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Important Notice

Before operating this unit, please verify that you have the latest firmware version available from our website - <http://www.cortex-pro.com>. New versions of the HDTT-5000 firmware will include additional features, bug fixes, and enhanced compatibility to guarantee optimum performance of your unit. There are even Spanish and French language versions, to make operating the HDTT-5000 easier than ever!

Additionally, please download our **FREE** Cortex Database Creation Software, which allows you to create searchable databases of your entire music collection within minutes! This indispensable utility is designed to save you time when preparing large storage devices to use with the HDTT-5000.

To find out what version of HDTT-5000 firmware you are running:

1. Power on the HDTT-5000 with **NO DEVICES CONNECTED**.
2. At the prompt that says 'Insert Devices,' press the INFO button.
3. The screen will display the version number of the currently installed HDTT-5000 firmware.

To upgrade your firmware to the newest version:

1. Using your PC, download the firmware update to the root directory of your USB storage device (X:\ where X is the letter of the drive). We recommend Internet Explorer.
2. Connect the USB storage device to the HDTT-5000.
3. Power on the HDTT-5000, and select the aforementioned device.
4. The unit will display the date/version of the new update, and will ask if you want to update. Select 'YES,' and press enter.
5. The unit will go through a 8-step update procedure, after which the power will automatically shut down. When the unit is powered on again, you will be running the latest firmware.

Warning: If the power is interrupted or the USB device is removed during this process, it can damage the operating system of the unit. As well, it is advisable that the unit is not moved during the update process to make sure that the process is uninterrupted.

For more detailed information about Firmware Updates, including screen shots, please see the Firmware Updates section of the manual (page 12).



Foreword

Thank you for purchasing our Cortex HDTT-5000. We are confident that the Cortex platform of products will not only make your life easier through the use of the latest advancements in cross-platform connectivity and sound reproduction but will raise the bar for DJ and pro audio products. With the proper care & maintenance, your unit will likely provide years of reliable, uninterrupted service. All Cortex products are backed by a 1-year limited warranty (see page 29).

Preparing for First Use

Please insure that you find these accessories included with the HDTT-5000:

RCA audio cable.....	1
Power Cable.....	1
Operating instructions.....	1
USB port protector cap.....	1

We Want You Listening For A Lifetime!



Dear Customer:

Selecting fine audio equipment such as the unit you have just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This Manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion-and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:

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

Once you have established a comfortable sound level:

- Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, This Manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

Decibel

Level Example

30	Quiet library, soft whispers
40	Living room, refrigerator, bedroom away from traffic
50	Light traffic, normal conversation, quiet office
60	Air conditioner at 20 feet, sewing machine
70	Vacuum cleaner, hair dryer, noisy restaurant
80	Average city traffic, garbage disposals, alarm clock at two feet

THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

90	Subway, motorcycle, truck traffic, lawn mower
100	Garbage truck, chain saw, pneumatic drill
120	Rock band concert in front of speakers, thunderclap
140	Gunshot blast, jet plane
180	Rocket launching pad

Information courtesy of the Deafness Research Foundation.

The Cortex HDTT-5000 has been designed & engineered to provide digital music playback and manipulation features demanded by professional users. The HDTT-5000 is designed to liberate DJs from the issues associated with PC-based solutions, by eliminating the need for a computer during performance. The HDTT-5000 also offers superior portability and flexibility over that of a typical PC.

Jog Wheel

The extra large jog wheel is unique to HDTT-5000 as it provides highly precise control for a variety of functions. With the Jog Wheel, the user can search, pitch bend or even scratch just as if it were a vinyl turntable! As well, this can provide an extremely powerful navigation tool for searching menus, changing parameters and selecting music on your hard drive.

Pitch Control

High precision 100mm slide potentiometer for accurate adjustment of speed.

- **0.05% pitch precision**

In order to provide more precise pitch adjustment, the unit is able to advance in increments of 0.05%. This aids in beatmatching between two musical programs, with much finer pitch resolution than can be found on most conventional professional CD players.

