

# AMERICAN AUDIO

## Flex 100MP3

Featuring:



Anti-Shock

seamless loop

[HYPER] PITCH™  
(±100%)



TEMPO LOCK

Q-Start



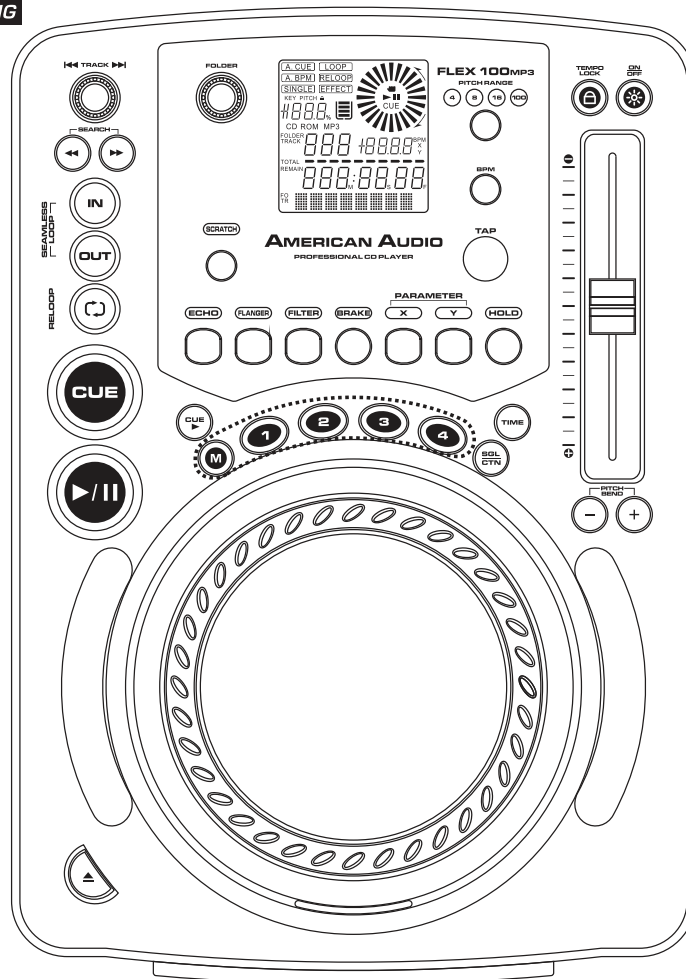
DIGITAL SCRATCH

**DSP** INSIDE!  
DIGITAL SIGNAL PROCESSING

digital output



CD&CD-R  
COMPATIBLE



## User Guide and Reference Manual

**AMERICAN AUDIO**  
6122 S. Eastern Ave.  
Los Angeles Ca. 90040  
www.AmericanAudio.us

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## FOR BEST CD-RW DISC PLAYBACK RESULTS IN THIS CD PLAYER PLEASE FOLLOW THESE GUIDELINES:

1. High quality CD-R Audio discs (should conform to the standards of the Orange Book 2).
2. Use a high quality bit rate when recording discs. (At least 160kbps)
3. Record discs in the slowest speed possible. (i.e. 2x or 4x speed)

## IMPORTANT INFORMATION

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

#### NOTE:

This CD player uses a semiconductor laser. It is recommended for use in a room at the following temperature: 41°F - 95°F / 5°C - 35°C

#### WARNING:

TO PREVENT FIRE OR SHOCK HAZARD,  
DO NOT EXPOSE THIS CD 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 CD 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 CD 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 LoadED 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 LoadED 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: 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, benzene, 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.

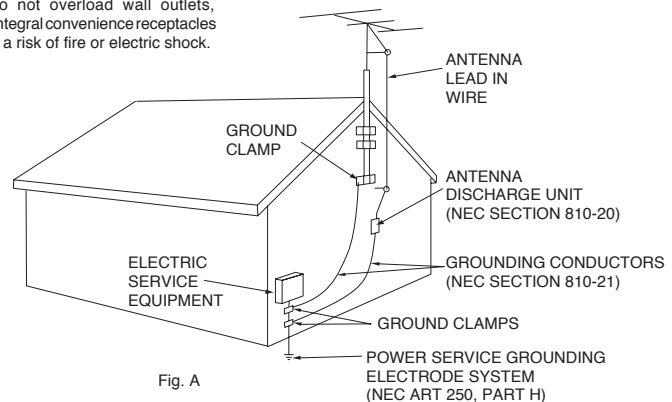


Fig. A

NEC — NATIONAL ELECTRICAL CODE

## SAFETY INSTRUCTIONS

1. Read Instructions - All the safety and operating instructions should be read before the CD Player is operated. The safety and operating instructions should be saved for future reference.
2. Heed Warnings - All warnings on the CD 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 CD Player should be situated so that its location or position does not interfere with its proper ventilation. For example, the CD 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 CD 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 CD player should be connected to a power supply only of the type described in the operating instructions or as marked on the CD Player.
7. Servicing - The user should not attempt to service the CD 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 CD Player.
  - C. The CD Player has been exposed to rain or water.
  - D. The CD 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 Flex 100MP3 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 CD player for any damage and be sure all equipment necessary to operate the CD 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 CD player to your dealer without first contacting customer support.

## INTRODUCTION

### **Introduction:**

Congratulations and thank you for purchasing the American Audio® Flex 100MP3 CD player. This CD 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 CD player. This booklet contains important information concerning the proper and safe operation of your new CD 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](http://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@americanaudio.us](mailto:support@americanaudio.us)

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

**Caution!** There are no user serviceable parts inside this CD 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 manufacturer's warranty. In the unlikely event your CD 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 CD player in to an electrical outlet. All fader and volume controls should be set to zero or minimum position, before the CD player is switched on. If the CD player has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch on the CD 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 CD 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 CD 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 CD 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, CD, and CD-RW Discs
- Folder Search for Mp3's
- 8 times over sampling 1 bit D/A converter
- Auto cue
- 1/75th second frame search
- Real time cue ("Cue on the Fly")
- 8 different speed scan (4 Forward/4 Reverse)
- Fader "Q" Start Control **(a)**
- Digital RCA coaxial output
- Large bright Digital Screen can be viewed from wide angles.
- 2000 programmable Cue Points (500 x 4) **(d)**
- Seamless Loop (uninterrupted loop playback)
- Memory Backup, Defaults to last setting **(c)**
- 4 Programmable Cue (Bank) Buttons
- 5 On-Board FX: Scratch, Echo, Flanger, Filter, & Brake
- Adjustable Pitch Percentages: +/-4%, +/-8%, +/-16% or +/-100% **(Audio CDs Only)**
- Instant Start within 10 ms (sound is produced immediately when the PLAY button is pressed)
- Mp3 Track Listings
- Visual Marker Display with 1:1 Ratio
- Music Master tempo
- Scratch Effect
- Digital Anti-Shock
- Selectable Single or Continuous Play
- Bank Program for Cue Points
- Sleep Mode **(f)**
- Jog Wheel Pitch Bend +/-100%
- Flip-Flop (Relay Playback) **(b)**
- Pitch display
- Touch Sensitive Jog Wheel

- 
- (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) Flex 100MP3 players. Connect your Flex 100MP3's 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 Flex 100MP3 playback functions. For Example, when using two (2) Flex 100MP3 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 CD 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 Flex 100MP3 player (see *setting cue points page 18*). "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).
- (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) Flex 100MP3 players. Connect your Flex 100MP3'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 disc and it ends, player two (2) will instantly begin to play. You may set FLIP-FLOP to play track to track or disc to disc. For more information on this feature, see FLIP-FLOP™ on page 27.
- (c) MEMORY BACKUP:** The Flex 100MP3 has a five (5) year memory back-up, that will save your setting in case the power supply is accidentally disconnected. Flex 100MP3 will remember your last setting even if you disconnect your main power. The Flex 100MP3 will store your cue points and samples in memory if you accidentally eject a disc or shut off the power. See memory on page 22.
- (d) PROGRAMMABLE CUE POINTS:** The Flex 100MP3 has four *BANK BUTTONS (13)*. 500 Cue points can be stored in each of the *BANK BUTTONS (13)*, for a total of 2000. 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 18.
- (e) FLASH START FUNCTION:** This feature is used in conjunction with most American Audio® and American DJ® audio mixers that also feature "Fader Q Start" control. This function work similar to the Fader "Q" Start Control described above. In this case the crossfader is used to start and stop any sample that is stored in the players memory.
- (f) SLEEP MODE:** The Flex 100MP3's laser and pick-up assembly will power down after 15 minutes of inactivity (when in pause or cue mode). This will lengthen the life of your motor drive and laser. To initialize the player, just press the cue or play buttons.

# SET-UP

## 1. Checking the Contents

Be sure your Flex 100MP3 was shipped with the following:

- 1) Flex 100MP3 Professional CD player.
- 2) Operating instructions (this booklet).
- 3) One (1) set of RCA cables.
- 4) One (1) 1/8" mini plug.
- 5) Warranty card.
- 6) Power Cord

## 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 Flex 100MP3 outputs to the inputs on your mixer.
- 3) Use the supplied 1/8" mini plug cable to connect your Flex 100MP3 to a mini jack connection (A or B ) on a compatible American Audio® or American DJ® "Fader Q Start" mixer.

