AMERICAN AUDIO

Radius 2000™

Featuring:

TEMPO LOCK · Sampling · seamless loop · POWER TOUCH jog wheel · QStart · FX · digital output

User Guide and Reference Manual

AMERICAN AUDIO
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2/09

CONTENTS

IMPORTANT SAFETY ITEMS FOR U.S.A. & CANADA MODEL ONLY

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PLAYER TO WATER OR MOISTURE

CAUTION:

1. Handle the power supply cord carefully. Do not damage or deform; it may cause electric shock or malfunction when used. Hold plug attachment when removing from wall outlet. Do not pull on the cord.
2. To avoid electric shock, do not open the top cover when the unit is plugged in. If problems occur with the unit, call your local American Audio® dealer.
3. Do not place metal objects or spill liquid inside the SD/USB player. Electric shock or malfunction may occur.

CAUTION
Do not open -
Risk of electric shock

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER RACK. THERE ARE NO USER SERVICEABLE PARTS INSIDE REFER SERVICE TO YOUR AUTHORIZED American Audio DEALER.

The lightning flash with an arrow triangular symbol is intended to alert the user to the presence of non insulated “dangerous voltage” within the products enclosure, and may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point triangular symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the user manual accompanying the SD/USB player.

CAUTION

TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE CAREFULLY INSERTED TO PREVENT BLADE EXPOSURE

CAUTION:

USE OF CONTROLS OR ADJUSTMENTS OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE

THE COMPACT DISC PLAYER SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED SERVICE PERSONNEL.

NOTE:

This unit may cause interference to radio and television reception.

Please carefully read and understand the instructions in this manual thoroughly before attempting to operate this unit. These instructions contain important safety information regarding the use and maintenance of this unit. Take special care to follow all warning symbols and labels both on the unit and printed in this manual. Also, Please keep this manual with the unit, for future reference.

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE, OR OTHER TYPE OF ELECTRICAL OUTLET UNLESS THE WIDE BLADES CAN BE CAREFULLY INSERTED INTO A MATCHING WIDE SLOT.

ATTENTION: POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR, UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

ELECTRICAL SAFETY PRECAUTIONS

ELECTRICAL PRECAUTIONS

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER (OR BACK). THERE ARE NO USER SERVICEABLE PARTS INSIDE REFER SERVICE TO YOUR AUTHORIZED AMERICAN AUDIO® SERVICE TECHNICIAN.

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.

IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the product is operated.

RETAIN INSTRUCTIONS — The safety and operating instructions should be retained for future reference.

HEED WARNINGS — All warnings on the product and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.

CLEANING — The product should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.

ATTACHMENTS — Do not use attachments not recommended by the product manufacturer as they may cause hazards.

WATER AND MOISTURE — Do not use this product near water — for example, near a bathtub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

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

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

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

POWER SOURCES — This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

LOCATION – The appliance should be installed in a stable location.

NONUSE PERIODS – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

GROUNDING OR POLARIZATION

- If this product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other), it will fit into the outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- If this product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin, it will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.

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

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

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

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

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

OBJECT AND LIQUID ENTRY - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

SERVICING — Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

DAMAGE REQUIRING SERVICE - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- If the product has been dropped or damaged in any way.
- When the product exhibits a distinct change in performance — this indicates a need for service.

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

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

WALL OR CEILING MOUNTING — The product should not be mounted to a wall or ceiling.

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

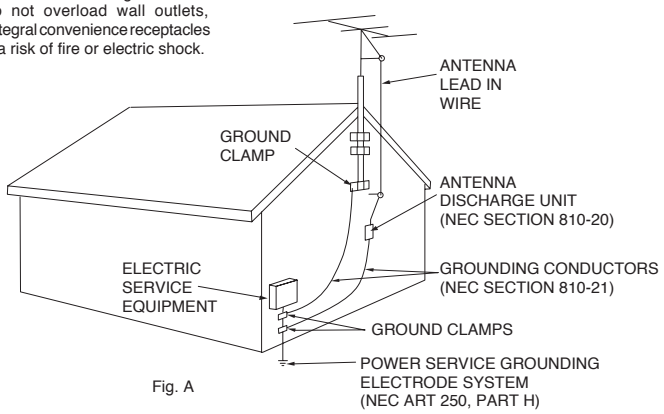


Fig. A

NEC — NATIONAL ELECTRICAL CODE

SAFETY INSTRUCTIONS

I. Read Instructions - All the safety and operating instructions should be read before the Player is operated. The safety and operating instructions should be saved for future reference.

2. Heed Warnings - All warnings on the Player and in the operating instructions should be adhered to.

3. Water and Moisture - The player should not be used near water - for example, near a bath tub, kitchen sink, laundry tub, in a wet basement or near a swimming pool, etc.

4. Ventilation - The player should be situated so that its location or position does not interfere with its proper ventilation. For example, the player should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

5. Heat - The player should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

6. Power Sources - The player should be connected to a power supply only of the type described in the operating instructions or as marked on the player.

7. Servicing - The user should not attempt to service the player beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel. The player should be serviced by qualified service personnel when:
   A. The power-supply cord or the plug has been damaged.
   B. Objects have fallen, or liquid has been spilled into the player.
   C. The player has been exposed to rain or water.
   D. If the player does not appear to operate normally or exhibits a marked change in performance.

The serial and model number for this unit is located on the rear panel. Please write down the numbers here and retain for future reference.

Model No._____

Serial No._____

Purchase Notes:

Date of Purchase_____

Dealer Name_____

Dealer Address_____

_____

_____

Dealer Phone_____

UNPACKING

Every Radius 2000™ has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your player for any damage and be sure all equipment necessary to operate the player has arrived intact. In the event damage has been found or parts are missing, please contact our toll free customer support number for further instructions. Please do not return the player to your dealer without first contacting customer support.

INTRODUCTION

Introduction:

Congratulations and thank you for purchasing the American Audio® Radius 2000™ SD/USB player. This player is a representation of American Audio's continuing commitment to produce the best and highest quality audio products possible at an affordable price. Please read and understand this manual completely before attempting to operate your new player. This booklet contains important information concerning the proper and safe operation of your new player.

Customer Support:

American Audio® provides a toll free customer support line, to provide set up help and answer any question should you encounter problems during your initial set up or operation. You may also visit us on the web at www.AmericanAudio.us for any comments or suggestions. Service Hours are Monday through Friday 8:00 a.m. to 4:30 p.m. Pacific Standard Time.

Voice: (800) 322-6337
Fax: (323) 582-2610
E-mail: support@americandaudio.us

To purchase parts online visit http://parts.americandj.com

Caution! There are no user serviceable parts inside this player. Do not attempt any repairs yourself, without being instructed to do so by an authorized American Audio service technician. Doing so will void your manufactures warranty. In the unlikely event your player may require service, please contact American Audio® customer support.

Do not discard the packing carton in the trash. Please recycle when ever possible.

SET-UP PRECAUTIONS

Please be sure to make any connections before plugging the player in to an electrical outlet. All fader and volume controls should be set to zero or minimum position, before the player is switched on. If the player has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch on the player immediately. The arising condensation of water might damage your device. Leave the device switched off until it has reached room temperature.

Operating Determinations:

- When installing this player, please make sure that the device is not exposed or will not be exposed to extreme heat, moisture or dust!
- Do not operate the player in extremely hot (more than 30°/100°F) or extremely cold (less than 5°C/40°F) surroundings.
- Keep the unit out of direct sunlight and away from heaters.
- Operate the player only after becoming familiar with its' functions. Do not permit operation by persons not qualified for operating the unit. Most damages are the result of unprofessional operation.

MAIN FEATURES

- Plays Mp3's from either USB Stick or SD/SDHC Card
- Mp3 Track Listings
- Fine Tune BPM (See page 28)
- Auto cue
- 1/75th second frame search
- Real time cue ("Cue on the Fly")
- 8 different speed scan (4 Forward/4 Reverse)
- Pitch display
- RCA coaxial output
- Large bright VFD display can be viewed from wide angles.
- Fader "Q" Start Control **(a)**
- Seamless Loop (uninterrupted loop playback)
- Sampler (Forward & Reverse Sampling)
- Flip-Flop (Relay Playback) **(b)**
- Jog Wheel Pitch Bend +/-100%
- Jog Wheel Sensitivity Adjustment
- 4 Programmable Cue (Bank) Buttons
- Adjustable Pitch Percentages: +/-4%, +/-8%, +/-16% or +/-100%
- Instant Start within 10ms (sound is produced immediately when the PLAY button is pressed)
- Folder Search for Mp3's
- Headphone Jack w/ Trim Control
- Advanced Track Search (See page 33)
- Real Time Scratch Play
- Reverse Play
- Pan Effect
- Skid Effect
- Filter Effect
- Phase Effect
- Echo Effect
- Flanger Effect
- Trans Effect
- Music Master tempo
- Memory Backup, Defaults to last setting**(c)**
- Selectable Single or Continuous Play

(a) FADER "Q" START CONTROL: This feature is used in conjunction with most American Audio® and American DJ® audio mixers that also feature "Fader Q Start" control. For best results use this feature with two (2) Radius 2000 players. Connect your Radius 2000 as described in the set-up section of this manual. After set up is completed load your players. By moving the mixer's crossfader from left to right you can start and pause your Radius 2000 playback functions. For Example, when using two (2) Radius 2000™ players and a Fader "Q" Start mixer, if your mixer's crossfader is all the way to the left (player one is playing, player two is in cue or pause mode), and you move the fader at least 20% to the right, player two (2) will begin to play and player one (1) will return to cue mode. When the crossfader is to the right, and you move it 20% to the left, player one (1) will begin to play and player two (2) will return to its' cue point. You can create great effects similar to scratching with this feature. After storing cue points on each side of the player, different songs or samples may quickly be recalled by moving the mixer crossfader back and forth. New cue points can be easily selected on the Radius 2000 player (see setting cue points page 17). "Q" Start control is easy to use and mastering this feature will help you create amazing effects with your music. Note: For proper "Q" Start operation be sure your mixers "Hamster" setting are set to 1/2 (Normal Setting). Important: When Bank Button LED is flashing, the unit will return to the bank in point.

(b) FLIP-FLOP: This feature is used in conjunction with American Audio® mixers that also feature Fader "Q" Start. For FLIP-FLOP results you must use two (2) Radius 2000 players. Connect your Radius 2000's as described in the set-up section of this manual. This feature will start the next player once one (1) player has ended. For example, if player one (1) is playing a track and it ends, player two (2) will instantly begin to play. You may set FLIP-FLOP to play track to track or folder to foler. For more information on this feature, see FLIP-FLOP™ on page 38. Important: When Bank Button LED is flashing, the unit will return to the bank in point.

(c) MEMORY BACKUP: The Radius 2000™ has a five (5) year memory back-up, that will save your setting in case the power supply is accidentally disconnected. Radius 2000™ will remember your last setting (SGL, CTN, and effect parameters) even if you disconnect your main power. The Radius 2000™ will store your cue points and samples in memory if you accidentally shut off the power. See memory on page 26.

(d) PROGRAMMABLE CUE POINTS: The Radius 2000™ has four *BANK BUTTONS* (28). These cue points can be stored into the unit's internal memory and may be recalled at any time. See setting "Cue Points" on page 20.

IMPORTANT SD CARD INFORMATION & SET-UP

SD CARD INFORMATION:

- ***Make sure your SD Card only has MP3 files on it***
- ***Do Not have any other file type on your SD Card; no WAV files, photo files, etc...***
- ***American Audio SD Players can read SD HC (High Capacity) Cards up to 32GB***

PLEASE NOTE:

For higher quality MP3 files (more than 128 kbps) American Audio recommends "High Speed" SD Cards. Using high speed cards will ensure the best performance with your American Audio SD Player.

USB INFORMATION:

- ***Make sure your USB device has only MP3 files on it. There cannot be any other type of files on your USB device, NO WAV files, photo files, etc...***
- ***If you are using a SD Card via USB SD Card reader, you must remove the USB SD Card reader first to change SD Card's. Please do not remove the SD Card from the USB SD Card reader while the USB card reader is still connected to the unit.***
- ***Only supports FAT/FAT32 formatted devices.***

1. Checking the Contents

Be sure your Radius 2000™ was shipped with the following:

1) Radius 2000™ Professional SD/USB player
2) User Guide and Reference Manual
3) One (1) set of RCA cables
4) One (1) 1/8” Relay Cable
5) Warranty card

2. Installing the Units

Place your unit on a flat surface or mount it in a flat surface case.

3. Connections

1) Be sure the power is disconnected.
2) Connect the included RCA cable from your Radius 2000™ outputs to the inputs on your mixer.
3) Use the supplied 1/8” mini plug cable to connect your Radius 2000™ to a mini jack connection (A or B) on a compatible American Audio® or American DJ® “Fader Q Start” mixer. (This will enable the Fader “Q” Start function)

CAUTION:

- ***Be sure to use the supplied mono 1/8" control cables. Using other types of cable may result in unit damage***
- ***To avoid severe damage to the unit, be sure the power is off when making connections to the unit.***

CAUTION:

• The VFD is designed to be clearly visible at any angle but is best viewed within the angles shown in **Figure 1**.

