ask you to thoroughly read this instruction manual through to the end.

We wish you many enjoyable hours of listening to music with your new unit.

SCHUNK AUDIO ENGINEERING – The home of ACCUSTIC ARTS®

1 DRIVE I – MK 2 highlights

- Premium CD drive in top-loader design
- CD positioning in drive using exceptionally precise clamper, whereby the integrated magnet inside the clamper guarantees ideal pressing and smooth running
- CDM Pro 2FL drive module with cast metal frame and involved mechanical decoupling
- Generously dimensioned magnetically shielded toroidal core transformer; 75 VA (watts) maximum transformer power
- 4 separate generously dimensioned power supply units for laser control, digital signal processing, display control and display heating
- Extremely fine digital output stage with the following-features:-
 - extra large power supply unit with voltage stabilisation
 - jitter minimising output stage
 - professionally designed balanced output (XLR) with HF-transformer
 - professionally designed unbalanced output (RCA) with HF-transformer
 - professionally designed unbalanced output (BNC) with HF-transformer
- Resonance minimising aluminium housing
- Shielded separate compartment in housing inside area for drive mechanism, mains power components, digital signal processing and display control
- Drawer with indirect blue lighting for logo (lighting can be switched off)
- Standby function
- ACCUSTIC ARTS[®] system remote control SRC II
- ACCUSTIC ARTS[®] DRIVE I MK 2 is "Handmade in Germany"





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



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to presence of uninsulated "dangerous voltage" within the product's enclosure that may be 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.



Marking by the "CE" symbol indicates compliance of this device with the EMC (Electromagnetic Compatibility) and LVD (Low Voltage Directive) standards of the European Community.

CLASS 1 LASER PRODUCT

VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO LASER BEAM.

- WARNING! Calls attention to a procedure, practice, condition or the like that, if not correctly performed or adhered to, could result in personal injury or death.
- CAUTION! Calls attention to a procedure, practice, condition or the like that, if not correctly performed or adhered to, could result in a damage or destruction to part or all of the component.

To guarantee a reliable function of this unit over the long-term we kindly ask you to thoroughly **read this instruction manual** before connecting this unit and to observe the following instructions. This is also necessary for your own safety when dealing with the unit.

2 Important safety instructions

- Read these instructions.
- Keep these instructions.
- Follow all instructions.
- **Do not** use this appliance near water.
- **Never** use this appliance near hot surfaces.
- **Never** use this appliance outside and always place it in a dry environment.
- Check that your mains voltage corresponds to that stated on the appliance.
- **Never** leave the appliance unsupervised when in use. Always keep electrical equipment out of the reach of children.
- Never pour or spill liquids directly onto this appliance.
- Never operate this apparatus in an explosive atmosphere.
- **Do not** put any vases or similar objects containing water or liquids on top of this appliance.
- Unplug this appliance during lightning storms or when unused for long periods of time.
- Ensure that the appliance has sufficient air around it and avoid extreme temperature influences on the unit, especially direct sunshine and high humidity.
- Always disconnect the appliance from the mains power before carrying out any changes to the cables or when cleaning the appliance.
- Protect the mains cable from being walked on or pinched particularly at plugs, convenience receptables and the point where they exit from the appliance.
- The mains cable (power cord) of this appliance is equipped with an equipment grounding conductor. This equipment grounding conductor must **never** be disconnected or taped over. In case any humming occurs please contact your authorized dealer.
- From time to time check the mains cable and the appliance for damages. Take care that the mains cable is not buckled or damaged by any house pets.
- **Never** move the appliance by pulling the mains cable. Make sure the mains cable cannot get caught in any way. **Do not** wind the mains cable around the appliance and do not bend it.
- **Never** use accessories which are not recommended by the manufacturer. They could constitute a danger to the user and risk to damage the appliance.
- **Never** operate the appliance with the housing open.
- To clean the aluminium housing please only use a cloth moistened with water and some detergent. **Never** use inflammable or chemically aggressive cleaning agents.
- In the event of a defect, please **never** attempt to repair it yourself. Any tampering with the appliance by an unauthorised person will make the warranty void. Please get in contact with your authorized dealer.