### 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 player will work normally when the main unit is mounted with the front panel within 15 degrees of the vertical plane. If the unit is tilted excessively, discs may not be loaded or unloaded properly. **(Figure 1)**

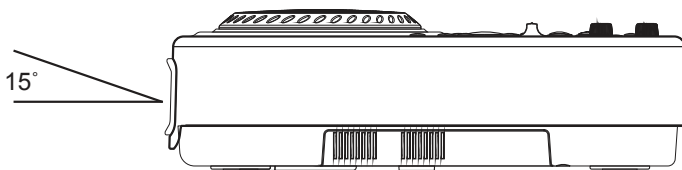


Figure 1

### CAUTION:

- The LCD is designed to be clearly visible within the angles shown in **Figure 2**. Mount the control unit so that the visual angle is within this range.

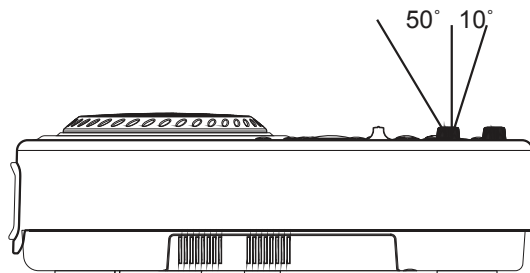


Figure 2



# GENERAL FUNCTIONS AND CONTROLS

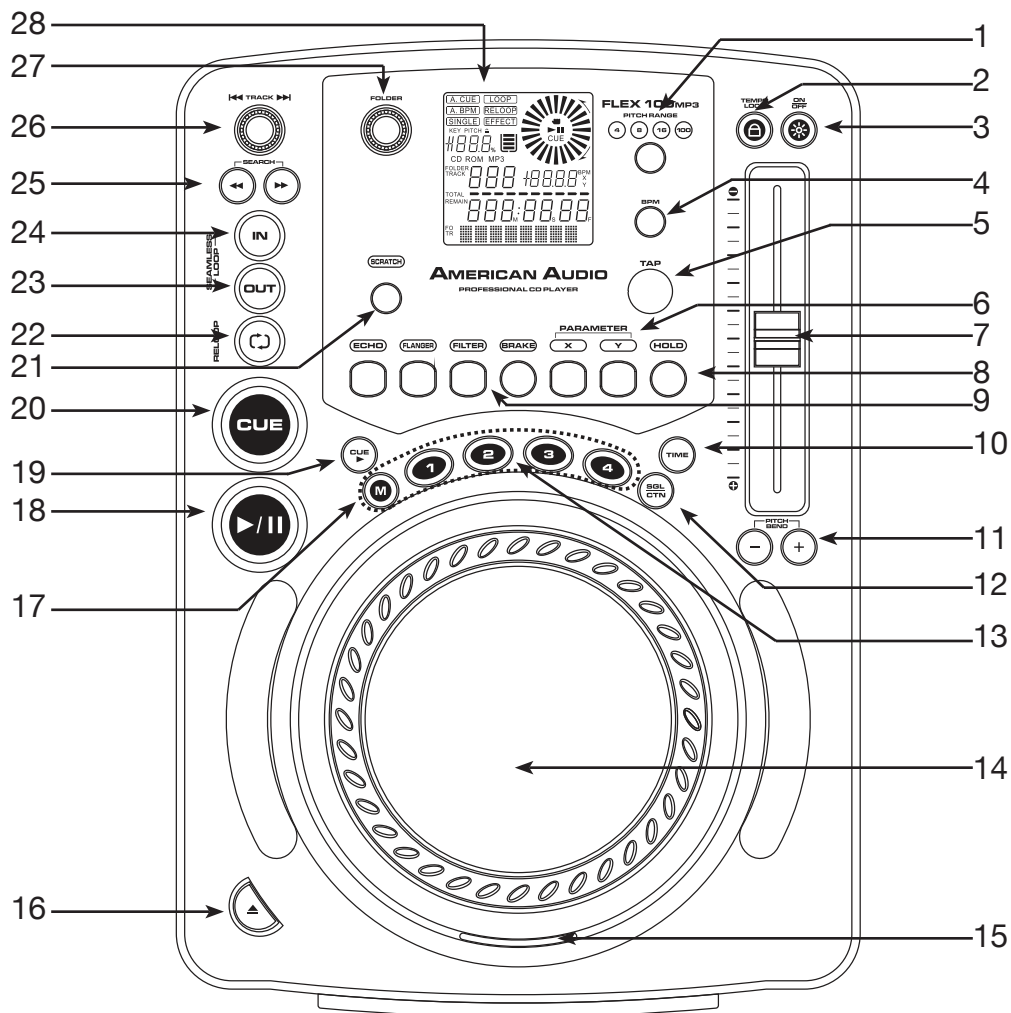


Figure 3

## A. TOP UNIT CONTROLS (FIGURE 3)

**1. PITCH PERCENTAGE SELECTOR** - Press this button to select pitch range percentages of 4%, 8%, 16%, and 100%. 100% pitch adjustment is only achievable on regular CD not an Mp3 disc. See adjusting the PITCH SLIDER'S RANGE on page 24.

**2. 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.

**3. PITCH ON/OFF BUTTON** - This button is used activate the *PITCH SLIDER* (7). When the button LED is lit the *PITCH SLIDER* (7) is active. When the button LED is not lit, the *PITCH SLIDER* (7) is not active. 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.

**Note: 100% pitch manipulation can only be done with actual audio discs, not Mp3 discs.**

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

**5. TAP BUTTON** - This button is used for manual BPM. When in manual BPM mode, tap this button

## GENERAL FUNCTIONS AND CONTROLS (Cont.)

to the beat of the current track.

### 6. PARAMETER X & Y BUTTONS -

**PARAMETER Y (RATIO) BUTTON** - This button is used to adjust the parameter ratio value. Push this button once to activate, when the LED is glowing, turn the *JOG WHEEL (14)* to adjust the parameter ratio value.

**PARAMETER X (TIME) BUTTON** - This button is used to adjust the parameter time value. Push this button once to activate, when the LED is glowing, turn the *JOG WHEEL (14)* to adjust the parameter time value.

**7. 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 disc in the drive. The pitch adjustment will remain even if a disc has been removed and will reflect on any other disc loaded into the player. That is to say, if you set a +2% pitch on one disc, remove that disc and load another, that disc too will have a +2% pitch. The amount of pitch being applied will be displayed in the *LCD (28)*.

**8. HOLD BUTTON** - This button allows you to lock any new parameter settings you set to the effects. The button LED will glow when the hold function is activated. When the hold selection is not active, any changes to the effect parameters will be momentary.

### 9. EFFECTS -

**ECHO EFFECT** - This button is used to activate and deactivate the Echo effect. The Echo effect adds an echo to your output signal.

**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.

**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.

**BRAKE BUTTON** - This button is used to adjust the START/STOP speed. When BRAKE is active, you can press the *X BUTTON (6)* and then use the *JOG WHEEL (14)* to adjust the START speed of the playback; press the *Y BUTTON (6)* and use the *JOG WHEEL (14)* to adjust the STOP speed.

**10. TIME MODE** - The TIME button will switch the time value described in the *TIME METER* between ELAPSED TRACK TIME, TRACK REMAINING TIME, and TOTAL REMAIN TIME (for audio CD only).

**11. (+) PITCH BEND BUTTON** - The (+) pitch bend function creates a momentary "BUMP" in the CD's BPM's (Beats per minute) while it is playing. This will allow you to match the beats between two playing CD'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 *PITCH SLIDERS (7)* selected pitch. Holding down this button will give a maximum pitch of the current pitch range set to the unit.

**(-) PITCH BEND BUTTON** - The (-) pitch bend function creates a momentary "Slow Down" in the CD's BPM's (Beats per minute) while it is playing. This will allow you to match the beats between two playing CD'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 SLIDERS (7)* 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,

## GENERAL FUNCTIONS AND CONTROLS (Cont.)

for a more precise adjustment use the *PITCH SLIDER (7)* to match the BPM's with another playing music source. Holding down this button will give a maximum pitch of the current pitch range set to the unit.

**12. 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. Press this button for 1 second to turn A.CUE on and off.

**13. BANK BUTTONS 1-4** - These buttons are used to store four (4) cue points.

**14. JOG WHEEL/EFFECTS PLATTER** - This wheel has three functions;

**A.** The jog wheel will act as a frame search control when the CD 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.

**C.** The Jog Wheel is used for the scratch effect, when the scratch effect is activated.

**15. CD LED** - This LED will light up when a CD is loaded and the player is ready for use. If the light is off, there is no disc loaded or the disc was not read properly. Check your disc.

**16. EJECT BUTTON** - Pressing this will open/close the CD tray. The function will only when the unit is in cue/pause mode, this is to prevent accidentally ejecting the disc when in play mode.

**17. MEMORY BUTTON** - This button allows you to program up to four (4) cue points into the four *BANK BUTTONS (13)*. The cue points can then be recalled at any time even when the disc has been removed and replaced at a later time.

**18. 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 button LED will glow, and while in pause mode the button LED will flash.

**19. CUE PLAY BUTTON** - Pressing this button will activate the CUE PLAY function and the music will begin to play instantly starting from the last cue point.

