Type

SD audio player : SD audio player Sampling rate : 32 kHz/44.1kHz/48kHz

Audio format : AAC format/MP3 format Number of channels : 2 channels (stereo)

: 20 Hz to 20,000 Hz (+0dB, -6dB) Frequency response Maximum recording time (with a 64 MB SD memory card) : Approx. 64 minutes (128 kbps) High-quality rec. : Approx. 86 minutes (96 kbps) Standard rec. Long-hour rec. : Approx. 129 minutes (64 kbps) Output : Headphones (3.5 mm dia. stereo \times 1)

2.5 mW/ch (32 ohms)

matching impedance (16 ohms to 47 kohm)

: Approx. 11 hours when using two fully

charged rechargeable batteries

Approx. 17 hours when using two alkaline batteries (L30 (24A), AAA size)

: DC 1.2 V (rechargeable battery)

DC 1.5 V (AAA size battery) Two batteries are used in parallel.

Dimensions (W × H × D) : $2^{1}/_{8}$ "× $1^{3}/_{16}$ " × $2^{9}/_{16}$ " (53.5 × 30.5 × 65 mm)

(Excluding buttons and controls)

Mass : Approx. 0.172 lbs (78 g)

(without batteries)

Battery charger

Duration of battery

Power requirements

: AC 120 V, 60 Hz Input power source Output voltage : DC 1.7 V, 950 mA

* Design and specifications are subject to change without notice.

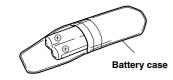
This main unit is resistant to spray.

Supplied Accessories

Check the packing carton for these accessories.



Headphones 1 pc.



Rechargeable battery (BN-R1213) 1 pack (2 pcs.)



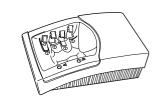
Extension cord 1 pc.



CD-ROM (Media Manager) 1 pc.



USB reader/writer unit 1 pc.



Battery charger (AC-R129) 1 pc.



Carrying pouch 1 pc.



SD memory card (64 MB) 1 pc.

Remove the rechargeable batteries from their case before use. Use numbers indicated in parentheses when asking for replacement parts.

- SD logo is a trademark.
- Portions of this product are protected under copyright law and are provided under license by ARIS/SOLANA/4C.
- RealJukebox® is a registered trademark of RealNetwork, Inc.



SD Audio Player

XA-SD'



Be sure to read this before any other information

After checking the accessories, perform check-out (recording) on the SD memory card using the following procedure.

For more details, read the operating instructions of Media Manager and the Online Help of RealJukebox®.

- Install the USB reader/writer driver and installation software (RealJukebox®) in the CD-ROM in your PC.
- Connect the USB reader/writer to the PC.
- 3 Open RealJukebox® and perform check-out of the SD memory card.

For Customer Use:

Enter below the Model No. and Serial No. which are located either on the rear of the cabinet or inside of the battery compartment. Retain this information for future reference.

Model No.

Serial No.

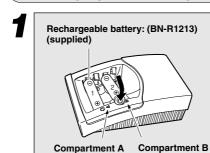
Thank you for purchasing this JVC product. Please read these instructions carefully before starting operation to be sure to obtain optimum performance and a longer service life from the unit.

LVT0718-002A [J]



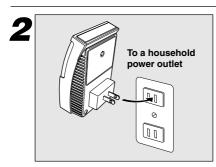


Recharging the Rechargeable Batteries



Insert two rechargeable batteries in the battery charger.

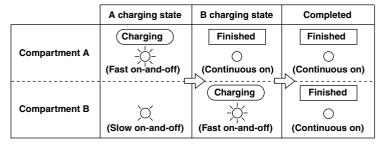
- ullet Insert them in the correct ulletand \bigcirc polarity as indicated inside the battery charger.
- The two batteries will be recharged separately one after another.



Insert the power plug blades into a household power outlet.

- Recharging begins with the battery inserted in position A. The recharging of two batteries will complete in about 4-1/2 hours.
- It is possible to recharge about 300 times.
- After recharging completes, remove the power plug blades from the power outlet.

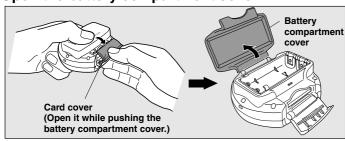
Charge indicator lamps



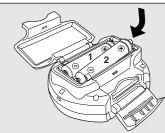
- If two batteries are inserted in the battery charger that has already been plugged into the power outlet, the first-inserted battery will be recharged first.
- Fast blinking refers to one blink per about 1 second, and slow blinking refers to one blink per about 3 seconds.

Insert batteries in the Main unit.

Open the battery compartment cover.

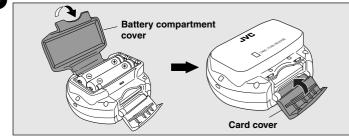


Insert batteries.



• Insert them in the correct (+) and ⊖ polarity as indicated inside the battery compartment. (You can use L30 (24A) alkaline batteries or rechargeable batteries only.)

Close the battery compartment cover.

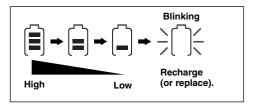


■ Caution for use of dry cell batteries:

Be sure to use L30 (24A) alkaline batteries. Manganese batteries cannot be used to power the unit.

■ Remaining battery power display:

Use the remaining battery power indicator in the display panel as the reference for identifying the available power.



Notes on battery replacement

During recharging of the batteries, use two L30 (24A) alkaline batteries, which is available in electric appliance stores. The built-in clock display can be retained by changing the batteries within 30 seconds.