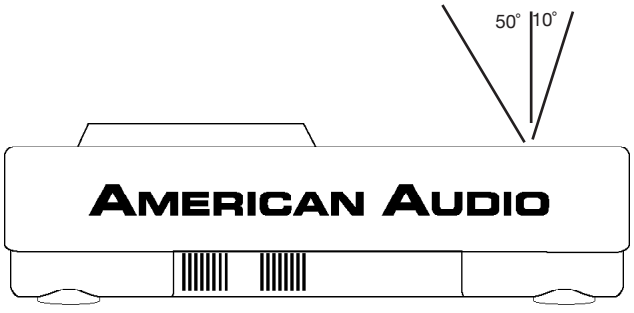
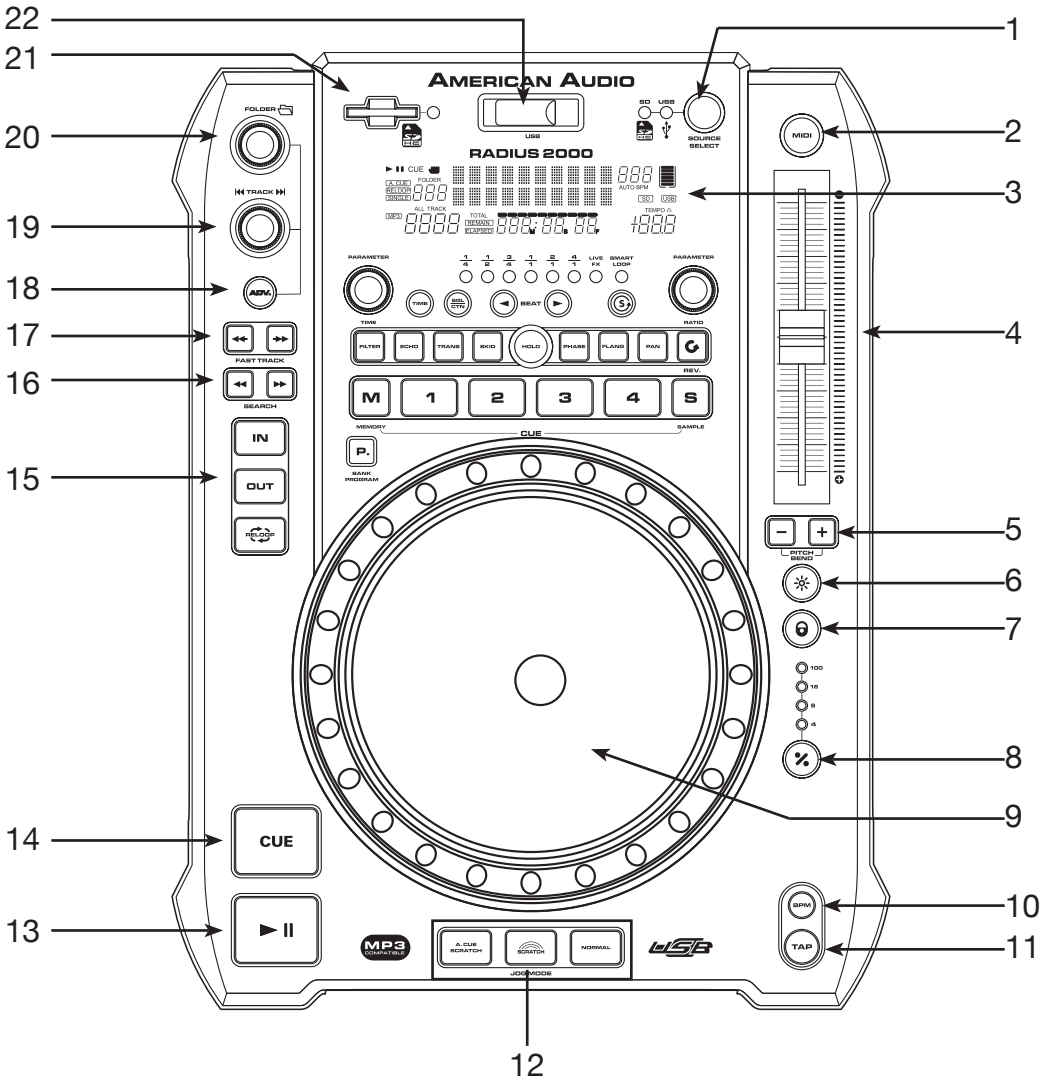


Figure 1

Figure 2


AMERICAN AUDIO
RADIUS 2000
FOLDER
TRACK
ADV.
FAST TRACK
SEARCH
IN
OUT
RELOOP
MIDI
SOURCE SELECT
PITCH BEND
PARAMETER
TIME
BEAT
RATIO
FILTER
ECHO
TRANS
SKID
HOLD
PHASE
FLANG
PAN
REV.
M
1
2
3
4
S
MEMORY
SAMPLE
CUE
P.
BANK PROGRAM
BPM
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A. CUE SCRATCH
SCRATCH
NORMAL
JOG MODE
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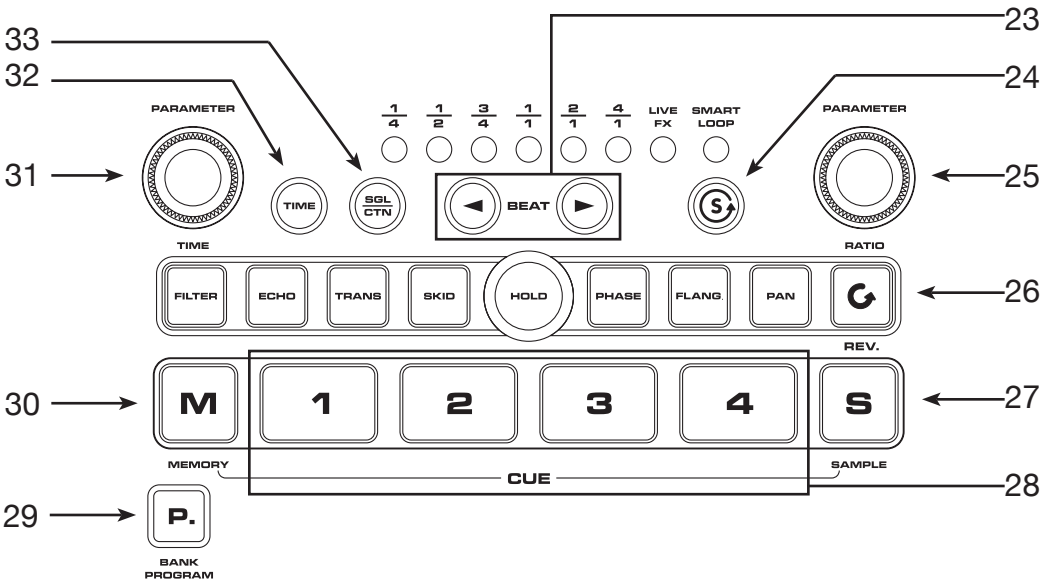
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MEMORY
CUE
SAMPLE
P.
BANK PROGRAM
23 24 25 26 27 28 29 30 31 32 33

GENERAL FUNCTIONS AND CONTROLS (Cont.)

A. TOP UNIT CONTROLS (FIGURE 2)

1. SD CARD/USB SELECTOR - Press this button to select either the SD CARD or USB port. The source indicator LED will light when the selected source is activate.

You can also use this button to record a demo from the current playing track. To record and save a demo, press and hold the Source Select for 3 sec. to record the playing track as a demo into the EEPROM.

2. MIDI BUTTON - Press this button to activate MIDI mode.

3. VFD DISPLAY - This high quality VFD display indicates all the functions, as they are occurring. The display ICONS will be explained on page 15

4. PITCH SLIDER - This slider is used to adjust the playback pitch percentage. The slider is a set adjustment and will remain set until the pitch slider is moved or the pitch function has been turned off. This adjustment can be made with or without a device in the drive. The amount of pitch being applied will be displayed in the *VFD (3).*

5. (-) PITCH BEND BUTTON - The **(-)** pitch bend function creates a momentary "Decrease" in the track's BPM's (Beats per minute) while it is playing. This will allow you to match the beats between two playing track's or other playing music source. Remember, this is a momentary function. When you remove your finger from the pitch button, the BPM's will automatically return to *PITCH SLIDER'S (4)* pitch value Holding down this button will give a maximum of -100% pitch. Use this function to slow to another playing music source. Be sure to notice that this function is a momentary pitch adjustment, for a more precise adjustment use the *PITCH SLIDER (4)* to match the BPM's with another playing music source.

(**+) PITCH BEND BUTTON -** The **(+)** pitch bend function creates a momentary "Increase" in the track's BPM's (Beats per minute) while it is playing. This will allow you to match the beats between two playing track's or any other music source. Remember, this is a momentary function. When you remove your finger from this button, the BPM's will automatically return to the *PITCH SLIDER'S (4)* selected pitch. Holding down this button will give a maximum of +100% pitch.

6. PITCH ON/OFF BUTTON - This button is used to turn the *PITCH SLIDER (4)* function on and off. The pitch percentage can be changed between 4%, 8%, 16% and 100%. 4% will allow the least amount of pitch manipulation and 100% will allow the most amount of pitch manipulation. To adjust to the different values please see page 28.

7. TEMPO LOCK FUNCTION - This button activates the TEMPO LOCK function. This function allows you to use the PITCH SLIDER to speed up or slow down playback speed without altering the tonal pitch of the track. When this function is not engaged the original tonal pitch of the track will be altered giving you the "chipmunk" effect when a track is played at a high rate of speed, or the "James Earl Jones" effect when a track is slowed to much.

8. PITCH PERCENTAGE SELECTOR - Press this button to choose any pitch range percentages of 4%, 8%, 16%, and 100%. See page 29 for more details.

9. JOG WHEEL/EFFECTS PLATTER - This wheel has two functions;

A. The jog wheel will act as a frame search control when the track is in pause or cue mode, allowing you to set a cue point.

B. The wheel also works as a pitch bend during playback. Turning the wheel clockwise will increase the pitch percentage up to 100%, and turning the wheel in the counter-clockwise direction will decrease the pitch percentage down to -100%. The pitch bend will be determined on how long you turn the jog wheel continuously.

10. BPM BUTTON - Press this button to switch between manual BPM and Auto BPM.

11. TAP BUTTON - This button is used for manual BPM. When in manual BPM mode, tap this button to the beat of the current track.

12. JOG WHEEL EFFECTS AND CONTROLS

NORMAL BUTTON - Press this button to exit SCRATCH mode. When SCRATCH mode is not active the *JOG WHEEL (9)* can be used to pitch bend.

SCRATCH BUTTON - Press this button to activate SCRATCH mode. Use the *JOG WHEEL (9)* to use the SCRATCH effect.

A. CUE SCRATCH BUTTON -

IN PLAYBACK MODE - When in PLAY mode and the touch sensitivity function is active, touching the *JOG WHEEL (9)* will return the unit back to the last set CUE POINT or a CUE POINT located in a selected BANK BUTTON, and immediately start playback without music interruption.

IN CUE MODE - When in CUE mode and touch sensitivity function is active, touching the *JOG WHEEL (9)* will start playback until the *JOG WHEEL (9)* is released. Once the *JOG WHEEL (9)* is released the unit will return to the last set CUE POINT.

13. PLAY/PAUSE BUTTON - Each press of the PLAY/PAUSE BUTTON causes the operation to change from play to pause or from pause to play. While in play mode the blue play LED will glow, and while in pause mode the blue play LED will flash.

14. CUE BUTTON - Pressing the *CUE* button during playback immediately pauses playback and returns the track to the last set cue point (see setting a CUE POINT, page 20). The red CUE BUTTON LED will glow when the unit is in cue mode The LED will also flash every time a new CUE POINT is set. The CUE button can be held down to momentarily play the track. When you release the CUE button it instantly returns to the CUE POINT. You can also tap the CUE button to create a BOP effect.

15. IN, OUT, & RELOOP BUTTONS -

IN BUTTON - "CUE ON THE FLY" - This function allows you to set a CUE POINT (see CUE POINT page 20) without music interruption ("on the fly"). This button also sets the starting point of a seamless loop (see SEAMLESS LOOP on page 21).

OUT BUTTON - This button is used to set the ending point of a loop. A loop is started by pressing the *IN BUTTON,* pressing the *OUT BUTTON* set the loop ending point. The loop will continue to play until the *OUT BUTTON* is pressed once again.

RELOOP BUTTON - If a SEAMLESS LOOP has been made (see setting a SEAMLESS LOOP on page 18), but the player is not actively in SEAMLESS LOOP mode (a loop is not playing), pressing the *RELOOP BUTTON* will instantly reactivate the SEAMLESS LOOP mode. To exit loop, press the *OUT BUTTON.* LOOP and RELOOP will appear in the *VFD DISPLAY (3)* when the RELOOP function is available. If a cue point has not been set the *RELOOP BUTTON* will return you to the IN point.

16. SEARCH BUTTONS -

◄◄ This search button allows you to quickly scan backwards through a track.

►► This search button allows you to quickly scan forwards through a track.

17. FAST TRACK BUTTONS -

►►| This button is used to select a track. Tapping this button will forward skip to the next track, holding down this button will rapidly forward skip through the tracks.

|◄◄ This button is used to select a track. Tapping this button will back skip on track, holding down this button will rapidly BACK SKIP through the tracks.

18. ADV. TRACK BUTTON - While either playing a track or in pause mode, press this button to search for the next track you want to play. When you press this button you will enter ADV. TRACK mode, and TRACK indicators will flash. You can now turn the *TRACK KNOB (19)* to search for the next track you want to play. Press the *TRACK KNOB (19)* once you have found your desired track. The VFD will display "Searching..." and then "FOUND" once the track is found. If you want to play the track immediately press the *TRACK KNOB (19)* again.

19. TRACK KNOB - This knob has three functions.

A. Turning this knob will let you search through tracks in your selected folder. Turn the knob to scroll backward and forward through tracks.

B. Push the knob in and turn to scroll 10 tracks forward or backward. The current track number will be shown in the VFD.

C. Push this knob to display the Artist, Album, Track Title, Genre, and Track Bit Rate.

20. FOLDER KNOB - This knob has two functions.

A. Turning this knob will let you search for your desired folder. Turn the knob to scroll backward and forward through folders. The folder number your are currently in will be shown in the VFD.

B. Press and hold this knob, and turn the *Ratio Knob (25)* to scroll the current line name in the VFD.

21. SD CARD SLOT - This is the SD slot where you load your SD card. ***It can read SDHC Cards up to 32GB. The file format is Mp3 only. Please see page 8 for more SD Card info.***

22. USB PORT - This is the USB port where you can insert a USB stick, USB SD Card reader, or compatiable external hard drive for playback. ***VERY IMPORTANT: PLEASE SEE PAGE 8 FOR DETAILS REGARDING/ USING USB DEVICES.***

23. BEAT-SYNC SELECT BUTTONS - These buttons' are used to select the delay time of an effect to the beat of music. The beat delay ratios are 1/4, 1/2, 3/4, 1/1, 2/1, and 4/1. To turn off beat sync press both buttons at the same time.

NOTE: A effect must be selected to set a delay time.

24. SMART LOOP BUTTON - When the smart loop function is activated, select the beat at which you would like to start your desired loop, and the smart loop function will find the loop out point automatically according to the BPM.

25. PARAMETER RATIO KNOB - This knob is used to adjust the parameter ratio value. You can also push the RATIO KNOB and turn the *JOG WHEEL (9*) to adjust the parameter ratio value.