**20. CUE** - 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 18). The red CUE 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 CD. When you release the CUE button it instantly returns to the CUE POINT. A CUE POINT can also be set by pressing the MEMORY BUTTON (17) and pressing CUE. If the CUE button is pressed down the playback will start and continue until the CUE button is let go.

**21. SCRATCH EFFECT BUTTON** - This button is used to activate and deactivate the Scratch effect. If the SCRATCH button is pressed for 2 seconds, A. CUE scratch mode will activate. This will return playback to the last set cue point when the *JOG WHEEL (14)* touch sensor is triggered. The scratch LED will flash when A. CUE scratch is activated. To deactivate press the SCRATCH button.

**22. RELOOP BUTTON** - If a SEAMLESS LOOP has been set (see setting a SEAMLESS LOOP on page 20), but the CD 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 the loop, press the *OUT BUTTON (23)*. LOOP will appear in the *LCD DISPLAY (28)* when the RELOOP function is avail-

## GENERAL FUNCTIONS AND CONTROLS (Cont.)

able. If no active loop exist, pressing the RELOOP button will return you to the last set cue point.

**23. OUT BUTTON** - This button is used to set the ending point of a loop. A loop is started by pressing the *IN BUTTON* (24), and pressing the OUT BUTTON to set the loop ending point. The loop will continue to play until the OUT BUTTON is pressed once again.

**24. SEAMLESS LOOP IN BUTTON** - “CUE ON THE FLY” - This function allows you to set a CUE POINT (see CUE POINT page 18) without music interruption (“on the fly”). This button also sets the starting point of a seamless loop (see SEAMLESS LOOP). The IN point will be set to the last use cue point.

### **25. 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.

**26. TRACK SEARCH KNOB** - This knob is used to search through the tracks on a CD or Mp3 disc. Press this knob to change the character display, FileName, Artist, Title, etc.

**27. FOLDER SEARCH KNOB** - This knob is used to search through the folders on a Mp3 disc.

**28. LCD DISPLAY** - This high quality LCD display indicates all the functions, as they are occurring. This display is viewable at several comfortable angles (see page 14). The display ICONS will be explained in section D.

Figure 4

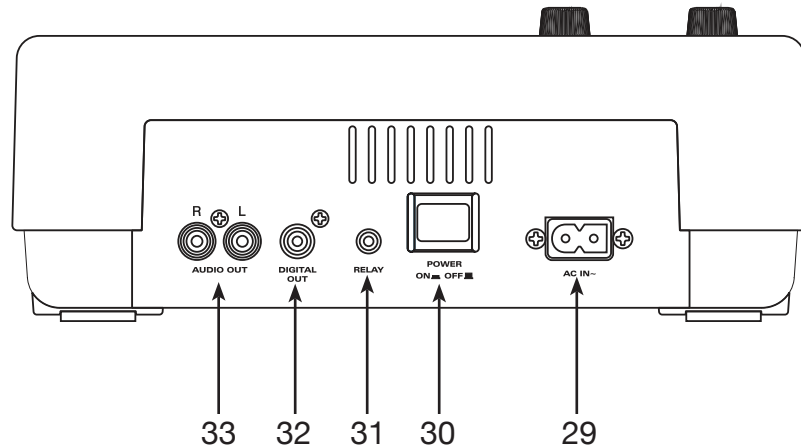
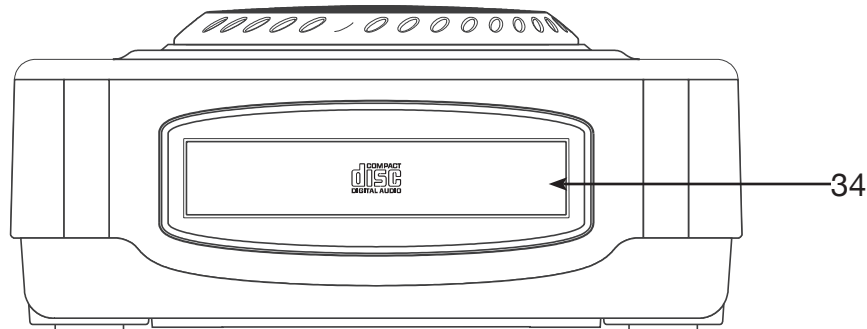


Figure 5



### B. REAR PANEL (FIGURE 4)

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

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

**31. RELAY JACK** - Connect the supplied mini-plug from the RELAY jack on the rear of your unit to a compatible American Audio® mixer's CONTROL out. This feature is only available on American Audio's "Q" series mixers.

**32. DIGITAL OUT** - Use this connection to create near perfect copies of your disc to a Mini disc, CD-R, or any other digital recording device.

**33. AUDIO OUT R & L** - Audio out signals. Connect stereo RCA cables from AUDIO OUT to a mixer's line input.

### C. FRONT PANEL (FIGURE 5)

**34. TRANSPORT TRAY** - This tray is used to load and unload a compact disc. The tray is opened and closed by pressing the OPEN/CLOSE BUTTON (16). Never attempt to force the transport tray open or closed when the power is turned off.

## GENERAL FUNCTIONS AND CONTROLS (Cont.)

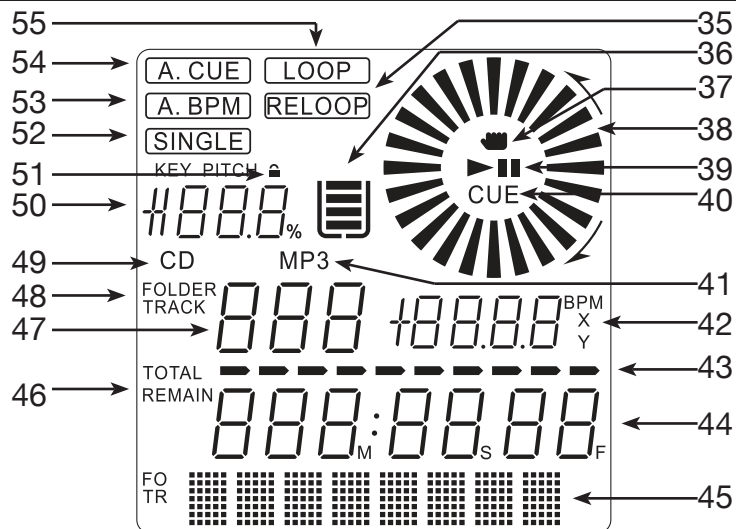


Figure 6

### D. LCD DISPLAY PANEL (FIGURE 6)

**35. RELOOP INDICATOR** - Appears when a LOOP has been activated and disappears when a LOOP has been deactivated.

**36. MEMORY BUCKET INDICATOR** - This indicator serves two functions. The bucket outline details the cue memory status, a full bucket outline indicates the cue memory is full. The four bars in the memory bucket detail the anti-shock memory state. Each bar indicates 2 seconds of digital anti-shock. There is up to 10 seconds of anti-shock.

**37. JOG WHEEL TOUCH INDICATOR** - A hand icon will appear in the LCD when the touch sensor is triggered. When the *JOG WHEEL (14)* is set to Scratch Mode touching the *JOG WHEEL (14)* will hold playback in place.

**38. CD PLAYBACK INDICATOR** - This is a visual marker of the CD playback point, used to mark the location of the sound's cue point on your CD. This indicates the play position, spins during playback, scratching in either direction, and stops during cue or pause mode.

**39. PLAY/PAUSE INDICATOR** - Either the play or pause indicator will glow depending which mode you are in.

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

**41. MP3 INDICATOR** - This will indicate that a Mp3 disc is loaded in the drive.

**42. BPM/X & Y INDICATOR** - Indicates the BPM of a track or the effect parameters when an effect is active.

**43. TIME BAR INDICATOR** - This bar gives a visual approximation of a track's or disc's remaining time. This bar will begin to flash when a CD is ending or when a track is ending.

**44. TIME DISPLAY** - These indicators detail the Minutes, Seconds, and Frames. The meter will display either the elapsed or remaining time of a track. It will also display the total remaining time of a complete CD not a Mp3 disc.

**45. CHARACTER DISPLAY** - This will display the name of the track and/or folder when either a CD with text information or an Mp3 disc with compatible ID3 tags is loaded into the unit.



## GENERAL FUNCTIONS AND CONTROLS (Cont.)

**46. REMAIN INDICATOR** - When "REMAIN" is indicated in the *LCD DISPLAY (28)* the *TIME DISPLAY (44)* in the *LCD* will define the current track's remaining time. When "REMAIN" is not indicated in the *LCD DISPLAY (28)* the *TIME DISPLAY (44)* in the *LCD* will define the track's elapsed time. When "TOTAL REMAIN" is indicated the time display will show total time remaining of the entire CD. Mp3 discs will not have total remain time.

**47. TRACK/FOLDER DISPLAY** - This indicator describes which track or folder is currently cued or is playing.

**48. FOLDER/TRACK INDICATOR** - This indicator shows you if you are looking at the track number or the folder number..

**49. CD INDICATOR** - This will indicate that an audio disc is loaded into the player.

**50. PITCH METER** - This meter will display the pitch percentage applied by the *PITCH SLIDER (7)*.

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

**52. SINGLE INDICATOR** - This indicates that the CD drive 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 on the disc.