- Refer all servicing to qualified service personnel. Servicing is required when the appliance has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the appliance, the appliance has been exposed to rain or moisture, does not operate normally or has been dropped.
- **Never** bypass a fuse.
- Replace fuses only with original types having the same ampere value, the same voltage endurance and the same time-lag. You can find the corresponding value in chapter 5.4 of this instruction manual or on the backside of the apparatus.
- No user-serviceable parts inside.

3 Unpacking

Great care must be exercised when unpacking the unit. Carefully store the transportation packaging for the possibility of further use. If you have a claim on the warranty, always use the original packaging for any necessary transportation. Transportation without this packaging can lead to damage to the housing.

Please check, if the following items are included:

- 1 x AC mains cable (type depends on your country)
- 1 x ACCUSTIC ARTS[®] system remote control SRC II
- 2 x batteries for the remote control
- 1 x replacement fuse (type depends on your mains voltage)

4 Positioning

The DRIVE I – MK 2 has no special requirements regarding its position, but it should be positioned on stable, even and horizontal surface. You can even put the unit in a cupboard. For reasons of better access to the various input and output sockets we recommend you position the unit in an audio rack. Professionally designed audio racks can have a positive effect on the music reproduction of your audio system.

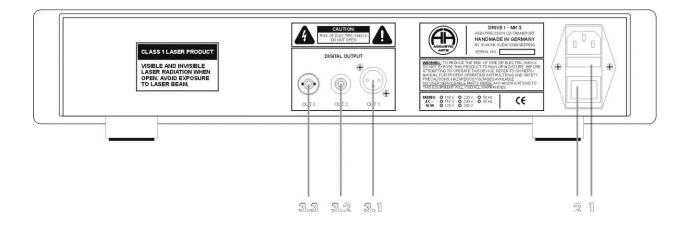
CAUTION!

Please observe at all times

Before you connect the DRIVE I – MK 2 with some other unit using a cable, please never forget that both units must first be switched off and disconnected from the mains power.

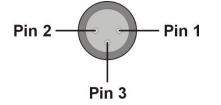
5 Installation

Fig. 1: Rear view



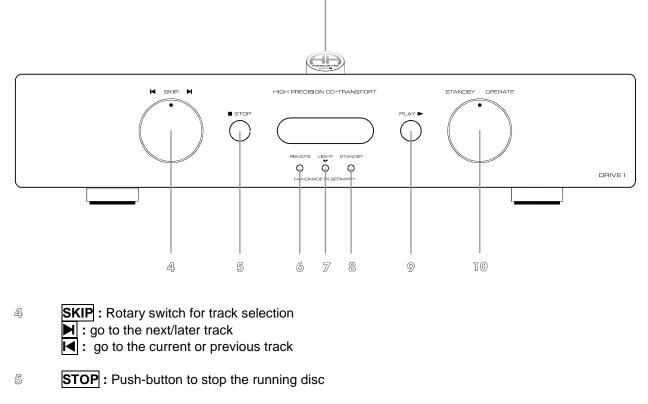
- 1 Fuse holder (plastic cap with integrated fuse)
- 2 Mains power switch
- 3.1 **OUT 1:** Balanced AES / EBU digital output (XLR)
- **OUT 2:** Unbalanced S/P-DIF digital output (RCA)
- 3.3 **OUT 3:** Unbalanced S/P-DIF digital output (BNC)

Pin declaration of the balanced output (XLR):



Pin 1:Ground (shield)Pin 2:Non-inverting (hot; 0°)Pin 3:Inverting (cold; 180°)

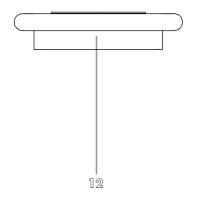
These pin assignments comply with the standard adopted by the Audio Engineering Society. Refer to the operating manual of your other units to verify that the pin assignments of their connectors correspond to your ACCUSTIC ARTS[®] unit.