26. EFFECTS AND HOLD BUTTON -

FILTER BUTTON - This button is used to activate and deactivate the Filter effect. The Filter effect tweaks the original sound to add different tonal definition. The effect is almost the same as the PHASE effect.

ECHO EFFECT - This button is used to activate and deactivate the Echo effect. The Echo effect adds an echo to your output signal. See built in effects on page 32.

TRANS EFFECT - This button is used to activate and deactivate the Trans effect. The Trans effect simulates a real-time mixer transformer effect. See built in effects on page 33.

SKID BUTTON - This button is used to activate and deactivate the Skid effect. The Skid effect simulates the sudden platter stop of a turntable, like pressing the stop button on a turntable.

HOLD BUTTON - This button has two functions:
Parameter Lock: This button allows you to lock any new parameter settings you set to the effects. The button LED will glow red when the hold function is not selected. When the hold selection is not active, any changes to the effect parameters will be momentay.

System Lock: If you press and hold the button for 5 seconds you will activate the System Lock. The button LED will flash when the HOLD function is active. To unlock the HOLD function press and hold the button for 5 seconds.

PHASE BUTTON - This button is used to activate and deactivate the Phase effect. The Phase effect tweaks the original sound to add different tonal definition. The effect is almost the same as the FILTER effect.

FLANGER EFFECT - This button is used to activate and deactivate the Flanger effect. The Flanger effect distorts the output signal and creates an effect similar to the frequency phasing in and out of each

other.

PAN EFFECT - This button is used to activate and deactivate the Trans or Pan effect. The Pan effect allows you to pan the output from the left channel to the right channel. See built-in effects on page 31.

REVERSE - This button activates reverse play mode This function will play your track or sample in reverse. All pitch and effect functions will operate normally in this mode

27. SAMPLE BUTTON - This button is used to set and store a sample. Press this button and then press your desired Bank Button (28) to set the sample loop mode, the button LED will glow.
When sample mode is set, the sampler will mix the music together. Press the Sample button again to set the sample single mode (LED is flash). Press the Sample button again to cancel the sample function.

28 BANK BUTTONS 1-4 - These buttons are used to store either four (4) cue points or four (4) samples. Each Bank Button can store either a sample or a cue point. To play your programmed samples, press the *Sample Button (27)* and then press the *BANK PROGRAM BUTTON*.

29. BANK PROGRAM BUTTON - This function will allow you to program a sequence of up to 12 saved samples. See page 25 for more information.

30. MEMORY BUTTON - This button can be used in a couple ways:
Press this button to activate the Memory mode, the memory button LED will glow when active. After the memory mode is activated, press your desired *Bank Button (28)* to store your CUE point or playing loop. See Using Built In Sampler on page 23.

You can also record a loop by pressing the BANK button during music playback to start recording, when you have reached your desired loop ending point, press the BANK button again.

You can also memorize the BANKS to the playing folder with your SD/USB device by pressing the MEMORY button for 1 sec. To recall the BANK, press the MEMORY button (LED On), and turn the *FOLDER KNOB (20*) to select the Folder with the BANKS that you would like to recall.

31. PARAMETER TIME KNOB - This knob is used to adjust the parameter time value. You can also push the TIME KNOB and turn the *JOG WHEEL (9*) to adjust the parameter time value.

32. TIME BUTTON - The button will switch the time value described in the *TIME METER (51)* between ELAPSED PLAYING TIME, and TRACK REMAINING TIME.

33. SGL/CTN - This function allows you to choose between single track play or continuous track play (all tracks in order). This function also operates in FLIP-FLOP mode. With this button you can also switch AUTO CUE on and off, by pressing it for at least 1 second.

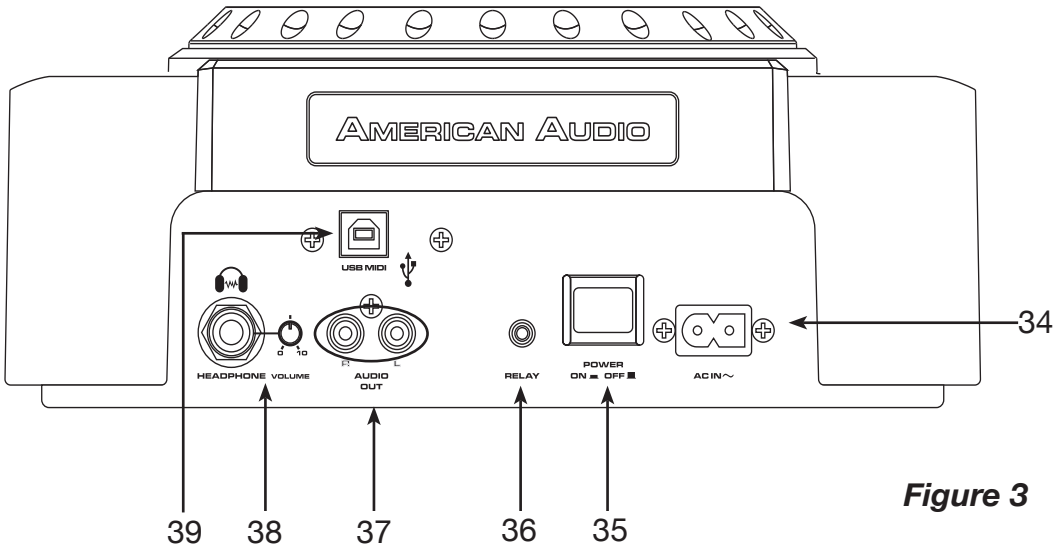


Figure 3

B. REAR PANEL (FIGURE 3)

34. POWER CONNECTOR - This connection is used to connect your main power. Be sure that your local power matches the unit's required power.

35. POWER BUTTON - This button is used to turn your unit's power on and off.

36. RELAY JACK - With this jack you can connect two players and relay (flip flop) play. You can also connect your unit to a compatible American Audio® mixer's CONTROL out, to use American Audio's "Q" start fader control. This feature is only available on American Audio's "Q" series mixers.

37. AUDIO OUT R & L - Audio out signals. Connect stereo RCA cable's from the AUDIO OUT to a mixer's LINE input.

38. HEADPHONE JACK & VOLUME CONTROL - This jack is used to connect your headphones and the volume control is for your headphones is located next to it. Set the volume control to the lowest setting before connecting your headphones. Adjust the volume accordingly.

39. USB MIDI JACK - Use this jack to connect to a computer.

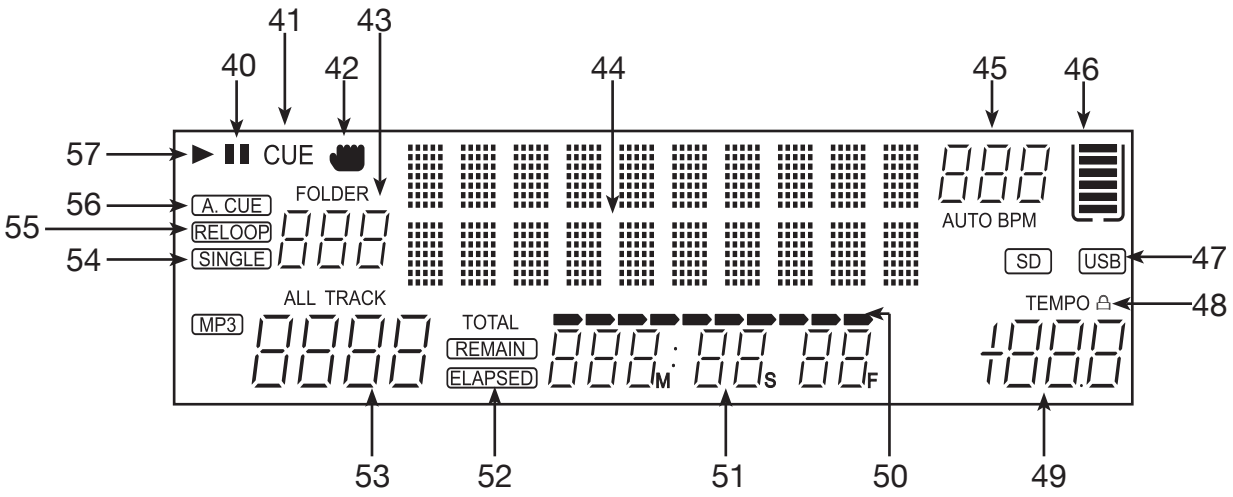


Figure 4

C. VFD DISPLAY PANEL (FIGURE 4)

40. PAUSE INDICATOR - The pause indicator will glow when the unit is in pause mode.

41. CUE INDICATOR - This indicator will glow when the unit is in CUE mode and will flash every time a new CUE POINT is set.

42. TOUCH INDICATOR - This appears when anything touches the jog wheel.

43. FOLDER DISPLAY - This indicates which folder you are in.

44. CHARACTER DISPLAY - This will display the name of the track and album when a Mp3 track is playing.

45. BPM METER - This meter will display the BPM's of the current track.

AUTO BPM - This will indicate that the AUTO BPM counter is active.

46. MEMORY BUCKET - This meter serves two functions.

1. The bucket outline indates your cue memory status. a full outline lets you know the cue memory is full. ***Note: The scratch function will not work unless all the bars are full.***
2. The five bars inside the bucket represnts the digital buffer. Each bar represents 2 seconds.

47. SD/USB INDICATOR - This indicates which port is active. Use the *SD CARD/USB SELECTOR (1)* to select your desired port.

48. TEMPO LOCK - This will indicate the Tempo Lock function is active.

49. PITCH INDICATOR - This meter will indicate how much pitch is either being applied or will be applied.

50. TIME BAR INDICATOR - This bar gives a visual approximation of a track's remaining time This bar will begin to flash when a track is ending. The flashing bar is great reminder, that time is running out to get that next track ready to go.

51. TIME METER - These indicators will detail the current Minutes, Seconds, and Frames. The meter will display either the elapse or remaining time of a track. The display time will depend on the se-

lected time function. The selected time function will be displayed above the TIME METER as either *REMAINING TRACK TIME OR ELAPSED TRACK TIME.*

52. REMAIN/ELAPSED INDICATOR - When REMAIN is indicated in the *VFD DISPLAY (3)* the time meter will show the current track's remaining time. When ELAPSED is indicated in the *VFD DISPLAY (3)* the time meter will show the current track's elapsed time.

53. TRACK DISPLAY - This indicator describes which track is currently cued or is playing.

54. SINGLE INDICATOR - This indicates that the player is in single play mode, the track will play once and return to CUE mode. If the single indicator is not on, the unit is in continuous mode. In continuous mode the drive will play all the remaining tracks. Once the remaining tracks have ended the unit will return to cue mode

55. RELOOP INDICATOR - Appears when LOOP is engaged or ready to be engaged.

56. AUTO CUE - This will indicate if the Auto Cue is on or off. Press and hold the *SGL/CTN (33)* for 1 sec. to turn the Auto Cue function on and off.

57. PLAY INDICATOR - The play indicator will glow when the unit is in play mode.

INTERNAL MENU

Press and hold the *FOLDER KNOB (20)* for at least 2 sec. to enter the internal menu, and turn the *FOLDER KNOB (20)* for.
Press either the *RATIO (25)* or *TIME (31) KNOBS* to enter the submenus and to confirm setting; press the *FOLDER KNOB (20)* to exit the menu.

1. JOG MODE - Select JOG LED mode (mode range is 1~8)
2. Sensitivity - Touch Wheel Sensitivity Adjustment (Adjustment range is -20~+20)
3. Pitch Bend - Pitch range +/-1%~100%
4. Display Time - Range is 0.5~12.0 sec.(LINE NAME start / stop time adjustment)
5. Scroll Speed- Range is 50~2000msec. (Line Name Move Time Adjustment)
6. INTENSITY - VFD Brightness (Brightness Range is 1~4)
7. A.CUE LEVEL - Change the AUTO CUE Level (Level Range is -36~+78db)
8. Line Setup - Press either the TIME or RATIO knobs to select VFD line name mod and display.
9. MIDI CC TYPE - Change the send of REL.(RELATIVE), ABS.(ABSOLUTE), Note for FOLDER/TRACK/PARAMETER TIME/PARAMETER RATIO/ PITCH under MIDI mode. PITCH is sent by BEND(PITCH BEND)/ ABS.(ABSOLUTE).

A. MIDI CH - Change Chan 1~16 or control Chan(1~8,9~16) by BEAT
B. MIDI SETUP - -Pulse = (1024 or 512) (select sensor to send Pulse)
-I/O DISPLAY/Hide (display/hide MIDI I/O value)
-JOG OUTPUT (0~30 ms) (Control JOG MIDI max. send time)
-USB Reset (reset USB)
C. Dual Control - In MIDI mode the unit can be controlled by the JOG WHEEL, PITCH BEND, PITCH ON/OFF, PITCH SLIDER, & PITCH PERCENTAGE.
E. Bit Rate - Disp ON
Disp OFF
F. Version - CON: VerXX(control version)
DSP: VerXX(DSP version)
G. Load Defaults - Press the Time or Ratio Knobs to enter load defaults.
H. EXIT & SAVE - Exit & Save setting to next power on (Press the Memory Button to fast exit & save in any operating mode)

Note:
Save: PITCH ON/OFF, PITCH RANGE, SGL/CTN, AUTO CUE, TIME MODE, HOLD, KEY LOCK, EFFECTS ON/OFF, SENITIVITY, DISPLAY/SCROLL TIME/JOG MODE/ INTENSITY/ A.CUE LEVEL/ MIDI CC TYPE/ MIDI CH/ MIDI SETUP

Defaults: PITCH (ON), PITCH RANGE (8%), (CTN), AUTO CUE(ON), TIME MODE (REMAIN), HOLD(OFF), KEY LOCK(OFF), EFFECTS(OFF), SENITIVITY(+05), DISPLAY (3 secs)/ SCROLL SPEED(400msec) TIME, PITCH BEND(PITCH RANGE), BIT RATE(Disp. ON), JOG MODE(MODE1,6), INTENSITY(4), A. CUE LEVEL(-48db), MIDI CC TYPE(REL.) PITCH(BEND), MIDI CH(CH 1), MIDI SETUP(JOGOUT 0 ms) (PLUSE 1024) (I/O HIDE), REPEAT MODE (OFF), DUAL CONTROL (OFF), LINE SETUP (MODE=1, LINE 1 DISPLAY=2/LINE 2 DISPLAY=1)

BASIC OPERATIONS

1. LOADING/EJECTING AN SD CARD OR USB DEVICE

The Radius 2000™ can only read SDHC (High Capacity) Cards up to 32GB. ***The file format is Mp3 only.*** When loading an SD Card into the player load with the SD Card label facing up and the contacts facing down. To remove the card from the player gently press the card "in" until it "pops' out. When connecting a USB stick, USB card reader, or external hard drive make sure you are correctly lined up with the USB port and gently insert the USB connection. To disconnect a USB drive, stop playback and "pull out" the USB connection. ***Please see page 8 for SD Card and USB information.***

CAUTION:

- **NEVER** remove a USB device while in PLAY mode.
- **NEVER** remove the SD Card when in PLAY mode.