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

**54. AUTO CUE** - This will indicate if the Auto Cue is on or off. Press and hold the *SGL/CTN (12)* for 1 sec. to turn the Auto Cue function on and off. The unit's Auto Cue function will automatically set the cue point at the beginning of each track.

**55. LOOP** - Indicates that a LOOP is ready to be played again.

# BASIC OPERATIONS

## 1. LOADING/EJECTING DISCS

The Flex 100MP3 can only play 3 inch and regular 5 inch CDs. When loading a CD into the player always hold the disc by it edge). Load the disc label side up and never touch the signal surface (the glossy side). To remove a disc from the player press the *EJECT BUTTON* (16), see Figure 7.

### CAUTION:

- **NEVER** attempt to load any other objects besides 3" and 5" CDs.
- **NEVER** attempt to load more than one disc at a time. Doing so may result in sever damage to your unit.
- **DO NOT** force the transport tray open or close when the power is off, this may damage the drive system.
- **NEVER** transport your unit with CD's inside.

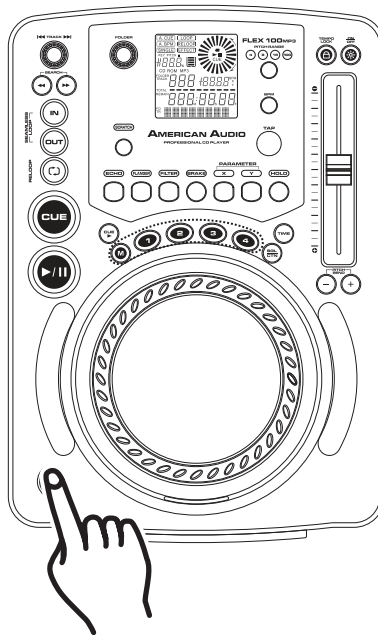
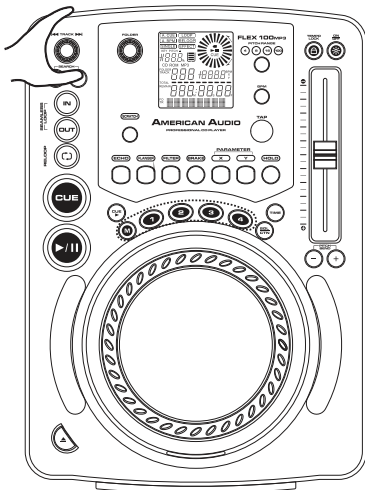


Figure 7

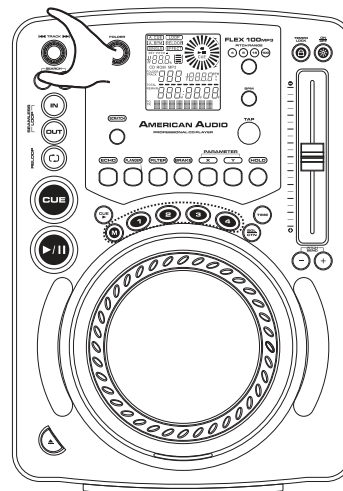
**Figure 7:** Press the Eject button to load and remove a disc. **Remember:** When loading a disc always hold the disc by it edges and load the disc label side up.

## 2. SELECTING TRACKS

Select a desired track by using the *TRACK KNOB* (26). Turn the knob clockwise to move forward a track or counter-clockwise to move back a track. If you want to select a new track during playback (a track is already in play mode) the new track you selected will immediately begin playback as soon as the search operation is completed.



**Figure 8:** Turning the track knob counter-clockwise will jump back to the previous track.



**Figure 9:** Turning the track knob clockwise will skip forward to the next track.

## BASIC OPERATIONS (CONT.)

### 3. STARTING PLAYBACK - *Figure 10*

Load an audio CD as describe on page 16 (*LOADING/EJECTING DISCS*). Pressing the *PLAY/PAUSE BUTTON (18)* with an audio CD loaded will immediately start playback. The *PLAY (39)* 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 (20)* is pressed.

### 4. AUTO CUE

This function will automatically set a cue point to the first audio point when a CD is loaded. The first set cue point will always be the beginning of track 1. If a new track is selected before the *PLAY BUTTON (18)* is pressed, a new CUE POINT will be set to reflect the new starting point.

### 5. STOPPING PLAYBACK - *Figures 10 & 11*

Stopping playback will not stop the drive 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 disc is ejected or the unit has gone in to sleep mode. There are two ways to stop (pause) playback:

- 1) Press the *PLAY/PAUSE BUTTON (18)* during playback. This will pause playback at the exact same point the *PLAY/PAUSE BUTTON (18)* was pressed.
- 2) Press the *CUE BUTTON (20)* during playback. This will pause playback and return the track to the last set cue point.

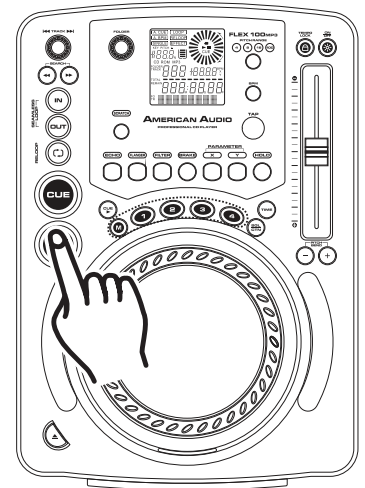
### 6. PAUSING - *Figure 10*

This function pauses playback at the exact same point the *PLAY/PAUSE BUTTON (18)* was pressed. Pressing the *PLAY/PAUSE BUTTON (18)* will switch between play and pause modes. When the unit is in pause mode the *PAUSE INDICATOR (39)* will show in the *LCD DISPLAY (28)*. The green *PLAY/PAUSE BUTTON (18)* LED will also begin to flash repeatedly.

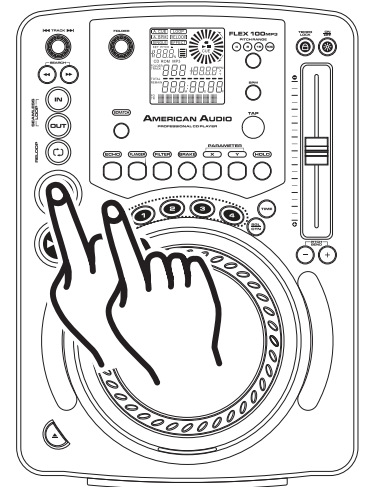
### 7. FRAME SEARCH

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 (see section 6) or Cue Mode (see section 9). Once you are in Pause or Cue mode, turn the *JOG WHEEL (14)* to scroll through the track (*Figure 12*). 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 (14)* the monitor (headphone level) function allows you to hear what you are scrolling through. Once you reach your desired starting point you can set a cue (starting) point by pressing the *IN BUTTON (24)* as in *Figure 19*. Pressing the *CUE BUTTON (20)* or *CUE PLAY BUTTON (19)* as in *Figure 11* will now return you to the point you just set.

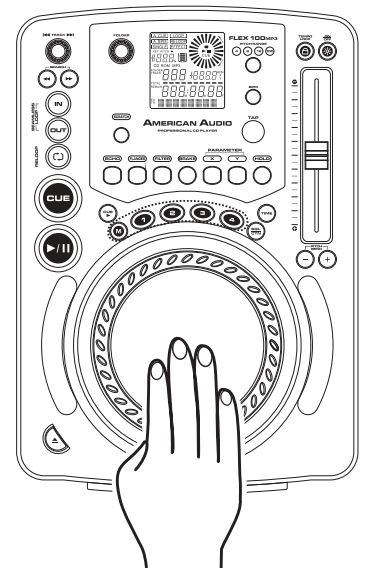
Note: For both X & Y parameter ratio, if no effect is active and either parameter button is on the *JOG WHEEL (14)* will effect the pitch.



*Figure 10*



*Figure 11*



*Figure 12*

## BASIC OPERATIONS (CONT.)

### 8. SCANNING (FAST FORWARD / FAST REVERSE)

This function gives you a fast search through a disc or track. Press the >> *SEARCH BUTTON* (25) to fast forward or press the << *SEARCH BUTTON* (25) for fast reverse. You can scan in four different forward and four different reverse speeds depending on how long you hold the button. The CD playback indicator will indicate the speed, 2 marks 2 x speed, 3 marks 3 x speed, and so on. 5 marks is full speed.

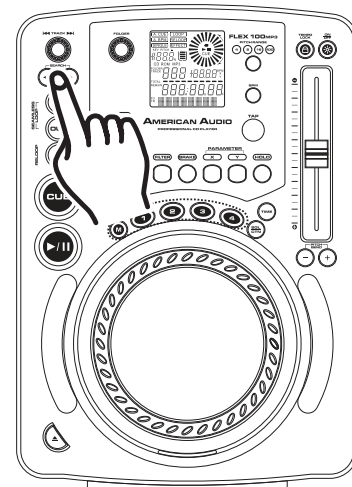


Figure 13

### 9. 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* (18) is pressed. You may set your cue points anywhere on a disc or in a track. You may set up to four independent cue points per disc. Four cue points are stored in the *BANK BUTTONS 1-4* (13). There are two (2) ways to set and create a CUE point as detailed in figures 14 and 15.