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- 6 **REMOTE:** IR receiver for remote control
- LIGHT: Switchable Multifunction component: switch & LED
 Please see chapter 6.3
- 8 STANDBY: LED (blue) indicates standby status of device
- PLAY : Push-button to start the CD
- **STANDBY / OPERATE** : Rotary switch for standby status **STANDBY** and operation **OPERATE**
- **CD** loader cover with push release and integrated, blue lit logo

Fig. 3: Side view of the CD clamper



12 CD clamper with integrated magnet mounting

5.1 Application possibilities for the DRIVE I – MK 2

The DRIVE I – MK 2 is a professional top-loader CD drive with extremely developed mechanical and electronic details. In order to help fully exploit the DRIVE I – MK 2, the device has a number of digital outputs. The device requires a Digital/Analog converter which converts the digital signals of the CD into analog signals.

The DRIVE I – MK 2 plays all types of CDs (redbook standard) incl. CD-R and CD-RW.

5.2 Connecting a D/A - Converter

The DRIVE I – MK 2 possesses a balanced XLR output **OUT 1**, an unbalanced RCA output **OUT 2** and an unbalanced BNC output **OUT 3**. For the connection of a D/A converter (e.g. TUBE DAC II from ACCUSTIC ARTS[®]), use a digital output of the DRIVE I – MK 2 and connect this to the corresponding digital input of the D/A converter. You can use these digital outputs also to connect a recording device, e.g. a mini disc or CD recorder.

If possible, use the balanced output. The balanced technology <u>can</u> increase the sound performance of your system.

5.3 Connection to mains power

Only connect the unit to the mains power when all the other cable connections have already been carried out.

Firstly, plug in the mains cable in the inlet connector socket of the unit and only then the earthing pin-plug in the mains socket.

By actuating the mains power switch 2, you can switch the unit on or off.

5.4 Replacing damaged mains fuses

If a fuse is damaged only replace the fuse with original types having the same ampere value, the same voltage endurance and the same time-lag. Never use fuses with other ampere classes or time-lag classes.

WARNING!

Pull out the mains plug!

Always disconnect the unit from the mains power before replacing a fuse.

To change the fuse \mathbb{I} please use a screwdriver suitable for the slot in the fuse holder. Press the screwdriver lightly into the slot and gently lever the fuse holder (plastic cap) carefully out of the respective socket. Now you can take out the fuse holder and replace the fuse.

For countries with **220-240 V / 50- 60 Hz** please use the following fuse types:

0.4 Ampere – time lag

For countries with **100-120 V / 50- 60 Hz** please use the following fuse types:

0.8 Ampere – time lag

6 Reproduction of a CD

6.1 Start-up and loading a CD

First of all switch-on the device by pressing the mains power switch 2 and set the rotary switch 10 to the position **OPERATE** and the blue LED 7 in the middle lights up. The laser unit of the DRIVE I – MK 2 now initialises for approx. 2 seconds and finds out if a CD is loaded or not. If no CD is inserted, then the display shows **NO DISC**. If there is a CD in the device, then after initialisation of the laser the number of music tracks and the total time of the CD are displayed. Then, for example, the display shows

10 65:20

This means that the inserted CD has 10 music tracks and the complete total playing time is 65 minutes and 20 seconds.

If you wish to load a CD or exchange a CD which is already loaded, then first of all slowly push the cover 1 to the back. On the display there now appears **OPEN**, indicating the cover is open. Now remove

the clamper 12 by lifting it upwards. Please note that the clamper has an integrated magnet and therefore sits rather firmly on the CD. After removing the clamper you may now remove a CD. When removing the CD take care not to touch the laser unit. Finger prints and dirt on the laser unit can disturb the scanning process and so negatively affect the sound.