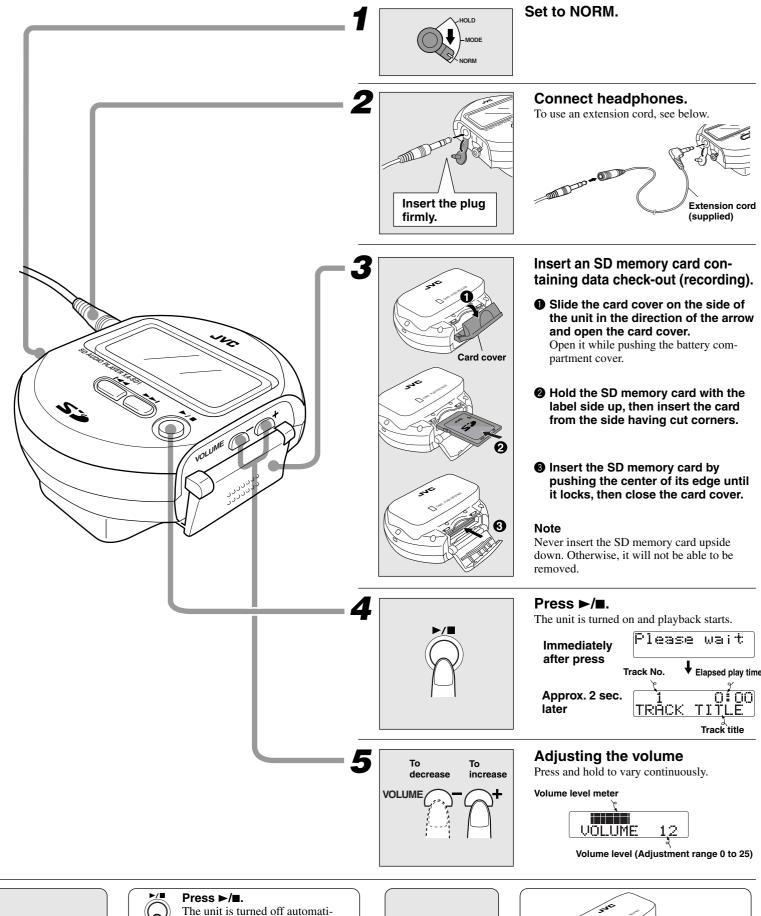
Hold mode

The hold mode protects the unit against accidental press of control buttons.



It prevents the following accidents:

- Battery exhaustion by turning the unit on without noticing it.
- Interruption of playback due to accidental press of a button.







cally in about 10 seconds.

■ Resume

When ►/■ is pressed again after the unit has been turned off, playback resumes from the position at which the unit was turned off. However, playback starts from the first track if the SD memory card is changed or batteries are removed and inserted again while the unit is off.





While playback is stopped, open the card cover (operations 1) in step 3 above) and unlock and remove the SD memory card by pushing its center area.

Preparation Set the MODE switch knob to "NORM". Press |◄◄/▶▶| during playback. • When the all-track repeat mode (see below) is set, it is also possible to skip from the final track to the first track. • In the random play mode (see below), it is not permitted to skip to a Skipping tracks track which has already been played. To skip backward To skip forward Press and hold |◄◄/▶▶| during playback. • When the all-track repeat mode (see below) is set, it is also possible to Forward search/ search the memory from the final track to the first track. Reverse search • In the random play mode (see below), it is not permitted to search disc into a track which has already been played. Reverse search Forward search 1 Press ►/■ during 2 Press | **◄◄/** ▶ ▶ | to 3 Press ►/■ to play • If you hold the key depressed in step 2, the track numbers can be varied in sequence. playback. select a track. the selected track. When the unit is left untouched for more than about 10 seconds after playback is Selecting track stopped or a track is selected, the unit will be turned off automatically. To skip To skip Playback is stopped. backward forward **Preparation** Set the MODE switch knob to "MODE". Press VOLUME – during playback. Each press alternates: RANDOM No display (To repeat a single track) (To repeat all tracks) (To play all tracks in a (Cancel) Repeat playback random order for once) (VOLUME button) Random playback In the playlist play mode (see below), repeat or random playback plays only the tracks in the selected RANDOM playlist. Each press alternates: Press VOLUME + during playback. S-XBS TRAIN No display (Extra bass) (Easy for the ears, preventing (Cancel) outside sound leak) Selecting the sound (VOLUME button) 1 Press ►► during playback. 2 Press ▶►. 3 Press VOLUME +/- to Press ▶►I. select a playlist number. Blink VOLUME Playlist playback Tracks in the Playlist No. Total play time **Number of playlists** selected playlist The clock/playlist will be played RealJukebox® does setting mode starts. automatically. not support the Total number playlist playback. of tracks F.PLA Playlist • If you selected a playlist in stop mode, press ►/■ to start playback. • To return to all-track play mode, select " []" (default Playlist) in step 3. • To cancel the above procedure in the middle, set the MODE switch knob to "NORM" any time you want.



Adjusting the clock

Set to "MODE" during playback.

To cancel the following procedure in the middle, set the switch knob to "NORM" any time you



Press ►►I.

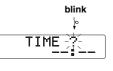
The unit enters the clock/ playlist setting mode.





Select "TIME?".

Press ▶►. The unit enters the clock setting mode.

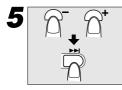




Select either display mode.

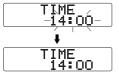
12-hour or 24-hour?

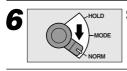




Adjust the time.

Press ▶►I. Count of time starts.





Set to "NORM".

The clock is displayed for about 2 seconds when either operation below is performed.

- When the MODE switch knob is set to "HOLD" during playback.
- When ►/■ is pressed while the unit is in the hold mode.

To maintain the accuracy of clock, it is recommended to adjust the time of the day periodically.