- 1) You may press the *IN BUTTON* (24) on the fly (while the disc is playing). This will set a CUE Point without music interruption. Pressing the *CUE BUTTON* (20) will now return you to the same point that you pressed the *IN BUTTON* (24). You may now store this CUE Point in any of the *BANK BUTTONS 1-4* (13). Pressing the *CUE BUTTON* (20) or the *IN BUTTON* (24) will now return you to this exact point.

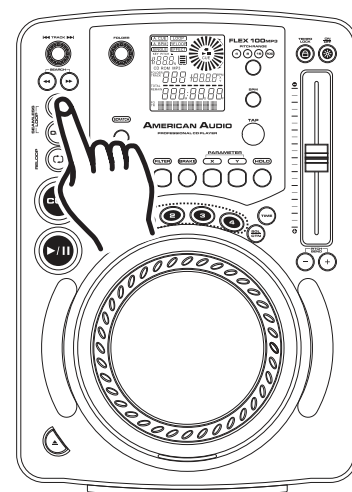


Figure 14

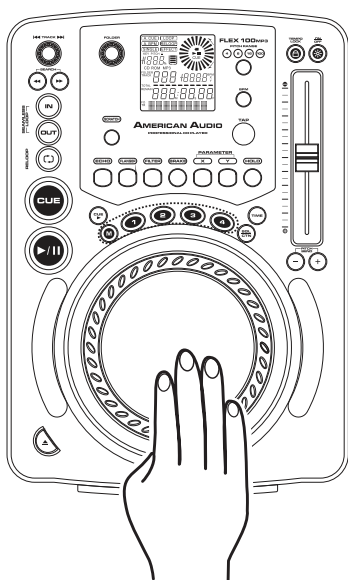


Figure 15

- 2) You may also use the *JOG WHEEL* (14) to set a cue point. While a disc is in *PAUSE* or *CUE* mode, use the *JOG WHEEL* (14) to scroll through a track and find your desired starting point. Once you have found your desired CUE point press the *PLAY BUTTON* (18) or the *IN BUTTON* (24) to set your cue point. Pressing the *CUE BUTTON* (20) will now return you to this exact point.

## BASIC OPERATIONS (CONT.)

### Storing A Cue Point:

Once you have set your CUE Point by one of the two means listed on page 18, you may store your cue point in one of the **BANK BUTTONS (13)**. Once you store this cue point in memory you may recall it at any time and you may even recall memory if the disc has been removed or power had been disconnected, see **SYSTEM MEMORY** on page 22. You may store a maximum of four cue points per disc and maximum of 2000 cue points can be saved in the unit's memory. The **MEMORY BUCKET (36)** in the **LCD DISPLAY (28)** will approximate the available memory.

### To Store a cue point:

- 1) Create a Cue Point by one of the two means listed on page 18. Press the **MEMORY BUTTON (17)**, as in Figure 16. The red Memory Cue LED will glow indicating the store memory function has been activated. You may now press any one of the four **BANK BUTTONS (13)** to store your cue point into memory (Figure 17). After pressing one of the **BANK BUTTONS (13)**, the corresponding Bank Button LED will flash briefly. The LED of the **BANK BUTTON (13)** will remain lit indicating a cue point is stored in memory. The red Memory LED will turn off.

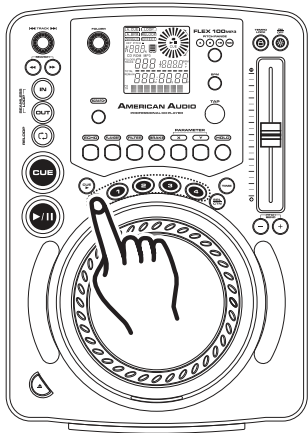


Figure 16

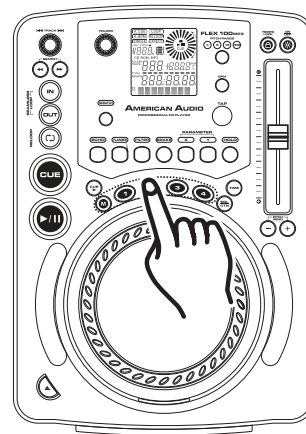


Figure 17

- 2) Repeat the above steps to store up to two more 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 disc used to create the cue points must be loaded.

## 10. 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 disc. You create a seamless loop between two continuous points of a disc.

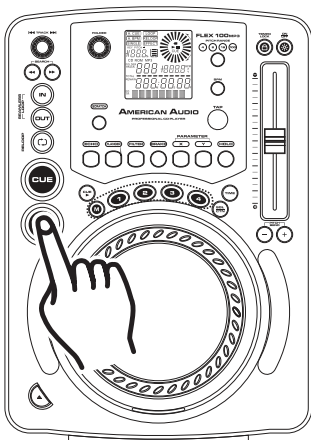


Figure 18

- 1) Press **PLAY/PAUSE BUTTON (18)** to activate playback mode

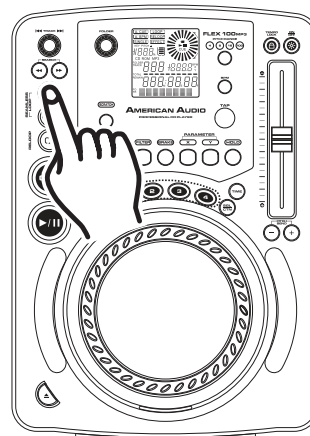
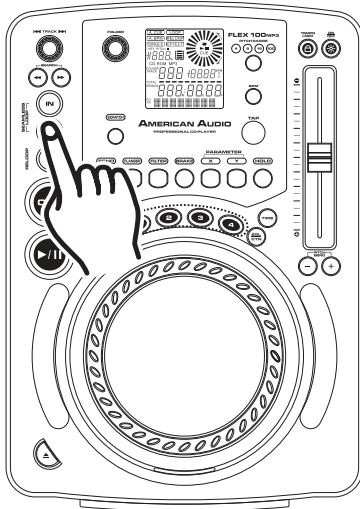


Figure 19

- 2) Press the **IN BUTTON (24)**. This will set the starting point of the SEAMLESS LOOP. The **IN BUTTON (24)** LED will light.



## BASIC OPERATIONS (CONT.)



- 3) Press the *OUT BUTTON* (23) to set the ending point for your SEAMLESS LOOP (Figure 20). The *IN BUTTON* (24) and *OUT BUTTON* (23) LEDs will immediately begin to flash rapidly, indicating the SEAMLESS LOOP mode has been activated.

**LCD LOOP INDICATORS** - During a seamless loop, the *LOOP* (55) and *RELOOP INDICATORS* (35) will turn on in the *LCD DISPLAY* (28) indicating a loop is active.

Figure 20

**EXITING A LOOP** - To exit a SEAMLESS LOOP, press the *OUT BUTTON* (23). The *IN BUTTON* (24) and *OUT BUTTON* (23) LEDs will remain on, but will stop flashing. Music playback will resume normal play. The *IN BUTTON* (24) and *OUT BUTTON* (23) LEDs will remain on to remind you that a loop is stored in memory.

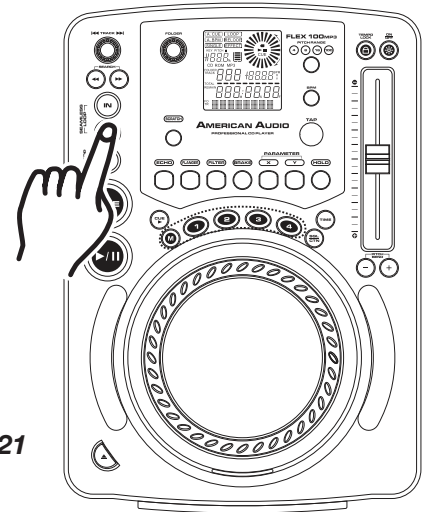


Figure 21

**REPLAY LOOP** - The *RELOOP* (22) function allows you to return to your stored loop at any time. The *IN BUTTON* (24) and *OUT BUTTON* (23) LEDs will indicate a loop is stored in memory, and may be played at any time. To replay the loop, press the *RELOOP BUTTON* (22). The *IN BUTTON* (24) and *OUT BUTTON* (23) LEDs will again begin to flash indicating SEAMLESS LOOP mode has been activated and your stored loop will immediately begin to play.

Figure 22

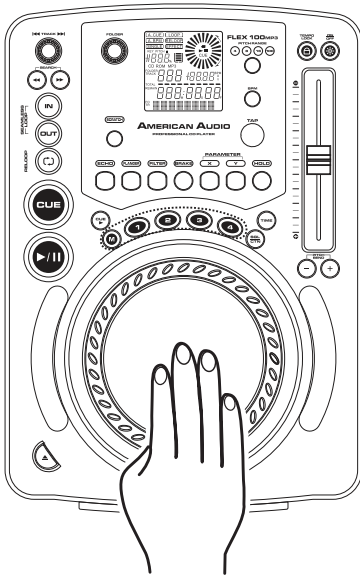
### 11. EDITING A LOOP:

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* (22) to activate your SEAMLESS LOOP (Figure 22) if it is not already activated. To edit your seamless loop's ending point:

- 1) Press the *OUT BUTTON* (23) to return to normal play from the loops cue point. (Figure 21). This will disengage the SEAMLESS LOOP mode and allow you to edit the loops ending point.
- 2) Press the *OUT BUTTON* (23) again when you reach your new ending point (Figure 21).
  - **FOR A SHORTER LOOP:** Press the *OUT BUTTON* (23) at sooner point in the track (Figure 21).
  - **FOR LONGER LOOP:** Press the *OUT BUTTON* (23) at later point in the track (Figure 21).