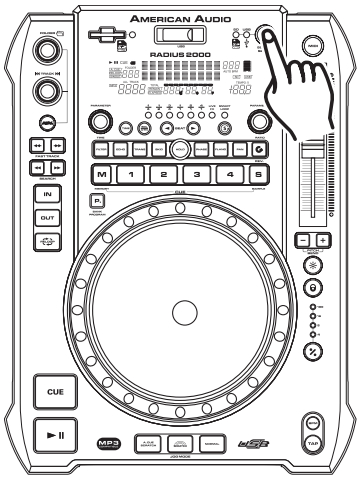


Figure 5

2. SELECTING YOUR AUDIO SOURCE - Figure 5

Select your desired audio source using the *SOURCE SELECTOR BUTTON (1)*. This button lets you toggle between SD Card slot A, SD Card slot B and the USB port. This selector lets you choose which source will play on either side. The LED's will verify which source is active. Red LED signifies SD slot A, blue LED signifies SD slot B, and both red and blue LEDs glowing signifies the USB port. The different sources can only be selected while in PAUSE mode.

3. SELECTING TRACKS

Select a desired track by using either of the two *TRACK BUTTONS (17)* or by turning the *TRACK KNOB (19)*. Tapping the *TRACK BUTTONS (17)* or turning the *TRACK KNOB (19)* once will select either the next higher or lower track. You may hold down the *TRACK BUTTONS (17)* or turn and hold the *TRACK KNOB (19)* to change tracks continuously at a faster speed. If you push the *TRACK KNOB (19)* and turn the knob either forward or reverse you can skip ahead 10 tracks or reverse 10 tracks, at a time.

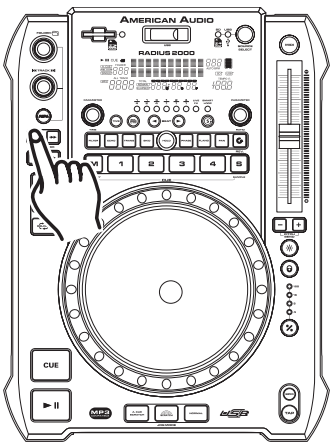


Figure 6: *Tapping the reverse track button or turning the track knob counter clockwise will jump back to the previous track.*

Figure 6

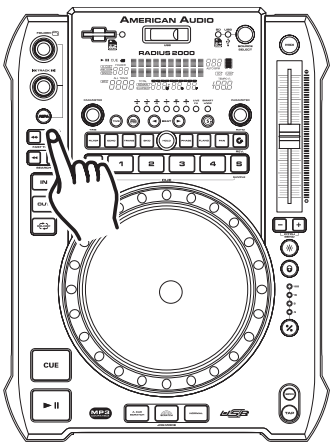


Figure 7: *Tapping the forward track button or turning the track knob clockwise will skip forward to the next track.*

Figure 7

4. STARTING PLAYBACK - *Figure 8*

Load a media device as described on page 18 (*LOADING/EJECTING USB or SD DEVICES*). Pressing the *PLAY/PAUSE BUTTON (13)* will immediately start playback. The *PLAY (57)* indicator will glow as soon as playback begins. The point at which playback starts (cue point) will automatically be stored in the memory as the cue point. The unit will return to this cue point (the point at which playback started) when the *CUE BUTTON (14)* is pressed.

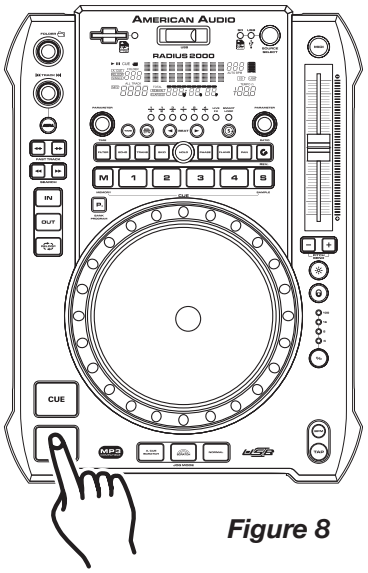


Figure 8

5. PAUSING - *Figure 8*

This function pauses playback at the exact same point the *PLAY/PAUSE BUTTON (13)* was pressed. Pressing the *PLAY/PAUSE BUTTON (13)* will switch between play and pause modes. When the unit is in pause mode the *PAUSE INDICATOR (40)* in the *VFD Display (3)* will glow. The blue *Play/Pause Button* LED will also begin to flash repeatedly.

6. STOPPING PLAYBACK - *Figures 8 & 9*

Stopping playback will not stop the reading mechanism, but merely pause or cue the track, this functions allows the unit to begin play instantly. The drive mechanism will only stop if a media device is removed or the unit has gone in to sleep mode. There are two ways to stop (pause) playback:

1) Press the *PLAY/PAUSE BUTTON (13)* during playback. This will pause playback at the exact same point the *PLAY/PAUSE BUTTON (13)* was pressed.
2) Press the *CUE BUTTON (14)* during playback. This will pause playback and return the track to the last set cue point.

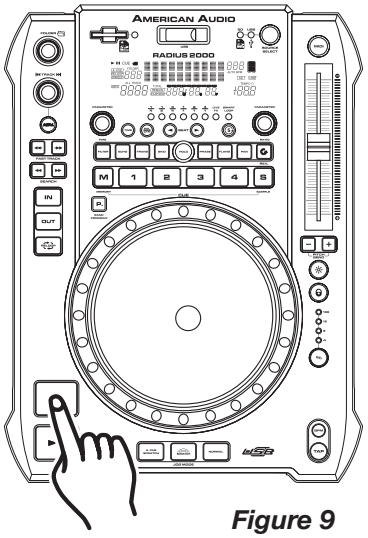


Figure 9

7. AUTO CUE - *Figure 9*

This function will automatically set a cue point to the first audio source when a media device is inserted. The first set cue point will always be the beginning of track 1. If a new track is selected before the *PLAY BUTTON (13)* is pressed, a new CUE POINT will be set to reflect the new starting point.

8. FRAME SEARCH - *Figure 10*

This feature allows you to scroll through a track frame by frame, allowing you to find and set a starting cue, sample, or loop point. To use the scroll function you must first be in Pause Mode or Cue Mode. Once you are in Pause or Cue mode, turn the *JOG WHEEL (9)* to scroll through the track (Figure 10). Turning the wheel in a clockwise direction will advance the frame search and turning the wheel in a counter-clockwise direction rewinds the frame search. When you use the *JOG WHEEL (9)* the monitor (headphone level) function allows you to here what you are scrolling through. Once you reach your desired starting point you can set a cue (starting) point by pressing the *PLAY/PAUSE BUTTON (13)* as in Figure 9. Pressing the *CUE BUTTON (14)* as in Figure 9 will now return you to the point you just set.

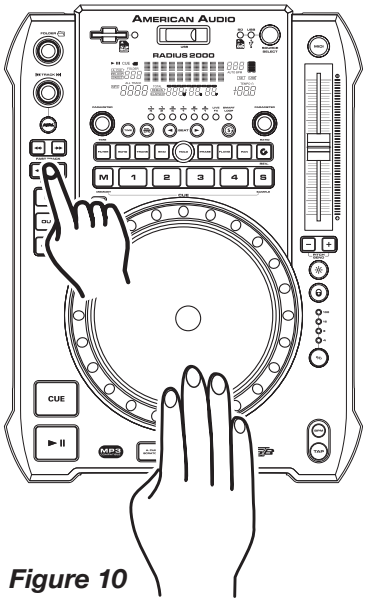


Figure 10

9. SCANNING (FAST FORWARD / FAST REVERSE)

This function gives you a fast search through a track. Press the *SEARCH BUTTONS (16)* for a fast forward or a fast reverse.

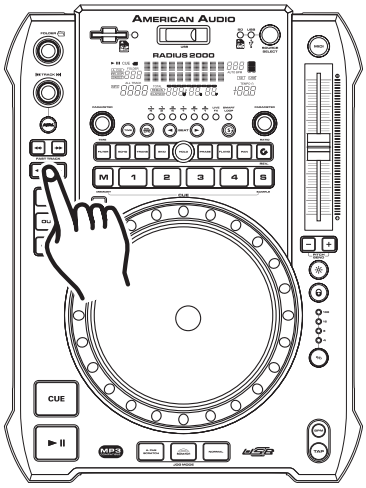


Figure 11

10. SETTING and STORING a CUE POINT:

Setting A Cue Point:

A cue point is the exact point playback will begin when the *PLAY/PAUSE BUTTON (13)* is pressed. You may set your cue points anywhere in a track. You may set up to three independent cue points per folder. Three cue points are stored in the *BANK BUTTONS 1-4 (28)*. There are two (2) ways to set a CUE point as detailed in figures 14 and 15.

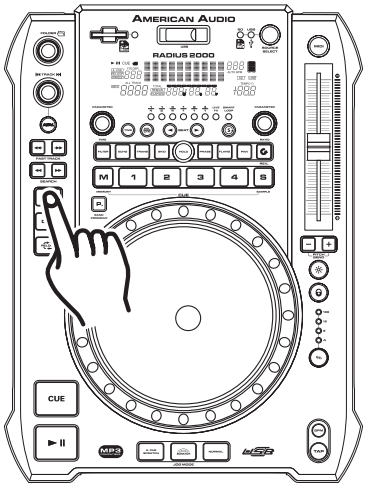
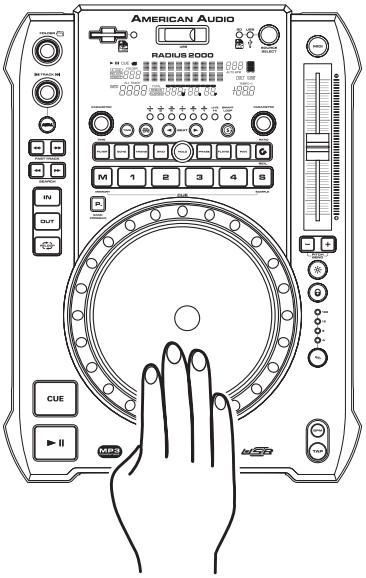


Figure 12

1) You may press the *IN BUTTON (15)* on the fly (while the track is playing). This will set a CUE Point without music interruption. Pressing the *CUE BUTTON (14)* will now return you to the same point that you pressed the *IN BUTTON (15).* You may now store this CUE Point in any of the *BANK BUTTONS 1-4 (28).*



2) You may also use the *JOG WHEEL (9)* to set a cue point. While a track is in PAUSE or CUE mode, use the *JOG WHEEL (9)* to scroll through a track to find your desired starting point. Once you have found your desired position press the *PLAY BUTTON (13)* to set your cue point. Pressing the *CUE BUTTON (14)* or the *IN BUTTON (15)* will now return you to this exact point.

Figure 13

Important Notice: When the Bank Button LED is flashing, the unit will set the bank in point.

Storing A Cue Point:

Once you have set your CUE Point by one of the two means listed on page 20, you may store your cue point in one of the *BANK BUTTONS (28).* Once you store this cue point in memory you may recall it at any time and you may even recall memory if the media device has been removed or power had been disconnected, see *INTERNAL OPERATING MODES* on page 17. You may store a maximum of four cue points per folder in the unit's memory. Either a CUE POINT or a SAMPLE (See creating a sample loop on page 23 and 24) can be stored into a *BANK BUTTON (28)* not both. ***To Store a cue point:***

1) Create a Cue Point by one of the two means listed on page 20. Press the *MEMORY BUTTON (30),* as in Figure 14. The red Memory Cue LED will glow indicating the store memory function has been activated. You may now press any one of the three *BANK BUTTONS (28)* to store your cue point into memory (Figure 16). After pressing one of the *BANK BUTTONS (28),* the corresponding Bank Button LED will flash briefly. The LED on the the *BANK BUTTON (28)* will remain lit indicating either a sample or cue point is stored in memory. The red Memory LED will turn off.

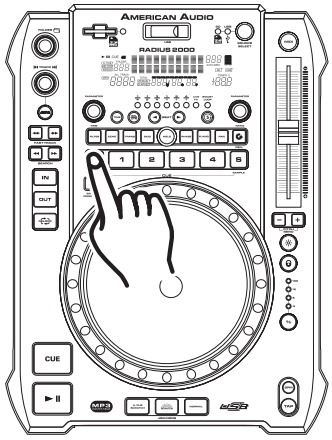


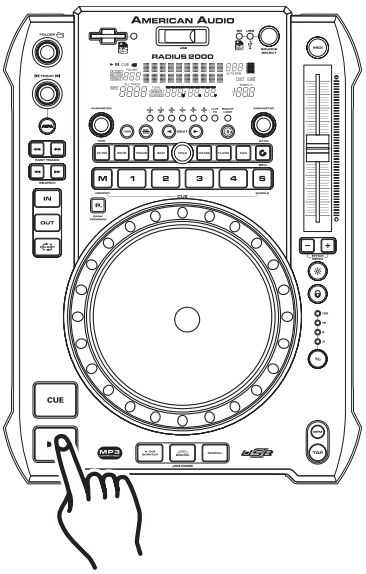
Figure 14

Figure 15

2) Repeat the above steps to store up to four Cue Points. Once your four cue points have been stored you may access them at any time. During playback the cue points will instantly start playback from that point without any music interruption. Please note in order to access these cue point, the folder used to create the cue points must be loaded in the drive.