Insert the desired CD and now place the clamper 12 in the middle of the CD. Make sure that the clamper locks correctly into position, otherwise playback is not possible. Close the cover 11 completely again. After the closing process the laser initialises again, i.e. it scans the inserted CD and determines the number of music tracks as well as the total time. If no CD is loaded or the clamper 12 is not correctly fixed on to the CD, the display shows NO DISC.

6.2 Basic functions of the DRIVE I - MK 2

After the CD has been correctly inserted the device is now ready for operation and you can start the CD by shortly pressing the push button **PLAY**.

To stop the CD please press the push button STOP.

To jump or go to the next track please use the left rotary switch **SKIP** by shortly turning it clockwise and then release. Should you wish to jump back one or several tracks, turn the rotary switch once or several times shortly to the left (anticlockwise).

Should you wish to interrupt your music listening for a short time (e.g. a number of minutes or a just for a few hours), operate the right rotary switch 10 and turn it left to the **STANDBY** position. In the standby function now only the blue standby LED \otimes is lit. The lighting for the upper logo and the display goes out.

For a complete start-up of the DRIVE I – MK 2, set the rotary switch 10 again to the position **OPERATE**.

IMPORTANT SAFETY PRECAUTIONS:

If you wish to discontinue your music listening for a longer period (<u>more than 1 hour</u>) the device must be completely disconnected from the mains power and this is done by pressing the mains power switch 2.

The functions **SKIP**, **STOP** and **PLAY** can also be operated using the IR remote control. The functions **STANDBY** and **OPERATE** are not available via the remote control.

6.3 Multifunction component: switch & LED

This multifunction component is a switch with an integrated blue LED \mathbb{Z} LIGHT:

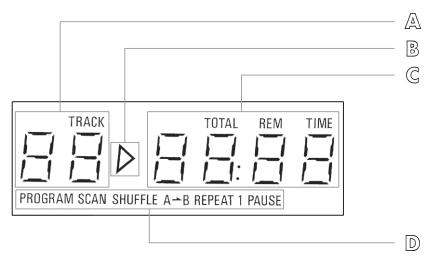
1. Function = switch: please press the switch to turn off/on the drawer lighting.

2. Function = LED: When the LED lights the unit is completely turned-on and the rotary switch 10 is set to position **OPERATE**.

This LED has an automatic dimmer function (see chapter 6.7).

6.4 Display

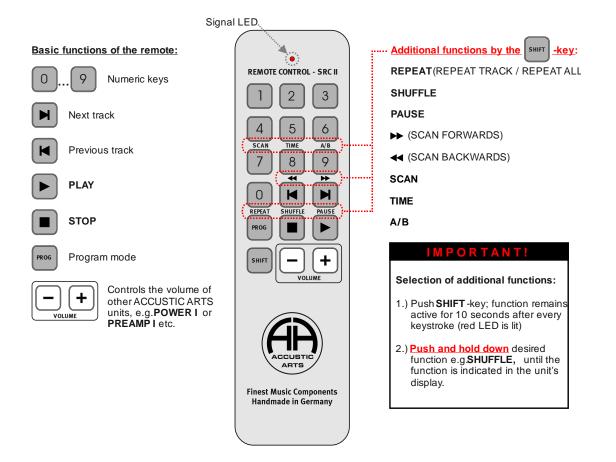
Fig 4: Display modes



- A This area shows the number of the selected music track (TRACK)
- B The arrow sign > always lights when the CD is started with PLAY
- C This area shows the various times of the CD (TOTAL TIME TOTAL REM TIME TIME); for this see chapter 6.6.6
- D The individual functions light up when the respective function is activated by the remote control

6.5 Basic functions of the remote control SRC II

Fig 5: Buttons on the remote control



6.5.1 Keys 0 - 9

You can use the keys on the remote control to select individual music tracks.