## BASIC OPERATIONS (CONT.)



### EDITING A LOOP USING THE JOG WHEEL:

To edit a loop out point using the *JOG WHEEL (14)* press and hold the *RELOOP BUTTON (22)*. While the loop is active you will see the current out point time in the *CHARACTER DISPLAY (45)*, use the *JOG WHEEL (14)* to adjust your new out point. Rotating the wheel clockwise will advance your outpoint making your loop longer. Rotating the wheel counter-clockwise will make your loop shorter.

### 12. BANK BUTTONS (13):

These buttons are used to store your cue points. Only a cue point can be stored into each of these four banks. The *BANK BUTTONS* instantly recall your cue points.

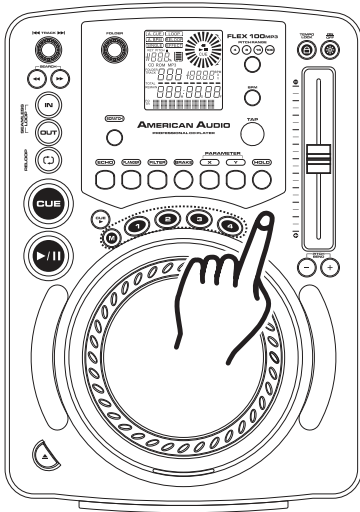


Figure 24

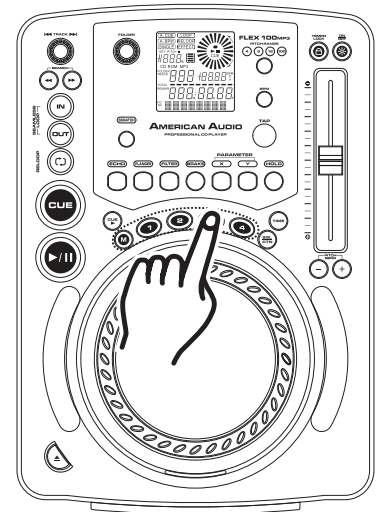


Figure 23

### 13. CHANGING THE TIME DISPLAY (44)/TIME BAR (43):

The time may be displayed in three different modes; Elapsed, Remain, and Total Remain. During normal playback, pressing the *TIME BUTTON (10)*, will change the time display information (43, 44, & 46) in the *LCD (28)*. The following is a breakdown of the time settings and their definitions:

- 1) **TOTAL REMAIN (46)** - This details the time in the *LCD* as the current CDs' total remaining time.
- 2) **REMAIN (46)** - This details the time in the *LCD* as the current track's remaining running time.
- 3) **ELAPSED** - This details the time in the *LCD* as the current track's elapsed running time.

**Note: The LCD will not display "ELAPSED", when the Elapsed running time is shown.**

**TIME BAR INDICATOR** - The time bar in the *LCD (28)* visually details the time defined in the *TIME METER (43)*. This bar is also dependent on the selected time function **REMAIN**, **TOTAL REMAIN**, or **ELAPSED**. This bar will begin to flash when 15 seconds of a track remain and will begin to rapidly flash when three seconds of a track remain. The flashing bar is a great visual reminder a track is about to end. The flashing bar will function regardless of which time mode the unit is in.

## BASIC OPERATIONS (CONT.)

### 14. SYSTEM MEMORY:

The Flex 100MP3 comes with an incredible memory system. The unit can memorize all cue points used on a particular disc. To store all your setting for a CD, press and hold down the *MEMORY BUTTON (17)* for at least three seconds. When the memory has been stored properly the *MEMORY LED* will turn off.

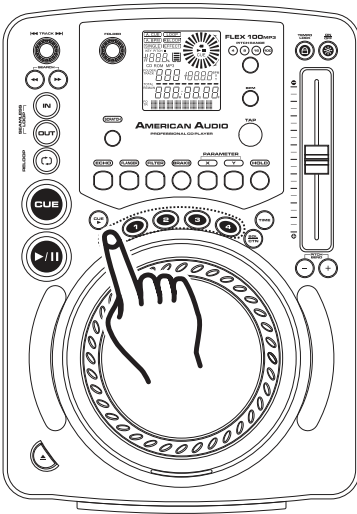


Figure 26

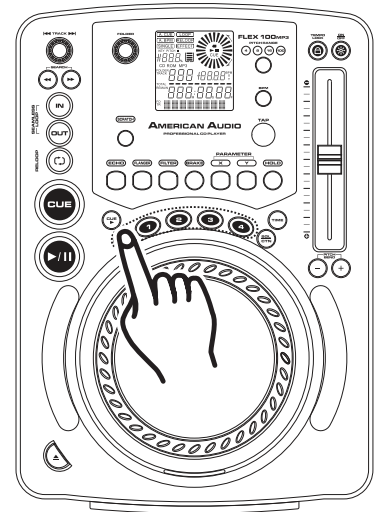


Figure 25

### 15. RECALL FLASH MEMORY:

The Flex 100MP3 can store all your user programmed cue points in to memory. These cue points may be recalled at any time, even when a disc has been removed and reloaded at a later time. To recall the memory on a specific disc; 1) Be sure a CD is not loaded in to the drive. 2) Press the *MEMORY BUTTON (17)* down until the red memory LED turns on. 3) Load the CD. "RECALL" will appear in the *LCD (28)* while the memory is being installed and the red *MEMORY BUTTON (17)* LED will turn off.

### 16. CLEAR ALL MEMORY:

You may clear the system memory at any time. This will erase all your programmed memory and restore the unit to it's default settings. To clear the memory; While main power is turned off, press the *MEMORY BUTTON (17)* and the *2nd BANK BUTTON (13)* simultaneously and turn the main power on. The *LCD (28)* will flash "Clear All" and default memory will be restored.

### 17. FIRMWARE VERSION DISPLAY:

You may display the units firmware version. Firmware is the units internal programming code. To view the firmware version; While main power is turned off, press the *MEMORY BUTTON (17)* and the *1st BANK BUTTON (13)* simultaneously and turn the main power on. To exit the firmware version press the *TRACK KNOB (26)*.

# PITCH ADJUSTMENTS

## PITCH ADJUSTMENTS:

You can activate the *PITCH SLIDER (7)* by pressing the *PITCH ON/OFF BUTTON (3)*. When the button LED is lit, the *PITCH SLIDER (7)* is active and the pitch can be adjusted. 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 player. The playback speed may be increased or decreased by a factor of +/-100. The next section details the different pitch manipulation schemes.

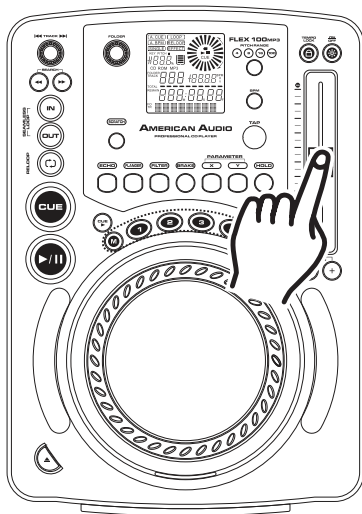


Figure 27

### 1. PITCH SLIDER (7):

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 (7)* 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 (7)* adjustment can be changed to range from +/-4%, +/-8%, +/-16%, or +/-100% (See changing "PITCH SLIDER PERCENTAGE RANGE" on the next page). This pitch adjustments will effect normal playback and loops only when the *PITCH ON/OFF BUTTON (3)* is turned on.

**Activating the Pitch Slider (7):** To activate the *PITCH SLIDER (7)* you must turn on the pitch adjustment function. Press the *ON/OFF BUTTON (3)* located at the top right of the unit. The *ON/OFF BUTTON (3)* LED will glow when the function is activated. If the pitch function is not activated the *PITCH SLIDER (7)* will not function.

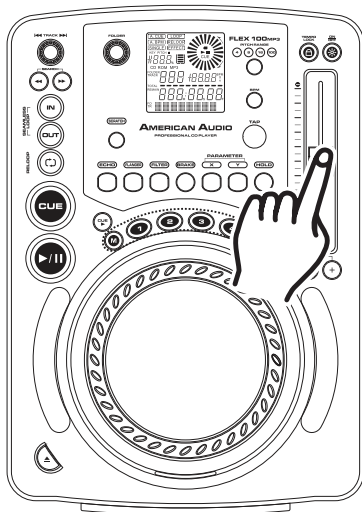


Figure 29

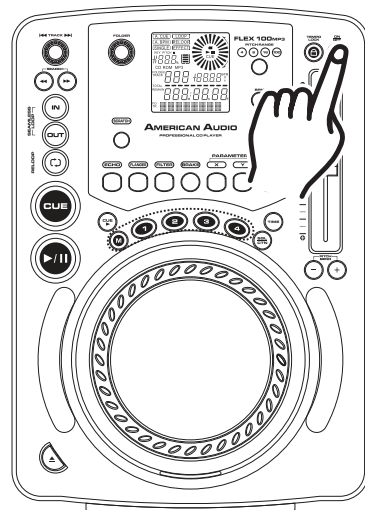


Figure 28

**Using the Pitch Slider (7):** Be sure the pitch function has been activated as described above. To use the *PITCH SLIDER (7)* slide the slider up and down. Down will increase the pitch and up will decrease the pitch.