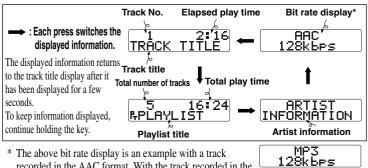
Adjustment and Switching of Display Panel

Adjusting the contrast

- Set the MODE switch knob to "HOLD" during playback.
- 2 While holding ►/■ depressed, adjust contrast by pressing VOLUME + (to brighten) or - (to darken).
- 3 Set the MODE switch knob to "NORM".

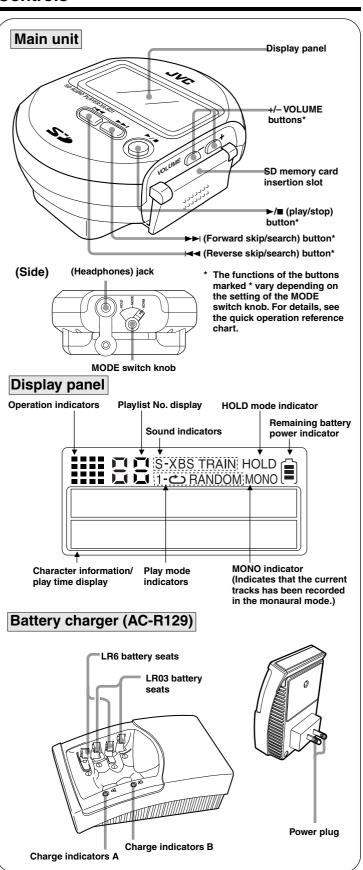
Switching the displayed information

- Set the MODE switch knob to "MODE" during playback.
- Press **◄** to switch information.
- When a track title, playlist title or artist information is too long to be displayed once, it is displayed by scrolling (moved toward the left).
- This unit may not be capable of displaying certain letters such as Chinese characters.

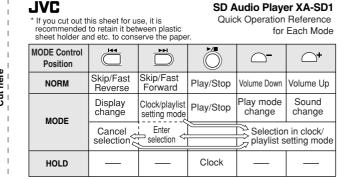


- * The above bit rate display is an example with a track recorded in the AAC format. With the track recorded in the MP3 format, the display becomes as shown on the right.
- 3 Set the MODE switch knob to "NORM".

Controls







Cautions

Before using this unit, be sure to read the applicable items of the operating instructions and these safety-suggestions carefully.

Afterwards keep them handy for future reference. Take special care to follow the warnings indicated on the unit itself as well as in the operating instructions

Safety

- Care of battery charger Never take hold of the battery charger if your hand is wet, and always grasp the plug body when connecting or disconnecting it.
- 2. **Nonuse Periods** When not in use, be sure to disconnect the battery charger from the AC power outlet.
- 3. **Batteries** If the set is not used for a long period of time, remove all the batteries to prevent potential damage due to possible battery leakage. Do not mix batteries (old and new) or different types of batteries.

Installation

Placement

- Foreign Material Care should be taken so that objects do not fall
 into and liquids are not spilled into the unit. Do not subject this unit to
 excessive smoke, dust, mechanical vibration, or shock.
- Magnetism The unit should be situated away from equipment or devices that generate strong magnetic fields.
- 3. **Stacking** Do not place any objects, on top of the unit.

WARNING:

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

CAUTION

This main unit is resistant to spray.

However, this function is inactive in any of the following condition.

- When the cap on the headphones is removed.
- When the card cover or the battery compartment cover is open. In case the unit is moistened, wipe it with a soft, dry cloth before reusing it. Also take care of the following points.
- Do not leave the unit under high humidity, for example in a bathroom.
- Keep the unit away from direct moistening by tap water etc.
- Do not change the SD memory card or batteries with wet hands.
 (Otherwise, the water drop may fall from your hand and penetrate inside the unit.)

THE FOLLOWING PHRASES ARE APPLIED ONLY FOR U.S.A.:

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION!

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant 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 harmful interference to radio communications. However, 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 of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

Precautions on the unit and SD memory card

To prevent malfunction, do not leave the unit and/or SD memory card in the following locations.

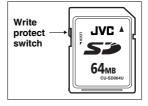
- In a closed automobile (particularly in the summer).
- In a place with high humidity, for example in a bathroom
- In a place with excessive dust.
- In a place subject to direct sunlight or near heating equipment.
- In a place exposed to corrosive gas, etc.

Also avoid the following:

- · Disassembly or modification.
- Strong impact, dropping or moistening with rainwater.
- Inserting an object other than an SD memory card into the card insertion slot.
- Using a cracked or deformed SD memory card.
- Applying excessive force when opening the battery compartment cover or card cover.
- Removing the label on SD memory card or attaching another label or sticker on the existing label.
- When the unit is moistened by water, water drops may penetrate the SD memory card insertion slot or behind the card cover. When the unit is moistened, hold it so that the card insertion slot faces downward, open the card cover and wipe off water drops well before inserting or removing the SD memory card. Also be sure to wipe water drops around and inside the headphones jack.

To protect recorded data

- Set the write protect switch on the SD memory card to "LOCK". Do not unlock this switch until the next time you check out (record) or edit the data in the card.
- Do not touch the metallic terminals of the SD memory card with a bare hand or metallic object.



Cautions

Listening caution





Do not play your headphones or earphones at a high volume. Hearing experts advise against continuous extended play.

If you experience a ringing in your ears, reduce volume or discontinue use.

Do not use while operating a motorized vehicle. It may create a traffic hazard and is illegal in many areas.

You should use extreme caution or temporarily discontinue use in potentially hazardous situations.

Even if your headphones or earphones is an open-air type designed to let you hear outside sounds, don't turn up the volume so high that you can't hear what's around you.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing.

Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:

• Set the dial and leave it there.