Example 1: You wish to hear track 3

- Press key 3
- Press (if the CD has not yet started)

Example 2: You wish to hear track 12

- Press key **1** (display flashes)
- Press key 2
- Press (if the CD has not yet started)

6.5.2 \blacktriangleright (PLAY) and \blacksquare (STOP)

- Key let starts the CD playback
- Key ends the CD playback
- Key pressed twice restarts the playing track from the beginning

6.5.3 **I** and **I** (= SKIP)

- Key 📕 starts the previous track
- Key 📕 starts the next track

6.5.4 PROG (= programming function)

Use the **PROG** key to re-define the playback order of the CD music tracks and so create your own individual playback sequence. The programming is made as follows:

Press the number keys for the tracks you would like to enter in your selection in the desired order. After pressing each number key you must also press the **PROG** key in order to store the respective track in the program mode. If you have stored the wrong track – a track you do not require in the selection – then press the number of the track you wish to delete once more and confirm with the **PROG** key.

Example: To program the tracks 2, 3, 6, 7, 9 and 12 of a CD

First press the number key **2** and then the **PROG** key. In the display PROGRAM is shown and the track 2 is set as your first selected track. Now press key **3** and then **PROG** again. Proceed in the same way until track 12. After track 12 is also programmed, in your display you will see the following:

6 22:40

This display shows clearly you have stored 6 tracks (TRACK) with a total playing (TOTAL TIME) of exactly 22 minutes 40 seconds in this example.

When you have finished your programming, please press **PLAY** and playback begins. To stop the CD press **STOP** once as usual, the programming remains. When **STOP** is pressed again your programming is deleted, PROGRAM in the display goes away and the device once again shows the total number of tracks and the total playing time .

6.5.5 VOLUME

Use the **VOLUME** key to adjust the volume of an ACCUSTIC ARTS® integrated amplifier (e.g. POWER I or preamplifier (e.g. PREAMP I).

Please note: The DRIVE I – MK 2 itself is not equipped with a volume control.

6.6 **SHIFT** key: additional functions of the remote control SRC II

Use the **SHIFT** key to activate the following functions:

- REPEAT
- SHUFFLE
- PAUSE
- ▶ (SCAN FORWARDS)
- SCAN
- TIME
- A/B

Press the SHIFT key once to activate the function and the red LED lights up on the remote control. You now have enough time to select additional functions (REPEAT, SHUFFLE, etc.). After 10 seconds with no key pressed the **SHIFT** function is automatically cancelled and the red LED goes out.

You can also end the **SHIFT** function at any time by pressing and holding the **SHIFT** key until the red LED light goes out.

6.6.1 REP (= REPEAT)

- Press **SHIFT** once (red LED lights up)
- Press the **REPEAT** key to activate the repeat mode and in the display REPEAT appears. You can repeat tracks in every mode, i.e. also in SHUFFLE or PROGRAM mode.
- Press the **REPEAT** key again to activate TRACK REPEAT. REPEAT 1 is shown on the display, i.e. now the track currently playing is repeated exclusively.
- A further pressing of the key deactivates the repeat mode

6.6.2 SHUFFLE

- Press SHIFT once (red LED lights up)
- Press and hold down SHUFFLE until the display shows SHUFFLE
- Press SHIFT if not activated and SHUFFLE again to deactivate this mode

6.6.3 PAUSE

- Press **SHIFT** once (red LED lights up)
- Press and <u>hold down</u> PAUSE until the display shows PAUSE
- Press SHIFT if not activated and PAUSE again to deactivate this mode

6.6.4 ▶ and ◀ (SCAN FWD / BWD)

- Press **SHIFT** once (red LED lights up)
- Press key i and hold down to go fast forward with a music track (SCAN FWD).
- Press key 📢 and hold to rewind within a music track (SCAN BWD)

6.6.5 SCAN

With the **SCAN** function each track on the CD is played for 10 seconds. This function gives you an overview of all the tracks on the CD. You can only activate the **SCAN** function if the CD was not started yet. You can end the process early by pressing the **SCAN** key again.