# PITCH ADJUSTMENTS

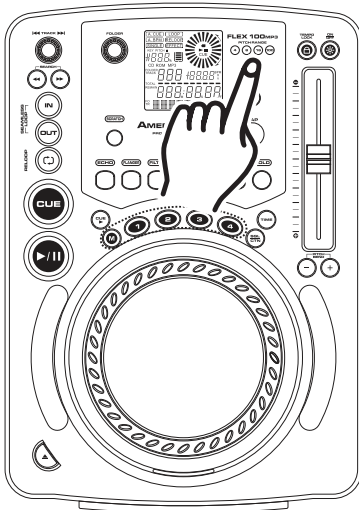


Figure 30

**Adjusting the PITCH SLIDER'S RANGE (1):** You may change the PITCH SLIDER'S (7) operating range at any time. To change the operating range be sure the pitch function is turned on, see figure 28. 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 the different ranges, press the PITCH ON/OFF BUTTON (3) and tap on the PITCH RANGE BUTTON (1) until your desired value is reached, see figure 30.

## 2. PITCH BENDING:

Unlike the PITCH SLIDER (7) adjustment this function will momentarily increase or decrease a tracks speed during playback. There are two ways to operate this function with the (-) & (+) PITCH BUTTONS (11) or with the JOG WHEEL (14). The maximum pitch bend percentage allowed is +/- 100%. The pitch bend function will work in conjunction with the PITCH SLIDER (7) pitch setting. For example, if the PITCH SLIDER (7) 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.**

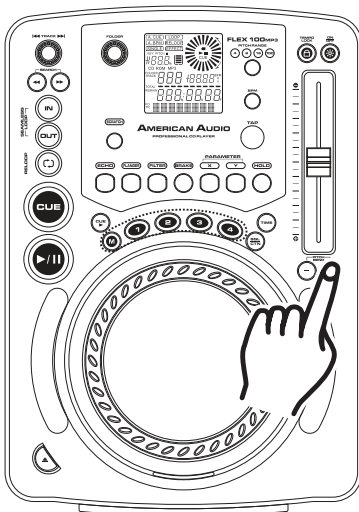


Figure 31

Holding down or tapping on the (+) PITCH BEND BUTTON (11) will provide a speed bump in the playback pitch.

Holding down or tapping on the (-) PITCH BEND BUTTON (11) will provide a slow down in the playback pitch.

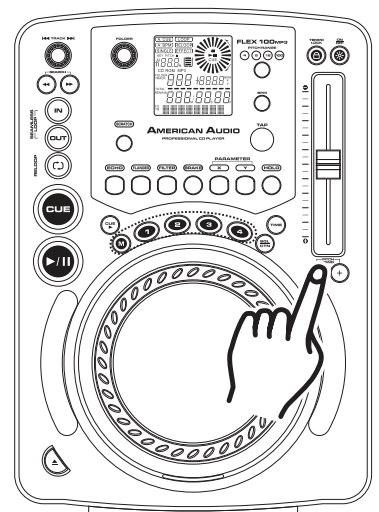


Figure 32

### PITCH BEND BUTTONS (11):

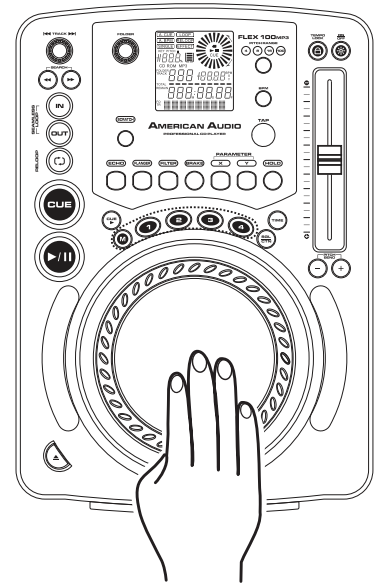
The (+) PITCH BEND BUTTON (11) will increase track playback speed and the (-) PITCH BEND BUTTON (11) will decrease track playback speed. The extent to which the speed changes is proportionate to the amount of time the button is pressed. For example, if the (+) PITCH BEND BUTTON (11) is held down continuously as in figure 31, the disc speed will increase and will continue to increase until it reaches a maximum of 100% speed gain. When you release the (+) PITCH BEND BUTTON (11) the disc speed will automatically return to its previous set speed.

## PITCH ADJUSTMENTS

### 3. JOG WHEEL (14):

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 slow 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 disc speed will automatically return to its previous set speed.

Figure 33





## ACCESSING MP3 FOLDERS

**ACCESS MP3 FOLDERS :** Use this function to access the different folders located on your Mp3 disc.

1) Press the *FOLDER KNOB* (27), the folder name will appear in the *CHARACTER DISPLAY* (45) and the folder number will appear in the *FOLDER INDICATOR* (47).

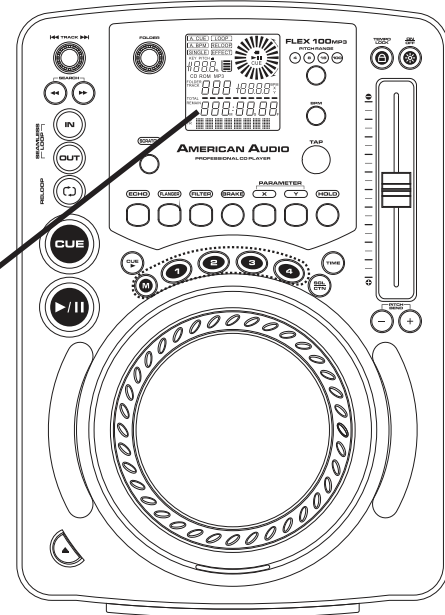
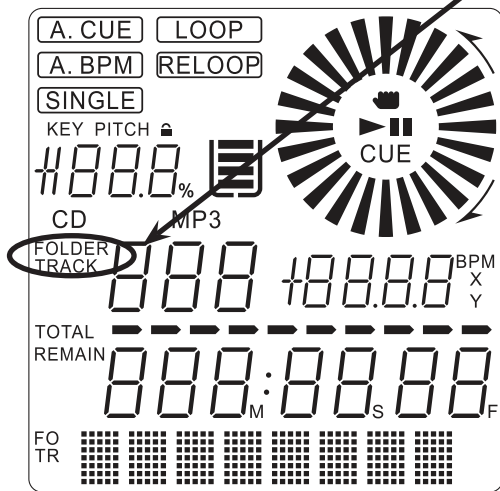


Figure 34

2) Turn the *FOLDER KNOB* (27) clockwise to scroll forward through the folders or turn it counter clockwise to scroll backwards through the folders.

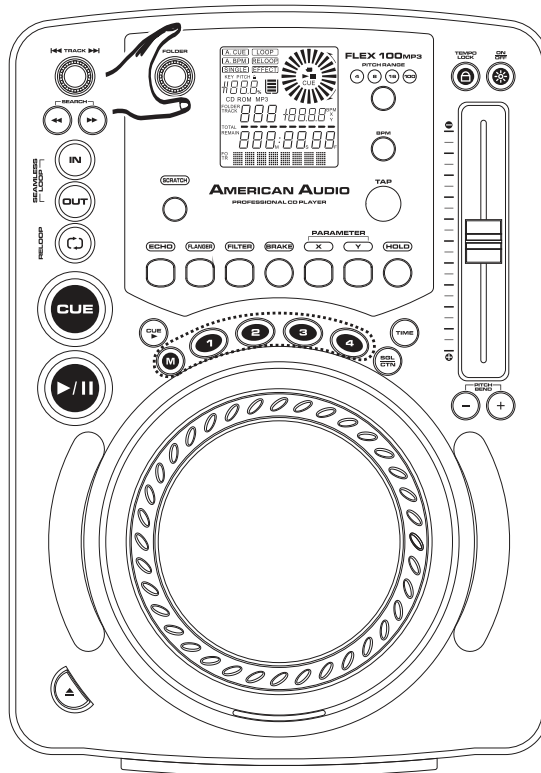


Figure 35



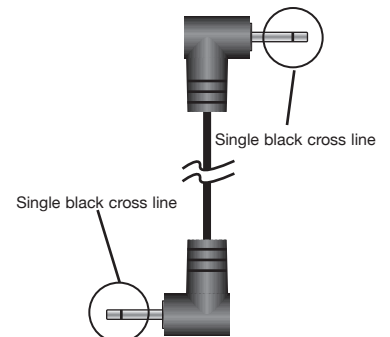
# FLIP-FLOP™

## FLIP-FLOP™

This feature is a kind of “auto pilot”. When you are using two Flex 100MP3 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 disc, or a combination of the two.