Rechargeable batteries

- Only the BN-R1213 or HHR-4UP/HHR-4AH (Panasonic) battery can be recharged.
- Recharging already charged batteries will shorten their service life.
- When recharging batteries for the first time or when they have not been used for a long period of time, the play time may be shorter than usual. In a case like this, repeatedly recharge and discharge the batteries. This will restore them to their regular state.
- Do not allow any metal objects to touch the terminals of rechargeable batteries since this may cause short-circuiting which is dangerous.
- The rechargeable batteries and charger equipment may generate heat during recharging. This is not a malfunction.
- If the rechargeable batteries are recharged near a radio receiver, noise may interfere with AM reception.
- The rechargeable batteries should be recharged under an ambient temperature between 10 and 35°C.
- When the rechargeable batteries are not to be used for a long period, recharge them at least every 3 months to prevent degradation of performance.
- When the battery operation time from the fully charged condition drops below half the usual, it is a sign that the service life of the rechargeable batteries has expired. In this case, replace the rechargeable batteries.

WARNING

- Use only JVC chargers designed for BN-R1213.
- Do not disassemble, dispose of in fire, or short circuit.
- Do not remove the covering.

Dry cell batteries / rechargeable batteries

To prevent damage to the batteries and electrolyte leakage, heed the following points.

- Align the \bigoplus and \bigoplus polarities properly when inserting the batteries.
- Do not mix different types or makers of batteries or old and new batteries.
- Remove the batteries if you do not plan to use the unit for a long period of time.
- Do not throw batteries into a fire, and do not short-circuit, disassemble or subject them to excessive heat.
- Do not attempt to recharge dry cell batteries.

Carrying dry cell batteries / rechargeable batteries around

When putting dry cell or rechargeable batteries in a pocket or bag, ensure that no other metal objects such as a necklace are placed together with them. Contact with metal may cause short-circuiting which, in turn, may cause a fire.

Be absolutely sure to carry the rechargeable batteries in the provided battery carrying case.

When purchasing rechargeable batteries

As a safety precaution, the SD audio players made by JVC have a construction designed to make it impossible to recharge ordinary batteries. To use rechargeable batteries, be absolutely sure to purchase the rechargeable Ni-MH batteries designed especially for this unit. Special rechargeable Ni-MH batteries:

BN-R1213 (set of 2)

For details, check with your dealer.

Notice about the rechargeable battery

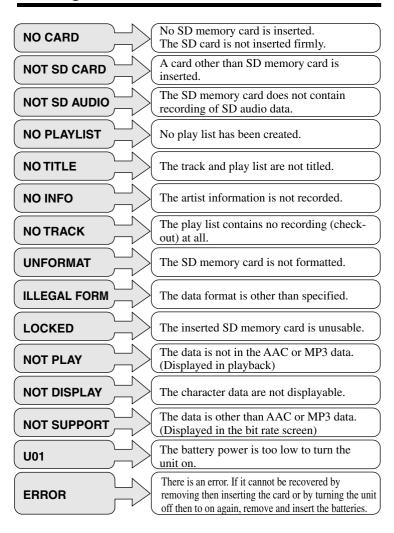
The battery is designed recycable.

Please follow your local recycling regulations.

When driving a car

In the interest of traffic safety, do not operate the unit while driving.

Messages



Maintenance

Maintenance of the unit

When the unit gets dirty, wipe with a soft, dry cloth. If it is contaminated seriously, clean with a cloth slightly moistened with light neutral detergent solution then wipe dry with a soft, dry cloth.

- Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.
- When you want to use a chemical cloth for cleaning, be sure to read carefully and observe its cautions and notes.

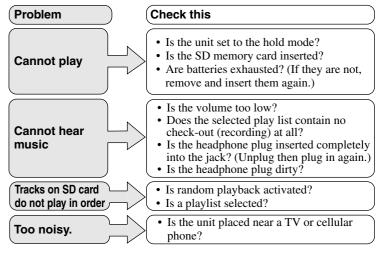
Note

This unit is a precision instrument. Do not subject it to a strong impact by hitting or dropping it. Otherwise, the SD memory card may be unlocked or the unit may fail.

Troubleshooting Guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.

If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of Authorized Service Centers (enclosed with this unit) to locate a convenient service center, or consult your dealer for instructions.



Note

This unit provides versatile operations under the microcomputer control. If the unit cannot be operated properly by pressing any button, remove the batteries and insert them again.







Media Manager V2 Basic Operating Instructions



Before enjoying music with your SD Audio Player

Follow the instructions in this manual and online help to record music onto your SD memory card.

- These instructions describe basic operations such as installation and checking out tracks. For more detailed instructions, refer to the online help included on the CD-ROM.
- · For details on using Windows, the computer, and peripheral equipment, refer to the appropriate operating instructions.

Before connecting, operating or adjusting this product, please read these instructions completely. Please keep this manual for future reference.



Media Manager:

Is a software package that includes RealJukebox for JVC, an AAC plug-in, an SD Interface plug-in, driver software for the USB Reader/Writer, and the setup programs for all these components.

- JVC in no way provides a guarantee for the RealJukebox Player Application or associated plug-in module. JVC accepts no liability for any problems that may arise either during the installation or through use of the RealJukebox Player Application and/or associated plug-in module. JVC does not provide a guarantee that content managed by the RealJukebox Player Application and/or associated plug-in module can be transferred to an SD Card.
- Electronic Music Distribution services are provided by a third party and not by JVC.
 Therefore JVC has no responsibility and accepts no liability for any problems that may arise with an Electronic Music Distribution service.
- You may be unable to record or use music data under some computer environments. This company accepts no responsibility for any loss of data or damages incurred by loss of data.
- Modifications to the product and these operating instructions may be made without prior notice.
- · Illustrations and screen examples in these operating instructions may differ from the actual product.