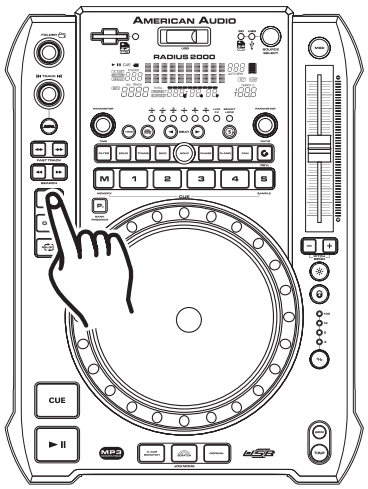
11. CREATING AND PLAYING A SEAMLESS LOOP

A seamless loop is a sound loop that plays continuously without sound interruption. You can use this loop to create dramatic effect in your mixing. This loop has no time limit and you could actually loop the entire length of folder. You create a seamless loop between two continuous points of a folder.



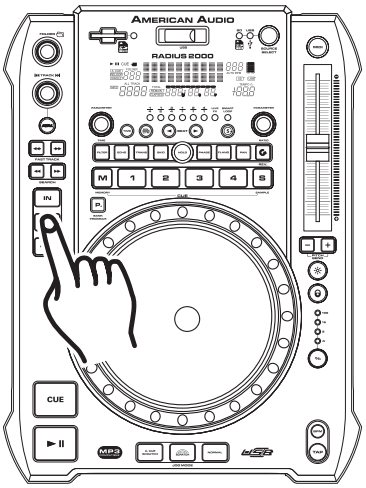
1) Press *PLAY/PAUSE BUTTON (13)* to activate playback mode.

Figure 16



2) Press the *IN BUTTON (15).* This will set the starting point of the SEAMLESS LOOP. The *IN BUTTON (15)* LED will flash then glow.

Figure 17



3) Press the *OUT BUTTON (15)* to set the ending point for your SEAMLESS LOOP (Figure 18). The *IN BUTTON (15)* and *OUT BUTTON (15)* LEDs will immediately begin to flash rapidly, indicating the SEAMLESS LOOP mode has been activated.

VFD LOOP INDICATORS - During a seamless loop, the *RELOOP INDICATOR (55)* will turn on in the *VFD DISPLAY (3)* indicating a loop is active.

Figure 18

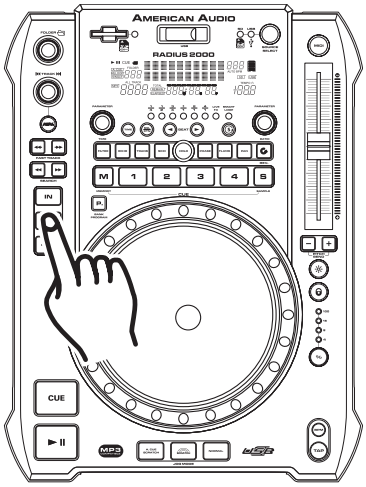


Figure 19

EXITING A LOOP - To exit a SEAMLESS LOOP, press the *OUT BUTTON (15).* The *IN BUTTON (15)* and *OUT BUTTON (15)* LEDs will remain on, but will stop flashing. Music playback will resume normal play. The *IN BUTTON (15)* and *OUT BUTTON (15)* LEDs will remain on to remind you that a loop is stored in memory.

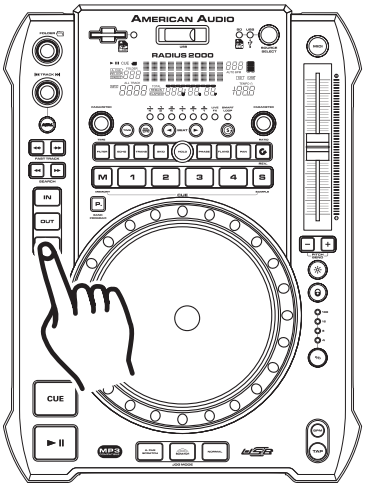


Figure 20

REPLAY LOOP - The *RELOOP (15)* function allows you to return to your stored loop at any time. The *IN BUTTON (15)* and *OUT BUTTON (15)* LEDs will indicate a loop is stored in memory, and may be played at any time. To replay the loop, press the *RELOOP BUTTON (15).* The *IN BUTTON (15)* and *OUT BUTTON (15)* LEDs will again begin to flash indicating SEAMLESS LOOP mode has been activated and your stored loop will immediately begin to play.

Please note: Only the ending point of the loop may be edited. You may make your loop shorter or longer. Before you can edit your seamless loop you obviously must first create a seamless loop to edit. If you haven't created a SEAMLESS LOOP, follow the instructions in step 10 to create a loop. If a SEAMLESS LOOP has already been created, press the *RELOOP BUTTON (15)* to activate your SEAMLESS LOOP (Figure 20) if it is not already activated. To edit your seamless loop's ending point:

1) Press the *OUT BUTTON (15)* to return to normal play from the loops cue point. (Figure 19). This will disengage the SEAMLESS LOOP mode and allows you to edit the loops ending point.
2) Press the *OUT BUTTON (15)* again when you reach your new ending point (Figure 19).
   - **FOR A SHORTER LOOP:** Press the *OUT BUTTON (15)* at sooner point in the track (Figure 19).
   - **FOR LONGER LOOP:** Press the *OUT BUTTON (15)* at later point in the track (Figure 19).

12. Using the Built In Sampler:

Your Radius 2000™ comes with an advanced built in sampler. You may store up to three samples in the three *BANK BUTTONS (28).* Once again please note you may only store either a CUE POINT or a SAMPLE into a *BANK BUTTON (28),* not both. Your sample can be a maximum of 5.5 seconds in length. A sample can be recalled while a media source is playing, while the media source is in PAUSE MODE, you may even play a sample when the media source has been removed. You may play your sample at anytime without music interruption. If you play your sample when the unit is already in playback mode your sample will over lap the current music source. You can also play your sample once or in a continuous loop.

To create a sample:

1) Initialize a loop (see creating a seamless loop on page 21 and 22). ***If your loop is longer than 5.5 seconds it can not be stored as a sample and will stored as a Cue Point.***

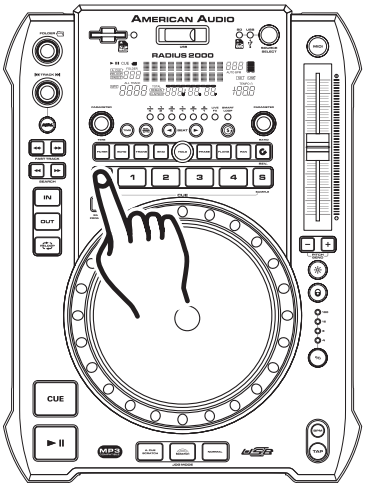


Figure 20

Figure 21

2) Press the *MEMORY BUTTON (30).* The *MEMORY BUTTON (30)* red LED will glow indicating memory is ready to be stored.

3) Select one of the four *BANK BUTTONS (28)* you wish to store your loop in and press that button.

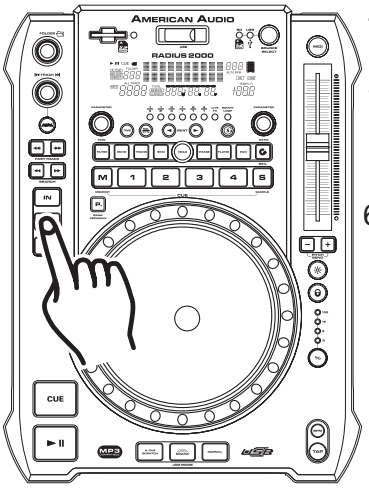


Figure 23

4) The red *MEMORY BUTTON (30)* LED will turn off, when your sample is locked into memory.

5) At this point your sample has been stored into memory. The original loop you used to create the sample will remain playing until the *OUT BUTTON (15)* is pressed (Figure 23).

6) Your sample can now be recalled at any time even when the unit is in PAUSE MODE. To recall the sample be sure the sample function is on, by pressing the *Sample Button (27).* The blue sample button LED will turn on. To play your sample in a continuos loop leave the sample function on. To play your sample just once, turn the sample function off immediately after initiating your sample. With the sample function on the sample will continue to play until the sample function is turned off.

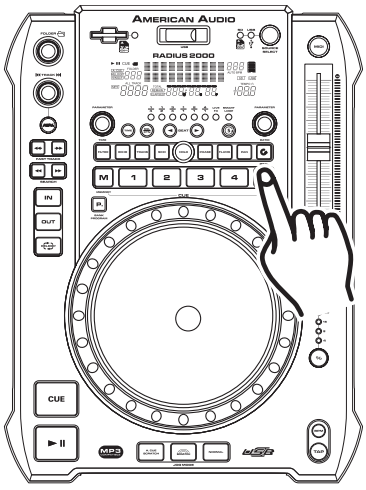


Figure 24

7) Important Notice: If you try to activate your sample without turning the sample function on, the *BANK BUTTON (28)* will act as a cue point!

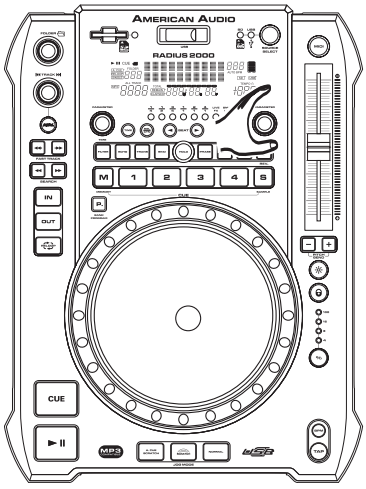
Changing the Sample Parameters:

Changing the sample parameters allows you to change the sample's volume and pitch. A higher value will increase the pitch percentage or volume. It's important to understand that the pitch value is basically a speed adjustment and has nothing to do with tonal quality. The values can be either a momentary change or set adjustment. The sample values are changed in three easy steps, while in sample playback mode:

Changing the Sample Parameters - Speed

While a sample is playing push the *PARAMETER TIME KNOB (31).* One tap will display a percentage in the *VFD DISPLAY (3).* Turning the knob in a clockwise direction will increase your pitch. Turning the knob in a counter-clockwise direction will decrease the parameters value.

Figure 25



Changing the Sample Parameters - Volume

While a sample is playing push the *PARAMETER RATIO KNOB (25).* One tap will display a volume value in the *VFD DISPLAY (3).* Turning the knob in a clockwise direction will increase the volume. Turning the knob in a counter-clockwise direction will decrease the parameters value.

Figure 26

Changing the Sample Parameters - Hold Function

Hold Function - This mode will allow you to save and lock your parameter adjustments, if the hold function is not activated before you set your parameters, your parameter adjustments will be momentary. If you select the *HOLD BUTTON (26)* all parameters will remain until changed again or power is shut off, unless they are stored in to the unit's memory.

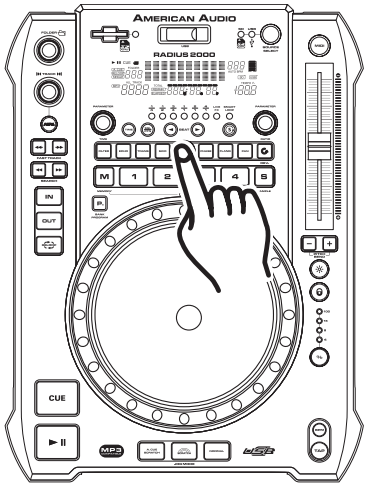


Figure 27

13. Bank Buttons (28):

These buttons are used to store your samples and cue points. Only a sample or a cue point can be stored into each of these four banks. When a sample is stored in of the banks you may use the sample starting point as a cue point. The *BANK BUTTONS (28)* instantly recall and play any of your stored samples or cue points without interrupting music playback. When in sample mode, (see "Using the Built-In Sampler" on page 23) and during playback, pressing any of the *BANK BUTTONS (28)* that stores a sample, will immediately begin to play that sample without interruption of music. If the unit is in sample mode and the drive is not in playback mode, pressing any of the *BANK BUTTONS (28)* that stores a sample, will immediately begin to play that sample.

Figure 28

14. BANK PROGRAM BUTTON (29):

Once you store samples in the four (4) Bank Buttons, the Radius 2000 can be programmed to play the stored samples in a desired order. You can program the four (4) banks up to 12 times. The programmed samples can be played in your desired order without interrupting music playback. The programmed samples can be played when the player is in Pause mode and even when the device has been removed. If the unit is in sample mode and the drive is not in playback mode, pressing any of the *BANK BUTTONS (28)* that stores a sample, will immediately begin to play that sample.

To program samples:

1) Once you have one or more samples stored. Press the *BANK PROGRAM BUTTON (29).* The *CHARACTER DISPLAY (44)* will now display BANK P. =0X. X=The parameter number.

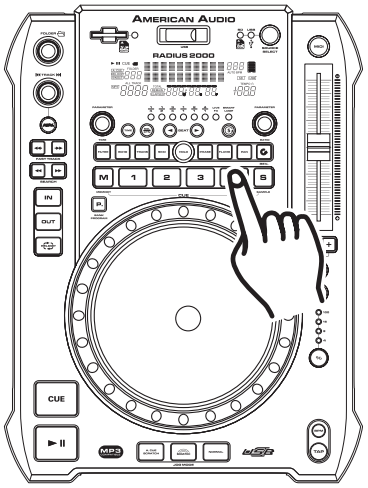
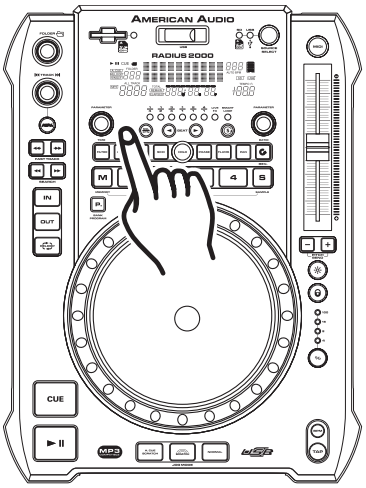


Figure 29

Figure 30

2) Program your Banks (Samples) in your desired order.
EXAMPLE: Bank 3; Bank 1; Bank 2; Bank 3; Bank 3; Bank 1. To end programming, press the *BANK PROGRAM BUTTON (29)*.

3) To play your programmed samples, press the *SAMPLE BUTTON (27)* then press the *BANK PROGRAM BUTTON (29)*.