6.6.6 TIME

The key **TIME** can display a total of 3 different time modes for the CD which is loaded. These 3 playing times are respectively shown in the display as TOTAL TIME – TOTAL REM TIME – TIME. The individual time modes are activated by respectively pressing the **TIME** key. The different time modes have the following functions:

TOTAL TIME:If the CD is inserted but not started, then the total playing time of the CD is
displayed. If the CD is started, then TOTAL TIME shows the playing time of the
CD already elapsedTOTAL REM TIME:This time mode shows the total remaining time left the CD which has startedTIME:If this mode is activated, then the playing time of the respectively played music
track is displayed.Example:2min 40sec playing time of music track no.2 is shown in the display
with:2 > 2:40

6.6.7 A/B

The **A / B** function is also a repeat mode. You can use this key to repeat a certain passage of the track. The A / B repeat mode is operated as follows:

- 1. During CD playback press the $\overline{A / B}$ key on the remote control just as the required passage begins (start point A). In the display A now appears.
- 2. When the end of the passage is reached (end point B), press the $\overline{A/B}$ key again and on the display A B now appears.

The device now plays the marked passage between points A and B again and again.

Pressing the **A / B** key again deactivates the repeat mode.

6.7 Dimmer function of blue LEDs

The two blue LEDs for **STANDBY** and **OPERATE** have an integrated dimmer function. That means the LEDs will be automatically adapt to the brightness of your room.

7 Looking after your equipment

The DRIVE I – MK 2 from ACCUSTIC ARTS[®] does not require special treatment in excess of the usual care taken with high quality devices. Clean the housing with a dry or slightly moistened cloth. Please do not use any aggressive detergents or detergents which contain silicon.

The best way to clean the front plate is with a mild non-aggressive fat-dissolving detergent (e.g. glass cleaner). **Never** use abrasive agents or polishing agents with abrasive particles.

CAUTION! Do not place the unit in direct sunshine and avoid extreme changes in temperature.

8 Troubleshooting

Malfunctions are mostly caused by something simple which can be put right quickly. In the next section some possible malfunctions are described together with their corrective action. However, if it is not possible to remove the malfunction please contact your authorised dealer.

Malfunction	The unit was switched on, the blue LED \mathbb{Z} remains dark.

- Cause 1 The mains cable is not properly connected.
- Solution Check mains cable and push in firmly.
- Cause 2 The fuse is damaged.

Solution Pull out the plug and replace the corresponding fuse.

Malfunction The unit was switched on. The laser initialises, but shows OPEN in the display.

Cause 1The CD loader cover 11 was not properly closed during the switching on process.SolutionClose CD loader cover; laser unit always initialises after each closing process.

|--|

Cause 1 Solution	Due to finger prints the CD is badly soiled, therefore the error correction has to interfere all the time or the error on the CD cannot be corrected. Clean the CD carefully with a soft cloth
Cause 1	The CD is damaged due to scratches or other surface damage and therefore the error correction has to interfere all the time or the error on the CD cannot be corrected.
Solution	If the scratches on the CD are not too deep, then they can be removed by using a special polish (ask your dealer!). If the scratches are deep, quite often a restoration is not possible.

For malfunctions which affect the reproduction relating to individual devices first of all make sure that all connections are correctly and thoroughly made. In general, errors which arise are often a result of an unsatisfactory or wrongly-made connection.

9 Specifications (selection)

Digital outputs:	1x AES/EBU; XLR (balanced - 110 Ω) 1 x S/P-DIF; RCA (unbalanced - 75 Ω) 1 x S/P-DIF; BNC (unbalanced - 75 Ω)
Output voltage:	S/P-DIF: 0,42 Vpp an 75 Ω AES/EBU: 3,1 Vpp an 110 Ω
Dimensions (H x W x D):	100 x 482 x 375 mm / 4.1" x 19" x 14.8"
Weight:	approx. 15 kg / 35 lbs

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