Registration

Please register your copy of RealJukebox for JVC. Registration allows you to take advantage of product support and to receive information about the latest version of the software and other products.

Visit the registration site on the Internet and fill out the online form.

Registering on the Internet

- After starting RealJukebox for JVC, click on the [to JVC] button in the main window.
- 2. Follow the instructions found on the homepage.

Contents

Before use	
System requirements What you can do with RealJukebox for JVC Installation Using the online help Connecting an SD memory Card • The USB Reader/Writer • Protecting the data on your SD memory card	5 11 13 14
Getting started	
Startup Startup Exiting Main features of the display Checking out tracks to an SD memory card	15 17 18
Reference	
Troubleshooting	26 27 27

System requirements

Operating System: Microsoft® Windows 98 or Windows Me

RealJukebox for JVC cannot be used on Microsoft Windows 3.1, Microsoft Windows NT, Microsoft Windows 2000 or Macintosh operating systems. Correct operation cannot be guaranteed when used on Microsoft Windows 95 or Microsoft Windows 98 that has been upgraded from Windows 95/3.1.

Minimum System:	Recommended System:
Intel Pentium® 233MHz MMX, or	Intel Pentium®II 333MHz MMX, or
equivalent CPU	equivalent CPU
64MB RAM	64MB RAM
Hard drive space: 30MB for Software	Hard drive space: 30MB for Software
200MB for Music	1GB for Music
CD-ROM drive	CD-ROM drive that supports digital
16 bit Sound card and speakers	audio extraction
	Full Duplex Sound card and speakers
16-bit color video card	16-bit color video card
Internet connection and web browser	Internet connection and web browser
(Microsoft® Internet Explorer® 5.01 or	(Microsoft® Internet Explorer® 5.01 or
later)	later)

What you can do with RealJukebox for JVC

RealJukebox for JVC includes the following new features:

- · New Skins radically new ways to enjoy your RealJukebox for JVC
- · Navigation Bar access to key sections with the touch of a button
- · Broken Links Management remove all missing files from RealJukebox for JVC
- Watch Music Folders allows you to quickly import tracks that you have downloaded
- · AutoPlaylists create track mixes automatically
- · Improved Interface Navigation Bar, Command Bar, optional tree view, and more
- Keyword Search find the songs you like in seconds
- · Recently Played Tracks displays the last 20 tracks you played
- · Radio tuner access thousands of radio stations via the RealPlayer
- · Online Track/Artist info live information via the web
- · Track Info add album art, lyrics, and more to your tracks and albums
- · Print Jewel Cases Print CD covers/inserts with graphics and track lists
- · Visualizations animate to the rhythm of your music
- Record from Mic/Line In transfer your vinyl or cassette collection to your PC or simply record from your microphone
- · SD Audio Player and SD memory card support
- · Edit Track Properties
- · Drag-and-drop track editing

The copyright protection technology used by RealJukebox for JVC follows the guidelines set by the Secure Digital Music Initiative (SDMI).

Note

You will need an Internet connection and an Internet service provider in order to use music data services.

Installation

The driver for the USB Reader/Writer and RealJukebox for JVC are included on the supplied CD-ROM. Follow these steps to install them.

Checking drive ID

You may have to specify the drive ID during installation. Turn on the computer and start Windows. Refer to the following to check the ID of the drive.

Double click on the "My Computer" icon at the top left of the screen.



If you have more than one CD-ROM drive, select the one into which you have inserted the CD-ROM.

CD-ROM drive ID (E in this case)

Installation

Do not connect the USB Reader/Writer until installation is complete.



Turn on the computer and start Windows.



Insert the included CD-ROM into the CD-ROM drive.

- · The installer program starts automatically .
- If you haven't installed Internet Explorer 5.01 or later, a message will appear recommending that you install Internet Explorer 5.5, which is included on the CD-ROM.
- If Internet Explorer 5.01 or later is already installed, proceed from step **5**.
- · If the installer program doesn't start, run the program by specifying the file name (page 10).



- **3** Follow the onscreen instructions to install Internet Explorer.
- 4 Take the CD-ROM out of the drive and then reinsert it.
 - · The installer program starts automatically .
 - If the installer program doesn't start, run the program by specifying the file name (■ page 10).
- 6 Click on [Next].

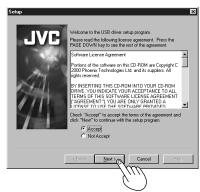
Select all two applications under normal circumstances.

Make changes if your computeroperating environment requires then click on [Next].



Read the license agreement, check "Accept" and click on [Next].

The USB Reader/Writer driver is installed.

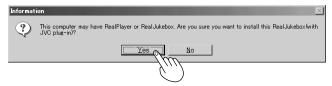


Installation



If the computer has RealPlayer or RealJukebox.

If the computer has RealPlayer or RealJukebox, the information appares.



Click "Yes" to start installation.

Note

If the computer doesn't have RealPlayer and RealJukebox, the RealJukebox for JVC installer starts automatically.

8

Read the licence agreement and click on [Accept].





Click on [Next].

Make changes to the destination if necessary before clicking on [Next].





Select whether to create icons on the desktop and toolbar, and click on [Finish].

Recommendation: create both icons. The setup program starts.





Check "Yes" and click on [Finish].

The computer restarts and installation is complete.



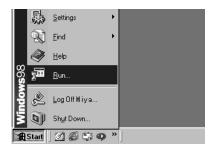
Note

If you decided not to install the USB Reader/Writer driver in step 6, the computer will not restart automatically.

If the installation program doesn't start automatically



Click on [Start] and, click on "Run...".



Type in "#:\setup.exe" and click on [OK].