15. CHANGING THE TIME METER (51)/TIME BAR (50):

DURING NORMAL PLAYBACK, pressing the *TIME BUTTON (32),* will change the time display information (50 & 51) in the *VFD (3)*. The following is a break down of the time settings and their definitions:

1) ***ELAPSED*** - This describes the time in the VFD (*3*) as the current TRACKS Elapsed running time.
2) ***REMAIN*** - This describes the time in the VFD (*3*) as the current TRACKS remaining running time.

Figure 31

TIME BAR INDICATOR (50) - Details the time defined in the *TIME METER (51)* as a visual bar icon. As with the *TIME METER (51)* this bar is also dependent on the selected time function *[REMAIN OR ELAPSED].* This bar will begin to flash when a track is ending regardless of which time functon you are in. Use the flashing bar as a visual reminder that a track is ending.

SYSTEM MEMORY

16. RECALL MEMORY:

The Radius 2000 can store 4 programmed cue points per folder and effect parameters in to memory. These setting may be recalled at any time, even when a media source has been removed and loaded at a later time. To recall the memory on a specific media source; 1) Be sure a media source is not loaded. 2) Press the memory Button (30) down until the memory button LED begins to flash. 3) Load the media source. "RECALL" will appear in the VFDfd (3) while the memory is being installed and the memory button LED will turn off.

TOUCH SENSITIVE JOG WHEEL/BOP EFFECT

JOG WHEEL TOUCH SENSITIVITY: This function works with the SCRATCH effects. This function allows the play and cue commands to be controlled by tapping on the touch sensitive jog wheel.

ADJUSTING JOG WHEEL TOUCH SENSITVITY: The degree of sensitivity can be adjusted to make it more or less sensitive. Press and hold the *FOLDER KNOB (20)* to enter the INTERNAL MENU. Turn the *TIME* or *RATIO KNOBS (31 & 25)* clockwise till SENSITIVITY is displayed. Press the *TIME* or *RATIO KNOBS (31 & 25)* to enter the SENSITIVITY menu. Turn the *TIME* or *RATIO KNOBS (31 & 25)* to find your desired sensitivity, the range of sensitivity is from -20 to +20. The *VFD (3)* will display the degree of sensitivity. When you have found your desired level press the *TIME* or *RATIO KNOBS (31 & 25)* to confirm. When you are finished press the *FOLDER KNOB (20)* to exit the INTERNAL MENU.

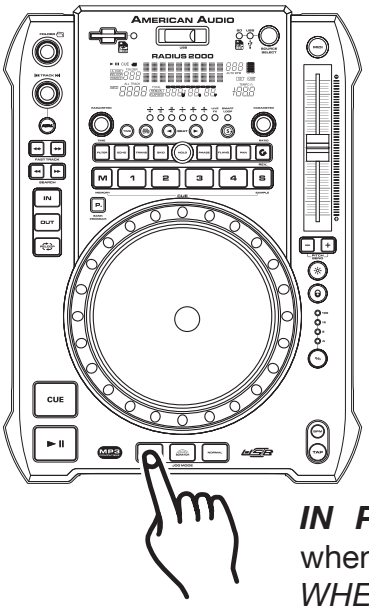


Figure 32

ACTIVATING TOUCH SENSITIVITY: Before you can use the *JOG WHEEL (9)* to control the play and cue commands you must first activate the jog wheel touch sensitivity. To activate the touch sensitivity mode, press the *A.CUE SCRATCH BUTTON (12)*. This will activate touch sensitivity mode.

IN PLAYBACK MODE: While in play mode and when the touch sensitivity function is active, the *JOG WHEEL (9)* can be used to return the unit to last cue point. Simply touch the *JOG WHEEL (9)* and unit will immediately return to the last set cue point and playback without music interruption.

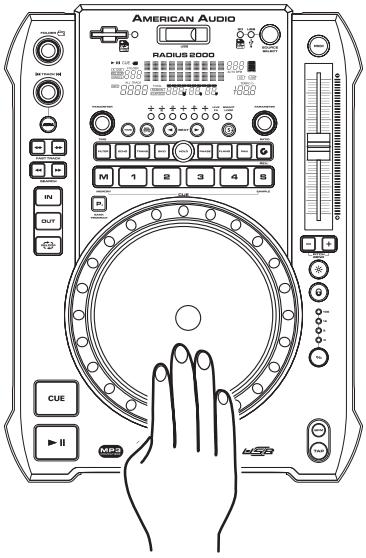


Figure 33

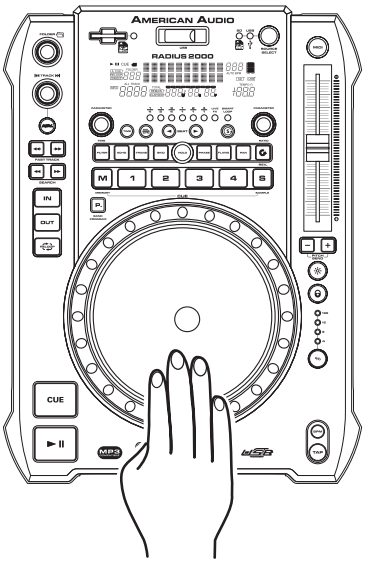


Figure 34

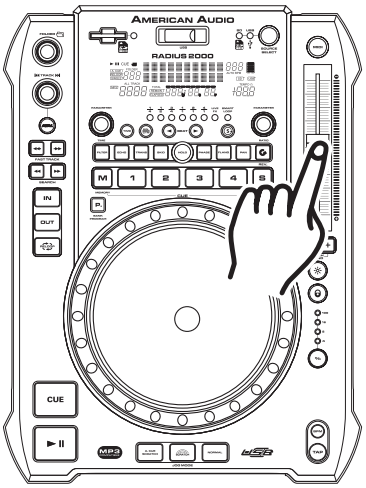
IN CUE MODE: While in cue mode and when the touch sensitivity function is active, tapping on the *JOG WHEEL (9)* can be used to start playback. The unit will continue to playback until the *JOG WHEEL (9)* is released. Once the *JOG WHEEL (9)* is released the unit will return to the last cue point.

Important Notice: When the BANK BUTTON LED is flashing, the unit will return to the last CUE point.

PITCH ADJUSTMENTS

PITCH ADJUSTMENTS:

The different pitch adjustments allow a track's or a loop's playback speed to be manipulated. This speed manipulation is commonly used to beat match between two or more music sources such as a turntable or another CD/Media player. The playback speed may be increased or decreased by a factor of +/-100. The next section details the different pitch manipulation schemes.



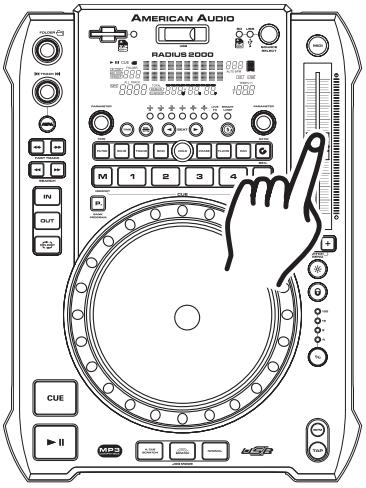
1. PITCH SLIDER (4):

This function will increase or decrease the tracks playback speed or "PITCH." The maximum pitch percentage manipulation in this function is +/-100%. The *PITCH SLIDER (4)* is used to decrease or increase the playback pitch. If the slider is moved up (towards the top of the unit) the pitch will decrease, if the slider is moved down (towards the bottom of the unit) the pitch will increase. The *PITCH SLIDER* adjustment can be changed to range from +/-4%, +/-8%, +/-16%, or +/-100% (See changing "PITCH SLIDER PERCENTAGE RANGE" on the next page). The pitch adjustments will effect normal playback and loops only when the *PITCH ON/OFF BUTTON (6)* is turned on. The pitch adjustments will not affect your samples.

Figure 35

***Activating the Pitch Slider (4)*:** To activate the *PITCH SLIDER (4)* you must turn on the pitch adjustment function. Press the *PITCH ON/OFF BUTTON (6)* to activate the slider. The *ON/OFF BUTTON* LED will glow when the function is activated. If the pitch function is not activated the *PITCH SLIDER (4)* will not function.

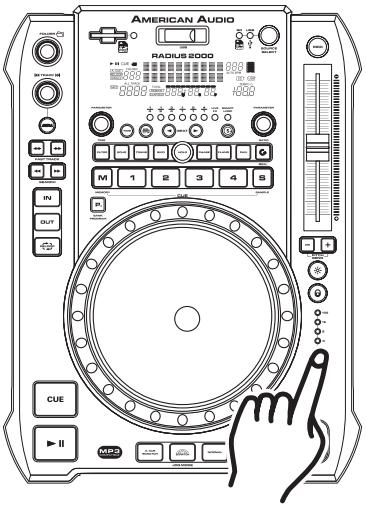
Figure 36



***Using the Pitch Slider (4)*:** Be sure the pitch function has been activated as described above. To use the *PITCH SLIDER (4)* slide the slider up and down. Down will increase the pitch and up will decrease the pitch.

Figure 37

PITCH ADJUSTMENTS



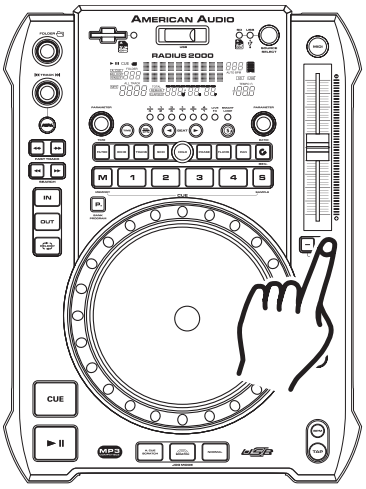
Adjusting the PITCH SLIDER'S RANGE (8): You may change the *PITCH SLIDER'S (4)* operating range at any time. To change the operating range be sure the pitch function is turned on, see figure 36. The pitch percentage range can be changed between +/-4%, +/-8%, +/-16%, and +/- 100%. 4% will allow the least amount of pitch manipulation and 100% will allow the most amount of pitch manipulation. To adjust the different ranges, press the *PITCH ON/OFF BUTTON (6)* and tap on the *PITCH RANGE BUTTON (8)* until your desired value is reached, see figure 39.

Figure 38

2. PITCH BENDING:

Unlike the *Pitch Slider (4)* adjustment this function will momentarily increase or decrease a tracks speed during playback. There are two ways to operate this function, with the *(-) & (+) PITCH BEND BUTTONS (5)* or with the *JOG WHEEL (9).* The maximum pitch bend percentage allowed is +/- 100%. The pitch bend function will work in conjunction with the *PITCH SLIDER'S (4)* pitch setting. For example, if the *PITCH SLIDER (4)* is set to a 2% pitch gain the pitch bending process will begin at 2% and will continue to the maximum of +/- 100%.

NOTE: A -100% pitch manipulation will stop playback entirely.



Holding down or tapping on the *(-) PITCH BEND BUTTON (5)* will provide a slow down in the playback pitch.

Holding down or tapping on the *(+) PITCH BEND BUTTON (5)* will provide a speed bump in the playback pitch.

Figure 39

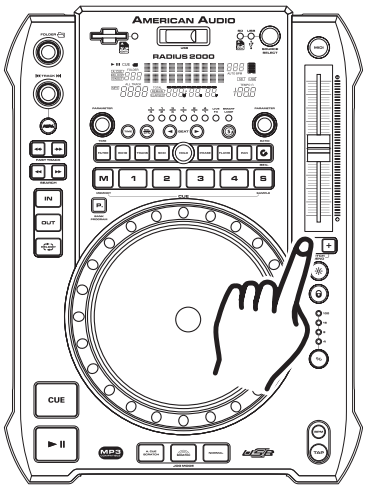


Figure 40

PITCH BEND BUTTONS (5):

The *(+) PITCH BEND BUTTON (5)* will increase track playback speed and the *(-) PITCH BEND BUTTON (5)* will decrease track playback speed. The extent to which the speed changes is proportionate to the amount of time the button is pressed. For example, if the *(+) PITCH BEND BUTTON (5)* is held down continuously as in figure 41, the playback speed will increase and will continue to increase until it reaches a maximum of 100% speed gain. When you release the *(+) PITCH BEND BUTTON (5)* the playback speed will automatically return to it's previous set speed.

3. JOG WHEEL (9):

The *JOG WHEEL* will temporarily bend the pitch if a track is in playback mode Rotating the wheel in a clockwise direction will increase your track pitch and rotating the wheel in a counter-clockwise direction will decrease your track pitch. The speed you rotate the *JOG WHEEL* will determine pitch bend percentage (%). For example, if the *JOG WHEEL* is continuously turned in a counter-clockwise direction the playback speed will steadily decrease and will continue to decrease until playback reaches a maximum of -100% and playback stops entirely. When you stop turning the *JOG WHEEL* the playback speed will automatically return to it's previous set speed.

NOTE: To use the JOG WHEEL in a pitch bend function when the SCRATCH EFFECT (12) is activated you must use the outer rubber ring of the jog wheel.

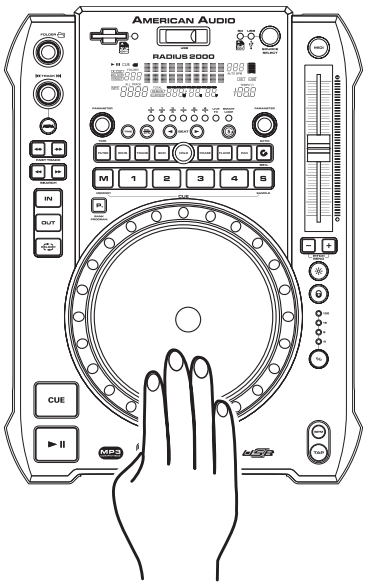


Figure 41

BUILT-IN EFFECTS

The Radius 2000™ comes with eight built in effects. These effects can be used one at a time or you may choose to overlap the effects and use up to four at a time. The Built-in effects include Scratch, Filter, Echo, Trans, Skid, Phase, Flanger, and Pan. You can choose to use the effects with their default parameters or you may choose to customize each effect by changing the parameters. The parameter values for all the effects will range. Some effects will have more adjustable parameters than others. The parameters have two adjustable values, PR (Parameter Ratio) and PT (Parameter Time). ***All parameters will be reset to there default values when power is shut off!***

BEAT SELECT BUTTONS (23): These buttons access the preset banks for the parameters. All effects synchronized to the beat. Each effect has a set of six built-in presets and one user programmable preset. These presets are accessed by the *BEAT SELECT BUTTONS (23).* To toggle between the banks tap on the arrow buttons. The chart on the side defines the presets.