### To FLIP-FLOP™ single tracks:

- 1) Connect your system as described in the set up section on page 8.
- 2) Set your American Audio® “Q” Deck™ mixer's crossfader to the center position.
- 3) Set your two Flex 100MP3s to playback in single mode, *SINGLE (52)* should be indicated in the *LCD (28)*.
- 4) Load your two Flex 100MP3s with audio discs.
- 5) After they have both cued, press the *PLAY/PAUSE BUTTON (18)* 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 36**

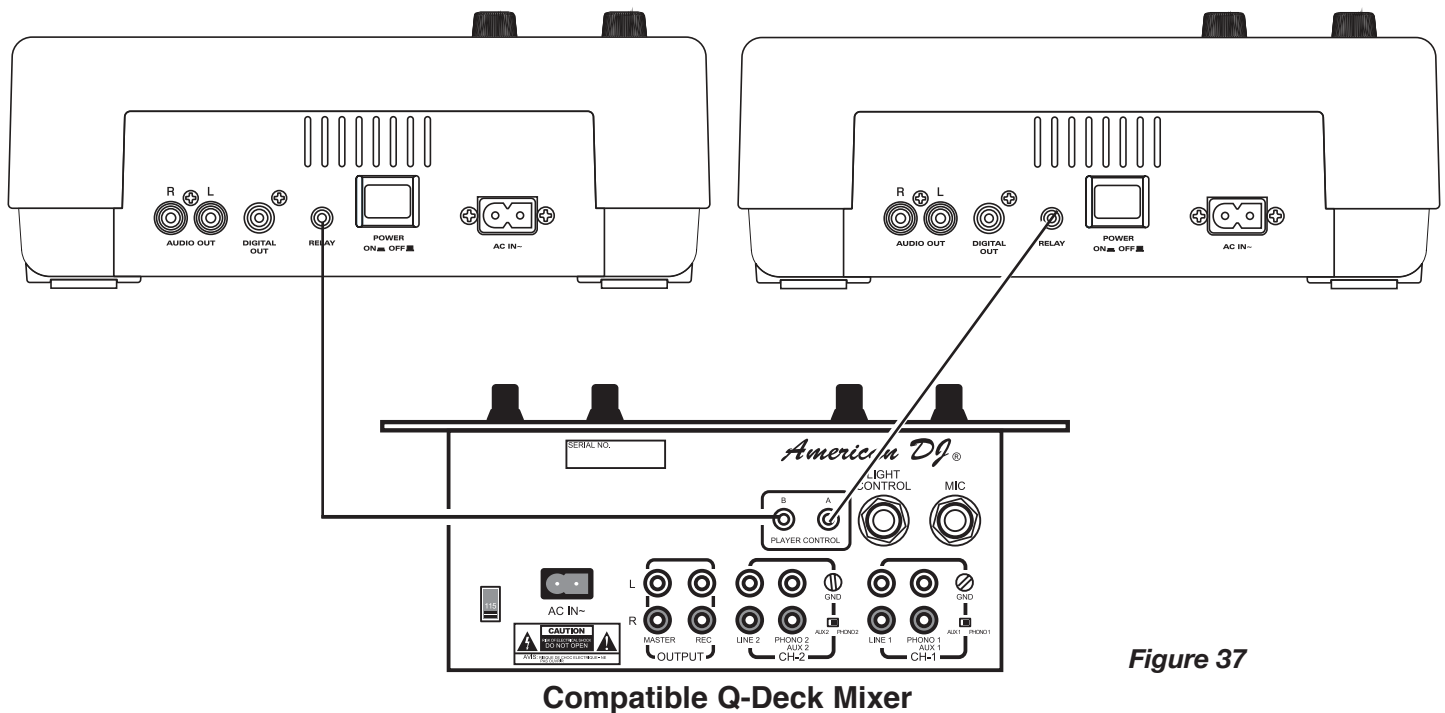
### To Flip-Flop entire CDs:

Be sure your players are both in continuous play mode, make sure *SINGLE MODE (52)* does not appear in the *LCDs (28)* of both players. Follow all directions for single track FLIP-FLOP™ above. When one player's disc ends the other player will immediately begin playback.

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

Connecting your Flex 100MP3 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 Flex 100MP3 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.



**Figure 37**

**Compatible Q-Deck Mixer**

## WARRANTY

**WARRANTY INFORMATION:** The FLEX 100MP3 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® Flex 100MP3 - Professional CD Player

Type:	Tray loading, digital compact disc audio player.		
Disc type:	Standard size compact discs (5in/12cm and 3in/8cm)		
Pitch Range (CD):	Within +/- 4%, +/- 8%, +/- 16%, & +/- 100%		
Pitch Range (Mp3):	Within +/- 4%, +/- 8%, & +/- 16%		
Pitch Accuracy:	+/- 0.15%		
Dimensions:	246mm (W) x 348mm (D) x 103.5mm (H)		
Installation:	Place on flat surface or mount in flat case		
Weight:	5.4 Lbs. / 2.46 Kgs		
Power supply:	AC 100 ~ 240V, 50/60Hz		
Power consumption:	13W		
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 (2 sets 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 20 Hz to 20,000 Hz
Output level:	2.0V +/- 1dB
Load impedance:	47k ohm or more

## AUDIO CHARACTERISTICS (TEST DISC: TCD-782, LOAD=47Kohm)

ITEM	TYPICAL	LIMIT	CONDITION
Output level	2V +/-0.5dB	2V +/-1dB	1KHz,0dB
Channel balance	within 0.2dB	within 1dB	1KHz,0dB
Frequency response	17-20KHz +/-0.4dB	17-20KHz +/-1dB	0dB output
De-emphasis response	-20dB +/-0.2dB	-20dB +/-1dB	16KHz,-20dB
Channel separation*2	93dB	85dB	1KHz,0dB
T.H.D. + NOISE*1	0.006%	0.01%	1KHz,0dB
S/N ratio (IHF-A)*2	130dB	90dB	1KHz,0dB
Digital Output Level	0.5 +/-0.03V P-P	0.5 +/-0.1V P-P	75Ohm Load

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

## SEARCHING TIME (TEST DISC: TCD-792)

ITEM	NOMINAL	LIMITS	CONDITION
Short access time	2sec	4sec	Play next track
Long access time	4sec	6sec	Track 1 ->Track 20
			Track 20 ->Track 1

## PLAYABILITY

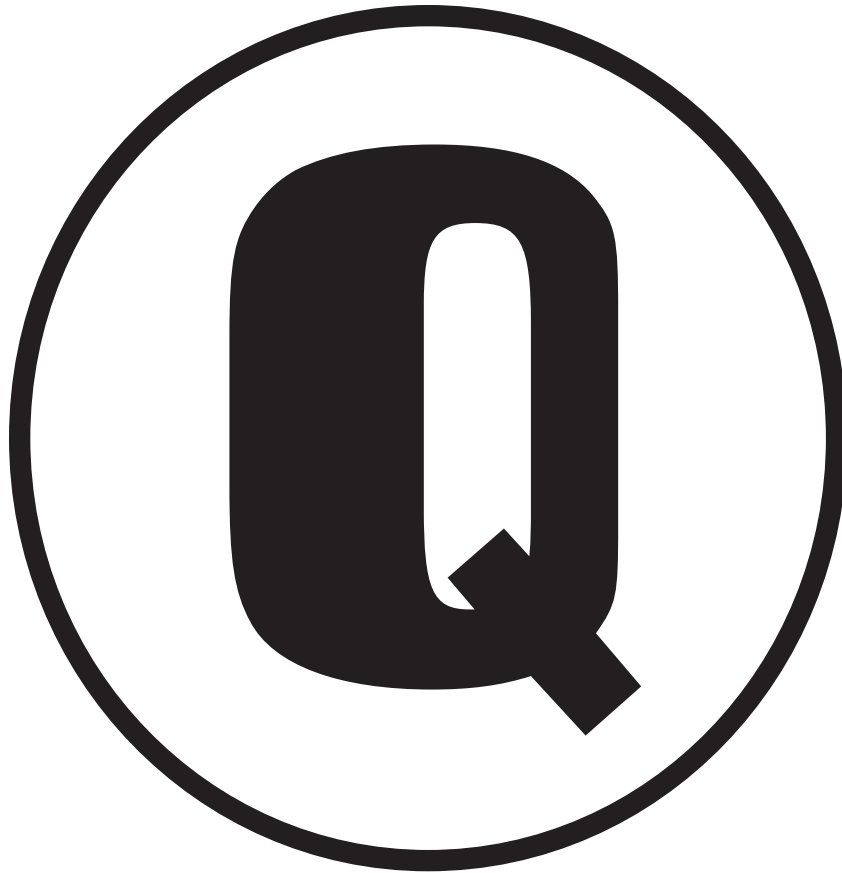
ITEM	NOMINAL	LIMIT	CONDITION
Interruption	1mm	0.7mm	TCD-725
Black dot	1mm	0.6mm	TCD-725
Finger prints	75um	65um	TCD-725
Eccentricity	140um	140um	TCD-712 W/O TRACK JUMP
Vertical deviation	1mm	0.5mm	TCD-731R
Scratch	2mm	1.2mm	TCD-721 W/O TRACK JUMP

## PICK-UP

System	Object lens drive system optical pick-up
Object lens drive system	2 dimensional parallel drive
Tracking detection	3 spot beam detection
Optical source	Semiconductor laser
Wave length	780nm

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





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