- · #: Enter the CD-ROM ID here. (Propage 6, Checking drive ID)
- · Letters you enter here can be either upper or lower case.
- The installation program starts. Go to step 3 on page 7 and continue.



Using the online help

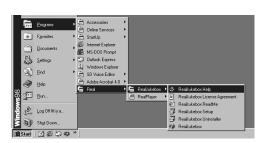
Online help for RealJukebox

These instructions describe basic operations such as installation and checking out tracks. For more detailed instructions, refer to the online help included on the CD-ROM.

To show the online help

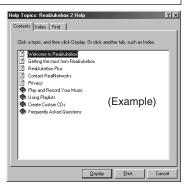
Do one of the following.

- Click on [Start] and select
 "Programs" → "Real" →
 - "RealJukebox" →
- "RealJukebox Help".
- After starting RealJukebox Help, select [Contents] from the "Help" menu.



To search using the table of contents

- · Double click on . to display its contents.
- · Double click on ? to see an explanation.



Searching by keyword

The table of contents is replaced by a list of keywords when you click on the "Index" tab.

You can find a keyword by either entering it or scrolling through the list. Double click on the keyword to see an explanation.

Using the online help

SD Audio HELP

The SD Audio Help includes explanations about the sections of RealJukebox for JVC specific to JVC that have not been explained in these operating instructions or in the Online Help for RealJukebox.

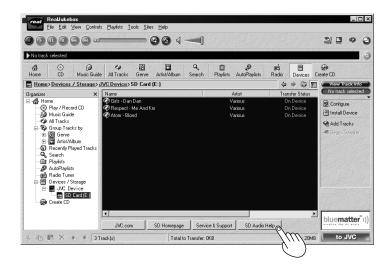
- · AAC settings and explanations
- · Data conversion
- · Checking out and checking in with SD memory cards
- And more

To show the online help for SD Audio

After starting RealJukebox for JVC.(Propage 15)

- **①** Connect the USB Reader/Writer (ISF page 13).
- 2 Insert an SD memory card into the USB Reader/Writer.
- 3 Click on [Devices].
- Double click on "JVC Device" and then double click on "SD Card".
- 6 Click on the [SD Audio Help] button.

To show the organizer, click on [View] and select "Organizer".



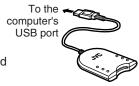
Connecting an SD memory Card

Connect the included USB Reader/Writer to checkout (record) tracks to your SD memory card.

Note

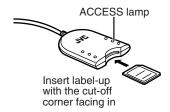
- Connect to an AC power supply when using a portable computer. Data can be lost or errors can occur if the computer turns off during operation.
- · Operation cannot be guaranteed under the following circumstances:
 - *When you have connected two or more USB Reader/Writer to your computer or are using another USB device.
 - *When you have connected another SD memory card adapter.
 - *When you are using a USB hub or extension cord.
- 1 Turn on the computer and start Windows.
- 2 Connect the USB Reader/Writer to the computer's USB port.

The "New Hardware Found" screen appears. The driver for the USB Reader/Writer is enabled automatically.



Check that it appears in Windows Explorer as a removable drive.

Taking care that the card is facing the right way, insert the SD memory card into the USB Reader/Writer.



Note

You can damage the card and USB Reader/Writer's slot if you insert the card incorrectly.

Ensure the USB Reader/Writer's ACCESS lamp is off before inserting or ejecting SD memory card.

Do not remove the SD memory card while checking out even if the ACCESS lamp is off.

Connecting an SD memory Card

The USB Reader/Writer

- Do not wet, drop, or expose the USB Reader/Writer to impacts.
- Do not use or store in locations directly exposed to sunlight, a heat vent, or a heating appliance.
- · Do not disassemble or modify.
- · Do not insert foreign objects into the slot.

CAUTION:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant 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 harmful interference to radio communications. However, 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:

- · Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- · Consult the dealer or an experienced radio/TV technician for help.

Any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party: JVC AMERICAS CORP.

1700 VALLEY ROAD WAYNE, N.J. 07470, USA

Protecting the data on your SD memory card

Performing the following actions before RealJukebox for JVC has started completely, while the USB Reader/Writer's ACCESS lamp is on, and while checking out tracks can damage your SD memory card and corrupt the data it contains.

- · Inserting or ejecting the SD memory card
- $\boldsymbol{\cdot}$ Connecting or disconnecting the USB Reader/Writer
- · Shutting down RealJukebox for JVC or Windows forcefully
- Turning the computer off forcefully (for example, unplugging the AC power supply cord)

Startup

Startup

Double-click on the desktop icon.

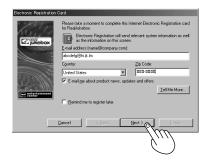


RealJukebox for JVC starts and the registration wizard begins.

Note

If the icon is not on the desktop, from the [Start] menu, select "Programs" \rightarrow "Real" \rightarrow "RealJukebox" \rightarrow "RealJukebox".

Fill out the form and Click on [Next].



3 Click on [Next].



Click on [Next].

Select "Express Setup

(Recommended)" under normal circumstances. Select "Custom Setup" if necessary before clicking on [Next].



Continued on next page



5 Click on [Finish].

You are connected to http://www.Real.com/central/ and your registration information is sent. A screen appears asking if you want to use RealJukebox as the default player.



6

Click on [Yes].

Setup of RealJukebox for JVC finishes and the operation window appears.





After doing this once, the RealJukebox for JVC operation window will be displayed by simply clicking on the desktop icon.

Note

Turn off the power-saving functions on your computer while using RealJukebox for JVC.