BEAT SELECTION BANKS
1 - Refreshes on the 1/4 Beat
2 - Refreshes on the 1/2 Beat
3 - Refreshes on 3/4 Beat
4 - Refreshes on 1/1 Beat (every full beat)
5 - Refreshes on 2/1 Beat (every two beats)
6 - Refreshes on 4/1 Beat (every four beats)

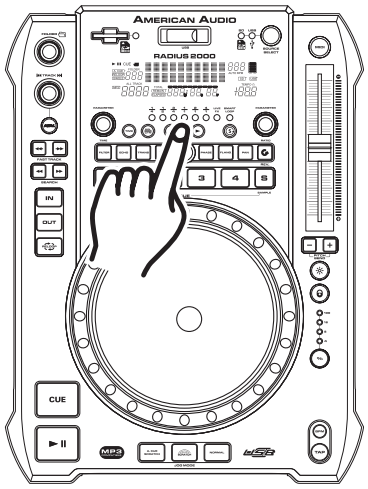
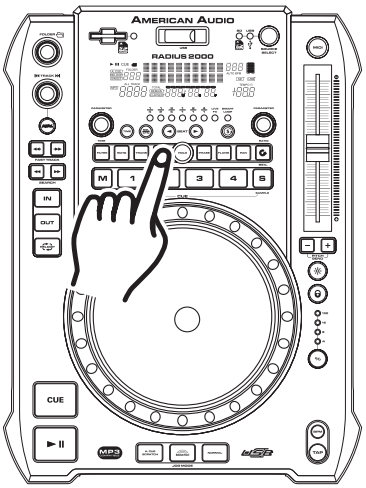
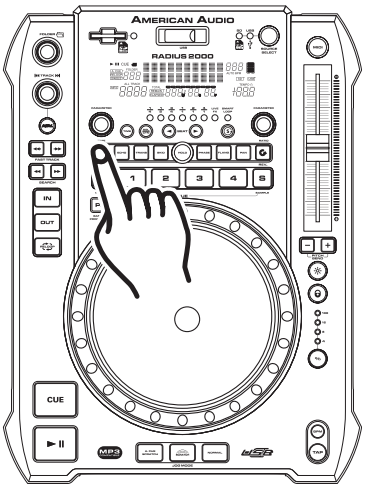


Figure 42



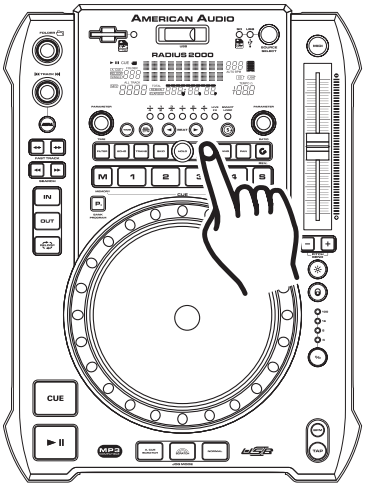
SCRATCH & SKID EFFECT: The Scratch Effect simulates real time turntable scratching. When the Scratch Effect is activated the SCRATCH LED will flash red. Once the Scratch Effect has been activated the *JOG WHEEL (9)* may be used in the same fashion a turntable platter is used. Use the *JOG WHEEL (9)* to simulate the scratch motion on a turntable platter and to manipulate playback. When the skid effect is activated the SKID LED will flash red. Both the Skid and Scratch time parameters can be adjusted from 0010 to 9990. 9990 will give you the longest Skid times. The Skid value ranges from a 10ms to ten seconds.

Figure 43



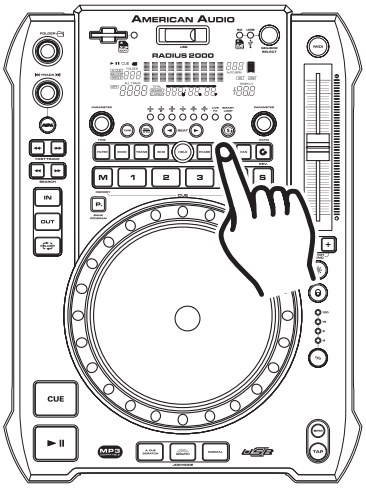
FILTER EFFECT: The Filter effect tweaks the original sound to add different tonal definition. The Filter Effect has two adjustable parameters, Parameter Time (PT) and Parameter Ratio (PR). The PT will adjust the Time Range and The PR will adjust the Frequency Range (see "Parameters" in the next section).

Figure 44



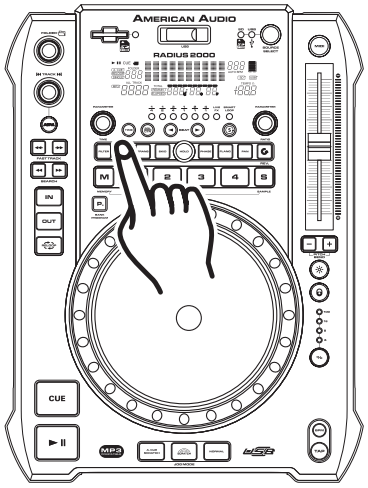
PHASE EFFECT: The Phase effect tweaks the original sound to add different tonal definition. The Phase Effect has two adjustable parameters, Parameter Time (PT) and Parameter Ratio (PR). The PT will adjust the Time Range and The PR will adjust the Frequency Range (see "Parameters" in the next section).

Figure 45



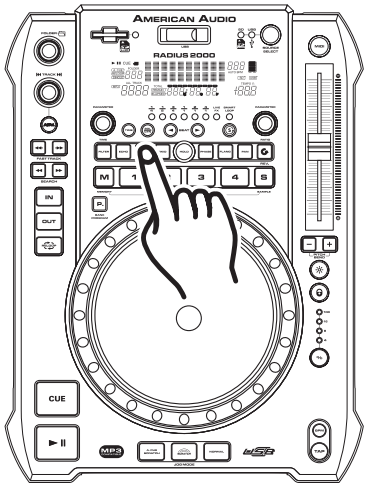
FLANGER EFFECT: The Flanger effect distorts the output signal and creates an effect similar to frequencies phasing in and out of each other. The FLANGER Effect has two adjustable parameters, Parameter Time (PT) and Parameter Ratio (PR). The PT will adjust the Time Range and The PR will adjust the Frequency Range (see "Parameters" in the next section).

Figure 46



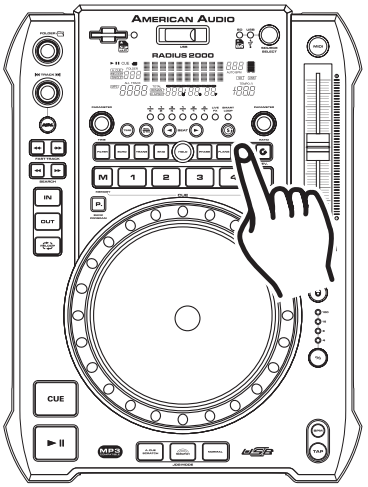
ECHO EFFECT: The Echo effect adds an echo to your output signal. The Echo effect has two adjustable parameters, Parameter Time (PT) and Parameter Ratio (PR). The PT will adjust the Time Range and The PR will adjust the Frequency Range (see "Parameters" in the next section).

Figure 47



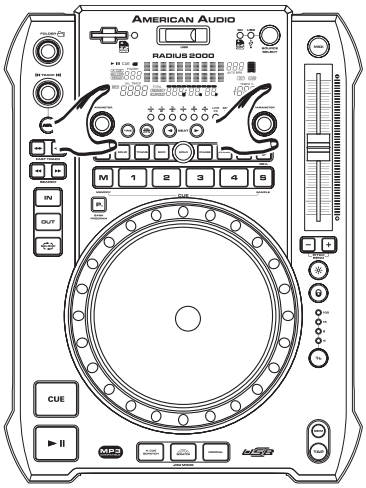
TRANS EFFECT: The Trans effect simulates a real-time mixer transformer effect. The Trans effect has two adjustable parameters, Parameter Time and Parameter Ratio. The PT will adjust the Trans Speed and The PR will adjust the Trans Audio Length.

Figure 48



PAN EFFECT: The Pan effect allows you to pan the output from the left channel to the right channel. The PT will adjust the amount of time the pan effect is in each channel (left and right). The PR will adjust the the time it takes to switch from the left channel to the right channel.

Figure 49



PARAMETERS:

All the effects have adjustable parameters. The parameters change the way the effects will react. To adjust the parameter values for any of the effects, turn either of the two *PARAMETER KNOBS (25 OR 31)*. When the parameter value is adjusted the VFD display will indicate the parameter adjustment. All effects have two adjustable parameters. *PARAMETER TIME (31)* and *PARAMETER RATIO (25)*. Use these knobs to customize the effects to your liking. For quick adjustment press and turn either of the knobs.

Figure 50

HOLD BUTTON: Use the *HOLD BUTTON (26)* to lock your customized parameters. If the hold button is not activated any changes to your parameters will be momentary. To activate the hold function press the *HOLD BUTTON (26)* as in figure 51. When the hold function becomes activated, the hold button will begin to glow blue.

Figure 51

ADVANCED TRACK SEARCH

Use this function to locate a specific track on a media device, while another track is playing at the same time.

1. Press the *ADV. TRACK BUTTON (18)* to enter advance track search mode.
2. When this mode is active, the *TRACK INDICATOR (53)* will flash.

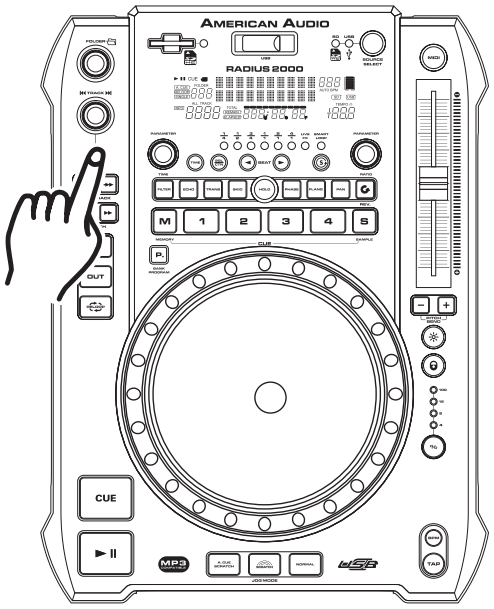


Figure 52

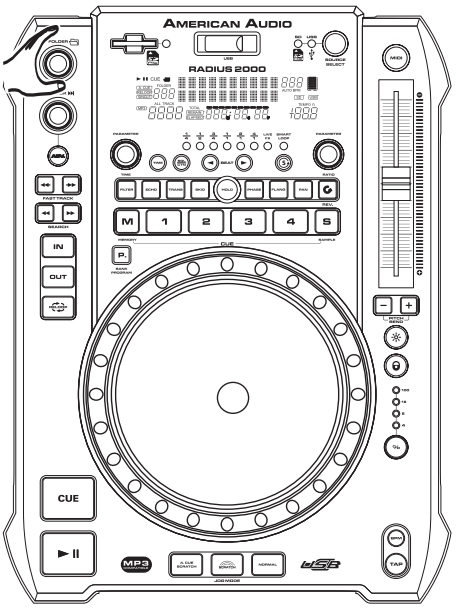


Figure 53

3. You can now turn the *TRACK KNOB (19)* to search through the Mp3 tracks.
4. When you found your desird track, press the *TRACK KNOB (19)*, and the VFD will now display "SEARCHING.....".
5. The VFD will then display "FOUND!!", when your track is located.

6. When "FOUND!!" is displayed in VFD, press the *TRACK KNOB (19)* to begin playback of your selected track. If you want to cancel Advanced Track Search without making any changes press the *ADV BUTTON (18).*

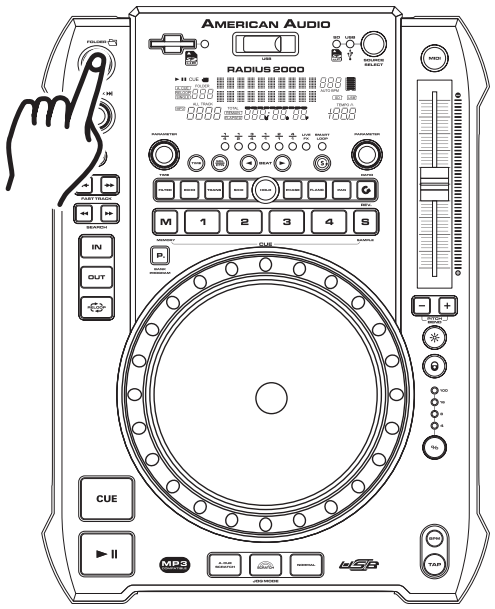


Figure 54

MIDI MAP

SW name	Type	MIDI	MIDI2(Hold TAP)	Remarks
FOLDER	SW/LED/ENC	19/19/36	58/19/75	CC TYPE = RELATIVE
⏮ TRACK ⏭	SW/LED/ENC	1F/1F/38	5E/1F/77	CC TYPE = RELATIVE
Para. Time	SW/ENC	25/3A	64/79	CC TYPE = RELATIVE
Para. Ratio	SW/ENC	2B/3C	6A/7B	CC TYPE = RELATIVE
JOG	SW/ENC	26/35	65/74	CC TYPE = RELATIVE
FOLDER	ENC/CENTER	36/3E	75/7D	CC TYPE = ABSOLUTE
⏮ TRACK ⏭	ENC/CENTER	38/31	77/70	CC TYPE = ABSOLUTE
Para. Time	ENC/CENTER	3A/32	79/71	CC TYPE = ABSOLUTE
Para. Ratio	ENC/CENTER	3C/33	7B/72	CC TYPE = ABSOLUTE
FOLDER	CW/CCW	36/37	75/76	CC TYPE = NOTE
⏮ TRACK ⏭	CW/CCW	38/39	77/78	CC TYPE = NOTE
Para. Time	CW/CCW	3A/3B	79/7A	CC TYPE = NOTE
Para. Ratio	CW/CCW	3C/3D	7B/7C	CC TYPE = NOTE
JOG	CW/CCW	35/3F	74/7E	CC TYPE = NOTE
Pitch Silder	VR	PITCHBEND	PITCHBEND	CC TYPE = PITCHBEND
Pitch Silder	VR/CENTER	34/2C	73/6B	CC TYPE = ABSOLUTE
IN	SW/LED	0B/0B	4A/0B	
OUT	SW/LED	05/05	44/05	
CUE	SW/LED	30/30	6F/30	
▶ II	SW/LED	2A/2A	69/2A	
ADV.	SW/LED	2F/2F	6E/2F	
FILTER	SW/LED	1B/1B	5A/1B	
ECHO	SW/LED	15/15	54/15	
TRANS	SW/LED	0F/0F	4E/0F	
SKID	SW/LED	09/09	48/09	
HOLD	SW/LED	21/21	60/21	
PHASE	SW/LED	27/27	66/27	
FLANG.	SW/LED	2D/2D	6C/2D	
PAN	SW/LED	03/03	42/03	
	SW/LED	04/04	43/04	
Ⓢ	SW/LED	02/02	41/02	
Memory	SW/LED	1C/1C	5B/1C	
	SW/LED	01/01	40/01	
	SW/LED	06/06	45/06	
%	SW/LED (4%)	0C/0C	4B/0C	
P.	SW/LED	2E/2E	6D/2E	
Sample	SW/LED	28/28	67/28	
A.Cue scratch	SW/LED	24/24	63/24	

MIDI MAP cont.