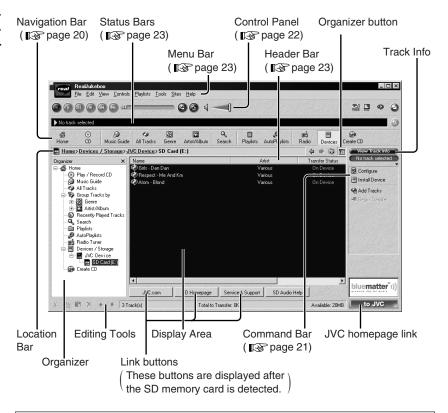
Exiting

Click on the x box at the top of the main window.



Main features of the display

Use the Navigation Bar to display track lists and other RealJukebox for JVC feature areas, and the Control Panel to play and record tracks. The Command Bar contains commands you can use on tracks or track lists, Playlists, devices, and more. RealJukebox for JVC menus contain many additional options, including Preferences, Navigation options, and Help.



If play starts automatically when you insert a CD into the CD-ROM drive, you will need to shutdown any CD playing applications before you can use RealJukebox for JVC.

Quick Start

This section will help you get started using some of RealJukebox for JVC's basic features. As you become more experienced using RealJukebox for JVC, be sure to explore both the program and this Help system to learn about the many additional tools and options available to you.

Note

The following instructions assume that all default automatic playback options are on.

Feature	Description			
Record/Play CDs	To Record and Play a CD, insert it into your CD-ROM			
	drive. To toggle recording on/off, click the Record			
	button on the Control Panel. To toggle playback			
	on/off, click the Play button.			
Play Tracks	To view and play your recorded music, click a Group			
	button (Genre, Artist, Album), then double-click items			
	in the display window to open or play them, or select a			
	track and click the Play button in the control panel.			
Create Playlists	To create a custom Playlist, click New Playlist in the			
	Command Bar and follow the on-screen instructions.			
Download Music	To download music from the Internet, click the Music			
	Guide button in the Navigation Bar and follow the			
	links.			

RealJukebox Homepage

RealJukebox Homepage gives you an easy way to get started using RealJukebox. Each item in the window provides a brief description of a RealJukebox feature, and you can click a link to display track lists, create Playlists, download music, and more.

Note

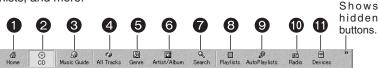
To see an overview of all options, click the organizer button to see RealJukebox for JVC in organizer view. To go back to the previous location, use the Back or Forward buttons on the Location Bar.

Main features of the display

RealJukebox for JVC Controls and Navigation

The Navigation Bar

The Navigation Bar gives you instant access to every RealJukebox for JVC feature area. Just click a button to display the track list or feature you want to use, then use the Control Panel and Command Bar to play tracks, create Playlists, and more.



Note

You can customize the Navigation Bar: right-click the Navigation Bar and choose the buttons you wish to display by checking/unchecking the boxes.

	Feature	Description		
0	Home	Go to the RealJukebox homepage.		
2	CD	Record or play a CD.		
3	Music Guide	Go to Music Guide and download music from the		
		Internet.		
4	All Tracks	View all tracks in your music library.		
6	Genre	Click a Group button to go to the desired Track Group.		
6	Artist/Album	View the Artist and Album Track Groups.		
7	Search	Search your music library using keywords. If you don't		
		see this button in the Navigation Bar, click the >> on		
		the right end.		
8	Playlists	View your Playlists. If you don't see this button in the		
		Navigation Bar, click the >> on the right end.		
9	AutoPlaylists	View your AutoPlaylists. If you don't see this button in		
		the Navigation Bar, click the >> on the right end.		
1	Radio	Go to Real.com and play live streamed radio		
		broadcasts using the RealPlayer.		
•	Devices	View your installed portable devices. If you don't see		
		this button in the Navigation Bar, click the >> on the		
		right end.		

The Command Bar

The Command Bar displays context-sensitive options based on the current track list or feature area . Many of these options are only available under the certain circumstances, such as when an appropriate item is selected.

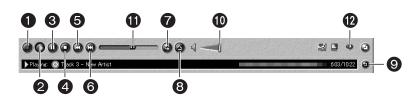
Feature	Description		
New Playlist	Launch a new window to help you create a new Playlist.		
New AutoPlaylist	Launch a new window to help you create and design		
	a new AutoPlaylist.		
Edit AutoPlaylist	Lets you change the criteria for the selected AutoPlaylist.		
Copy to Playlist	Send selected tracks to an existing Playlist.		
Copy to Device	Send selected tracks to a portable device queue.		
Add Tracks	Add selected tracks to a Playlist, AutoPlaylist, or		
	portable device.		
Check All	Select all tracks for recording from CD or transfer to a		
	portable device.		
Check None	Skip all tracks when recording from CD or transferring		
	to a portable device.		
Remix Now	Remix a selected AutoPlaylist: Automatically generates		
	a new compilation of tracks using the same criteria.		
Update Now	Updates the Music Guide display.		
Begin Transfer	Transfer queued tracks to a portable device. (Changes		
	to "Cancel Transfer" when tracks are being transferred)		
Configure	Configure a portable device in preparation for transferring		
	tracks. (Available only when a portable device is selected)		
View Track Info	View Track Info associated with the selected track.		
Edit View Track	Change artist name, album title, and genre for		
Info	multiple tracks. Add lyrics, album art, and more.		
Clear History	Erase the list of recently played tracks.		
	Available only in the Recent window.		
New Stations	Appears only when new radio stations are available. Click		
	the New Stations button to display the Radio window.		
New Music Guide	Appears only when Music Guide has been updated. Click New Music Guide to display the latest version of the Music Guide.		

Main features of the display

The Control Panel

The Control Panel provides recording and playback control as well as skip, seek (search), shuffle (random), continuous play (repeat) options.

The Control Panel also offers Visualization settings, quick access to your RealPlayer, and Skin mode.



	Feature	Description
0	Record	Click to begin recording the CD in your CD drive. Click again to stop recording.
2	Play	Click to play the selected track. Click again to stop playing.
8	Pause	Click to pause playback. Click again to resume playback.
4	Stop	Click to stop both playback and recording.
6	Previous	Click to jump to previous track on the current CD or track list.
6	Next	Click to jump to next track on the current CD or track list.
7	Continuous	Play current CD or track list repeatedly.
8	Shuffle	Play current CD or track list randomly.
9	Return	Click the return button to return to the currently playing track list. For example, if you're playing a track from a Playlist, and you're browsing your Groups (Genre, Artist, Album), clicking the return button takes you back to the Playlist your track is playing from.
0	Volume Control	Click and drag the slider to pump up the volume (right) or tone it down (left). Use the arrow keys to "fine tune" your settings.
•	Progress Bar	The Progress Bar displays the current track's playback progress. You can skip forward and backward in the currently playing track by dragging the slider left (back) or right (forward).
12	Launch RealPlayer	Launches the RealPlayer.

The Status Bars

· Play Status Bar

This bar provides up-to-date information on the currently playing track, including the name of the track and artist and the time elapsed/length of the track. Other information includes icons that tell you whether the track is playing from a CD (CD) or a recorded music file (an icon will tell you the format), and whether the track is playing in stereo ((((\cdot))))

· Record Status Bar

This bar provides up-to-date information on the currently recording track, including the name of the track and artist, the track number, and the recording progress. The Record Status bar only appears while a track is recording.

The Menu Bar

The menu bar offers dozens of options including navigation, preferences, playlists, plus online sites and Help. Click to open a menu, then click again to select an option.



The Header Bar

The Header Bar is the bar just above any track list. With a Group, Playlist, or All Tracks open, it contains the headers Track Name, Album, Artist, etc. You can specify which headers and columns appear in **Tools>Preferences>Display**.



 To sort tracks by header criteria, click a header. For instance, to sort by name, click the "Name" header (Track Name, Playlist Name, Grouping Name).

Note

Tracks on CD cannot be sorted, and Playlist tracks cannot be sorted using the Header Bar.

Checking out tracks to an SD memory card

Select tracks you have recorded on your computer and check them out to an SD memory card. The tracks are converted as they are checked out, so ensure you have made the correct conversion settings.

Note

Before using new SD memory card, perform the formatting (Perpage 26).

- Connect the SD memory card.
- 2 Select tracks.
- 3 Click on "Copy to"→ "Device".
- 4 Click on "OK".
- Click on "Begin Transfer".
 "On Device" is shown when checking out is finished.







Note

Do not insert or remove SD memory cards while a progress bar in the Transfer Status area is being displayed.

Troubleshooting

Before requesting service, make the below checks and refer to the online Help. If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem,

Installation and startup

Problems	Check points or causes			
Cannot install	· Insert the CD-ROM.			
	Ensure you have specified the correct CD-ROM drive.			
Cannot start.	· Ensure the program is installed on the hard disc. The			
	program cannot be run from the CD-ROM.			
	· Ensure the computer has at least 64 MB of RAM.			
I want to install just the USB Reader/Writer driver.	Install the driver from the included CD-ROM. In step 6 of the installation procedure on page 7, remove the checks from RealJukebox [with JVC plug-in].			

Formatting SD memory cards

Format your SD memory card to use SD Audio data. Some or all of the data on the card will be lost when you format it. Select "Format only for SD Audio (Erase all Audio data)" under normal circumstances. Select "Format entire card (Erase all data)" only when necessary.

Note

Tracks you have checked out using software other than RealJukebox for JVC are also deleted when you format the card. Check the data on the card before commencing formatting.

Use only the method described below to format your card. Using other methods can render the card unable to checkout or play.

- Click on "Devices".
- **2** Double-click on "JVC Device".
- Right Click on "SD Card".
- Click on "Configure".



- 5 Click on "Initialize (Format)".
 - Recomended: "Format only for SD Audio (Erases all Audio data)"
- 6 Click on [Start].

The SD memory card is formatted.



Copyright protection limitations

- This software includes copyright limitations decided upon by the Secure Digital Music Initiative (SDMI).
 - * You may be unable to use music data with this software if the data is copyright-protected or if you have recorded from a DVD-Audio player.
 - * Where the owner of the copyright or music data providers have set conditions with regard to the use of the data, you are obliged to abide by those conditions.
- Your attention is drawn to the fact that recording pre-recorded SD memory card may infringe copyright laws.
- Upgrading RealJukebox for JVC
 RealJukebox for JVC follows the guidelines set by the SDMI. Future changes
 to these guidelines may render some functions of RealJukebox for JVC
 inoperable. Upgraded versions of RealJukebox for JVC will be offered in
 such circumstances. A charge may be applied to these upgrades.

Limitations in Windows Explorer

- SD memory cards are shown as external drives (for example, "D") in Windows Explorer when they are connected to the computer.
 - Do not use Explorer to move SD memory card music data or folders, change their names, or delete them. This can render the music data unplayable. Use only RealJukebox for JVC for editing.
- Similarly, do not use Explorer to move, change the names of, or delete music data and folders you have saved to your computer.

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Licensed AAC Patents(U.S. patent numbers);

Pat.	5,357,594	5,297,236	98/03037	5,481,614	08/557,046
5,848,391	5,752,225	4,914,701	97/02875	5,592,584	08/894,844
5,291,557	5,394,473	5,235,671	97/02874	5,781,888	
5,451,954	5,583,962	07/640,550	98/03036	08/039,478	
5,400,433	5,274,740	5,579,430	5,227,788	08/211,547	
5,222,189	5,633,981	08/678,666	5,285,498	5,703,999	