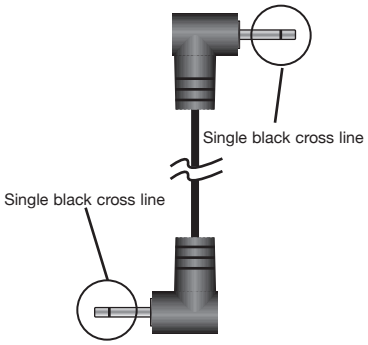
SCRATCH	SW/LED	1E/1E	5D/1E	
Normal	SW/LED	18/18	57/18	
SOURCE SELECT	SW/LED(USB)	13/13	52/13	
1	SW/LED/LED2	16/16/3B	55/16/3B	
2	SW/LED/LED2	10/10/3C	4F/10/3C	
3	SW/LED/LED2	0A/0A/3D	49/0A/3D	
4	SW/LED/LED2	22/22/3E	61/22/3E	
◄◄	SW	29	68	
►►	SW	1D	5C	
◄◄	SW	11	50	
►►	SW	23	62	
Time	SW	1A	59	
SGL/CTN	SW	14	53	
RELOOP	SW	17	56	
−	SW	07	46	
+	SW	0D	4C	
BPM	SW	12	51	
TAP	SW	20		
◄ BEAT	SW	0E	4D	Chan= “1~8” or “9~16” no function
BEAT ►	SW	08	47	Chan= “1~8” or “9~16” no function
LIVE FX	LED	34		Chan= “1~8” or “9~16” no function
1/4	LED	3A		Chan= “1~8” or “9~16” no function
1/2	LED	39		Chan= “1~8” or “9~16” no function
3/4	LED	38		Chan= “1~8” or “9~16” no function
1/1	LED	37		Chan= “1~8” or “9~16” no function
2/1	LED	36		Chan= “1~8” or “9~16” no function
4/1	LED	35		Chan= “1~8” or “9~16” no function
100	LED	33		
16	LED	32		
8	LED	31		
SD	LED	40		
SD_IN	LED	3F		

FLIP-FLOP™

This feature is a kind of “auto pilot”. When you are using two Radius 2000™ players and an American Audio® “Q” Deck™ mixer, you can have one player begin playback when the other ends. You can “Flip-Flop™” single tracks, the entire media source, or a combination of the two.

To FLIP-FLOP™ single tracks:

1) Connect your system as described in the connection section on page 8.
2) Set your American Audio® “Q” Deck™ mixer’s crossfader to the center position.
3) Set your two Radius 2000s™ to playback in single mode, *SINGLE (54)* should be indicated in the *VFD (3).*
4) Load your two Radius 2000s™ with audio sources.
5) After they have both cued, press the *PLAY/PAUSE BUTTON (13)* on one player to begin playback.
6) After the first player’s single track has ended the second player’s track will immediately begin playback.
7) FLIP-FLOP™ will continue until you stop it or power is interrupted.



Mono Mini Plug

Figure 55

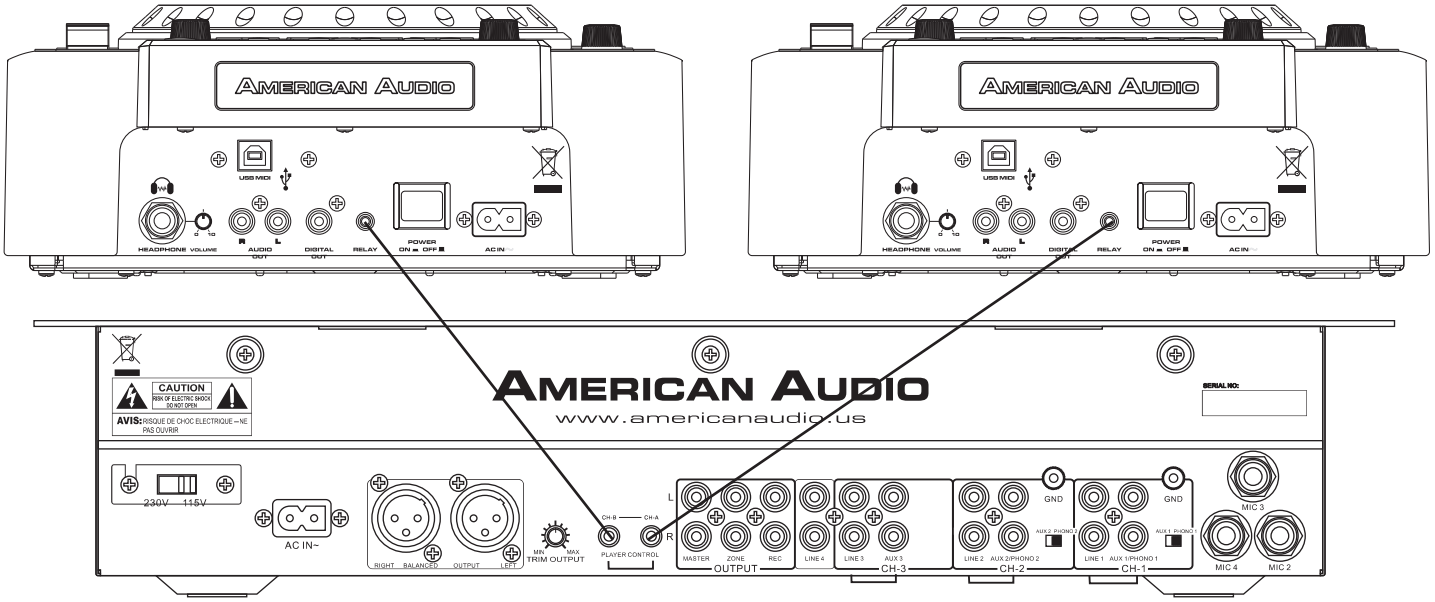
To Flip-Flop entire folders:

Be sure your players are both in continuous play mode, make sure *SINGLE (54)* does not appear in the *VFD's (3)* of both players. Follow all directions for single track FLIP-FLOP™ above. When one player’s track ends the other player will immediately begin playback.

Note: You may combine FLIP-FLOP™ single and continuous playback modes by selecting either single or continuous playback on your units.

Connecting your Radius 2000™ to an American Audio® or an American DJ® “Q” Deck™ mixer for “Flip-Flop™” control: Be sure to connect 1/8” mono mini plugs from the control connection on the rear of your Radius 2000™ to the 1/8” control jack on the rear of American Audio® “Q” series mixer. That’s it, you’ll be set for FLIP-FLOP.™

Sample "Q" Start Set-Up. This set-up will allow "Q" start function and Flip-Flop™ function to operate. Be sure to use 1/8" mono mini plugs only.



Compatible Q-Deck Mixer

WARRANTY

WARRANTY INFORMATION: The RADIUS 2000™ carries a ONE year (365 days) limited warranty. This warranty covers parts and labor. Please fill out the enclosed warranty card to validate your purchase and warranty. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Please contact American Audio® customer support at (800) 322-6337 for a R.A. number. All package not displaying a R.A. number on the outside of the package will be returned to the shipper.

1-YEAR LIMITED WARRANTY

A. American Audio® hereby warrants, to the original purchaser, American Audio® products to be free of manufacturing defects in material and workmanship for a period of 1 Year (365 days) from the date of purchase. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

B. For warranty service, send the product only to the American Audio® factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, American Audio® will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, American Audio® shall have no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof.

C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which American Audio® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the American Audio® factory unless prior written authorization was issued to purchaser by American Audio®; if the product is damaged because not properly maintained as set forth in the instruction manual.

D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up. During the period specified above, American Audio® will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of American Audio® under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of American Audio®. All products covered by this warranty were manufactured after January 1, 1990, and bear identifying marks to that effect.

E. American Audio® reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by American Audio® in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall American Audio® be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

G. This warranty is the only written warranty applicable to American Audio® Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

SPECIFICATIONS

GENERAL	**Model: American Audio® Radius 2000™ - Professional SD/USB Player**
Type:	USB & SD Card Player - SDHC (High Capacity) Cards up to 16GB
Media type:	Applicable File Extenstions: mp3, MP3, mP3, and Mp3
Pitch Range:	Within +/- 4%, +/- 8%, +/- 16%, +/- 100%
Pitch Accuracy:	0.15%
Dimensions:	265mm (W) x 356mm (D) x 106mm (H) 10.4" x 14.01" x 4.17"
Installation:	Place on flat surface or mount in flat case
Weight:	6.4 Lbs. / 2.9 Kgs
Power supply:	AC 115/230V, 50/60Hz AC 100V, 50/60Hz (Japan) AC 110V, 60Hz (Colombia) AC 120V, 60Hz (U.S.A. and Canada) AC 127V, 60Hz (Mexico) AC 220V, 50Hz (Chile and Argentina) AC 220V, 60Hz (Philippines and Korea) AC 230V, 50Hz (Europe, New Zealand, South Africa, and Singapore) AC 240V, 50Hz (Australia and U.K.)
Power consumption:	12W
Environmental conditions:	Operational temperature: 5 to 35˚C (41 to 95˚F) Operational humidity: 25 to 85% RH (no condensation) Storage temperature: -20 to 60˚C (4 to 140˚F)
Accessories:	Connecting RCA Cable (1 set for left and right channels) Control 1/8” miniplug type (3 feet)

AUDIO SECTION

Quantization:	16 bit linear per channel
Sampling rate:	44.1 kHz at normal pitch
Over sampling rate:	8 times
D/A conversion	16 bit
Frequency response:	+/- 1 dB 17 Hz to 16,000 Hz
Output level:	1.37V +/- 1dB
Load impedance:	100k ohm or more

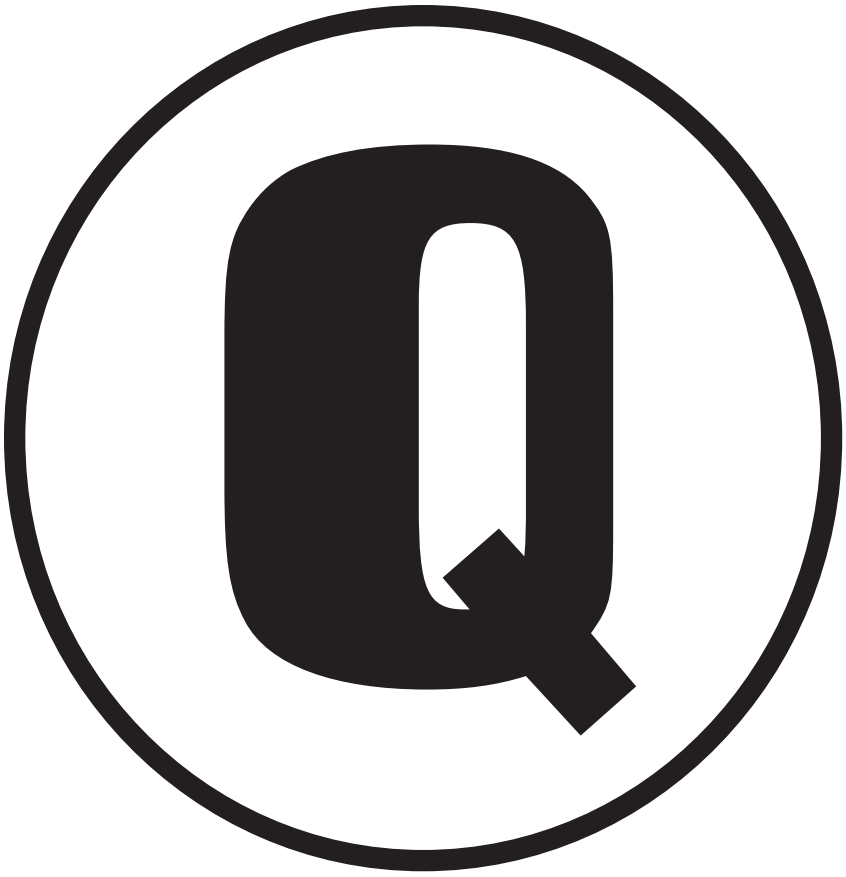
AUDIO CHARACTERISTICS (TEST SIGNAL FORMAT: MP3 128KBPS, LOAD=100Kohm)

ITEM	NOMINAL	LIMIT	CONDITION
Output level	1.37Vrms+/-0.5dB	1.37Vrms+/-1dB	1KHz, 0dB
Channel balance	within 0.2dB	within 1dB	1KHz, 0dB
Frequency response	+/-0.3dB	+/-1dB	17Hz-16KHz, 0dB Output
De-emphasis response	-20dB +/-0.2dB	-20dB +/-1dB	16KHz,-20dB
Channel separation*2	91dB	85dB	1KHz, 0dB
T.H.D. + NOISE*1	0.006%	0.01%	1KHz, 0dB
S/N ratio (IHF-A)*2	115dB	90dB	1KHz, 0dB
Phones Output level	0.27V +/-0.5dB	0.27 +/-1dB	1KHz, -20dB

NOTE: 1 With 20KHz low pass filter. *2 With 20KHz low pass filter, "IHF-A" weighted*

NOTES: *Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.*

CE



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