- **Multiple pitch ranges**

With pitch ranges of 4, 8, 12, and 24%, the pitch control's minimum and maximum values can be altered to augment or reduce the amount of pitch adjustment to a musical program.

- **Pitch ON/OFF**

By pressing the PITCH + and PITCH - buttons simultaneously, this toggles whether or not the unit will respond to changes via the PITCH CONTROL slide. The Pitch ON/OFF feature also functions as a pitch reset, when it is used to turn the pitch OFF.

Backlit LCD Display

The backlit 192x128 graphical LCD screen shows a variety of information, including track titles, times, pitch, setup options, waveforms, hot starts, loops and search parameters. This display allows more extensive visualization of parameters than a conventional CD player.

DSP Effects Processor

The HDTT-5000 provides a wealth of effect choices for whatever style of DJ you are. Under the hood, the HDTT-5000 provides two effects groups, each having a wide variety of creative uses. Group one consists of creative remix effects such as filter, echo, flange, pan and a sampler. Group two consists of reverse, scratch, master tempo and key adjust. Any effect can from group one can be combined with group two to provide a wealth of remix options for the creative DJ.

Cue Points/Hot Cue Storage

The HDTT-5000 allows you to set and store up to 4 different Hot Cue "CUE POINTS" using buttons 1-4, as well as setting a traditional cue point with the CUE button. As your music is playing, if you would like it to jump to one of your set CUE POINTS, simply press that individual CUE button and the music will jump instantly. This allows the DJ to either stutter cue or even re-sequence the program material in a creative fashion. All "CUE POINTS" are automatically stored on your hard drive when you eject it.

Seamless Looping

For further creative options, the HDTT-5000 provides for seamless loops for the DJ to use at any time. Loop In and Out points can be edited on the fly, with no limit in time, length or position. Up to four loops can be stored per song.

Cross-Platform USB Connectivity

The HDTT-5000 offers an unparalleled level of connectivity with all driver-less USB devices. The Cortex line of products are the first to offer the ability to manipulate music stored on USB devices such as hard drives, flash memory, optical drives, and personal music players, regardless of platform. Through this innovation, DJs are able to consolidate the amount of equipment and music needed during a performance. Even more USB devices can be connected with the use of a compatible USB hub.

CD Audio support

Despite the fact that a vast majority of people have access to USB storage devices or portable music players, the Cortex HDTT-5000 supports the playback of CD Audio discs through a compatible USB external CD-ROM, CD-RW, DVD-ROM, or DVD-RW drive. This is particularly useful for DJs making a gradual migration, or for playing CDs provided by clients. Note that both sides can share one optical drive, but only one track can be played at a time. For dual-deck CD functionality, simply connect two USB optical drives.

Database-Driven Music Management

The entire line of Cortex Digital Music Players allows for the management of music collections via a database-driven system. Using this method, the database can be queried based on a number of different criteria. This allows DJs to search by artist, title, genre, album, or search string. Using this method allows the DJ to find a specific music selection within seconds. The database is saved to the storage device the music is being drawn from, so that it can be used with any Cortex unit, whether it's in your personal rig or at a club! Cue Points that have been memorized using the HDTT-5000 are also stored along with the database information on the active storage device. Once a Cue Point has been stored, DJs have the ability to recall it each time that track is loaded.

iPod® Playlist Support

The HDTT-5000 supports iPod® Playlists, which can be created using Apple iTunes™. When there are iPod® Playlists available to be loaded, a menu option will appear in the main Search Options menu.

Storage Device Sharing

With the HDTT-5000, you don't need to worry about having a storage device for each unit. Through the Master/Slave device operation, you can share one mass storage device across two units. As well, audio output for both units is located on the rear of your Master unit, keeping cable clutter to a minimum!

Additional Information

Maintaining Storage Devices

When using writable storage devices, such as hard drives, and hard-drive-based music players (iPod™, Zen™), certain maintenance might be required. Because the Cortex units use streaming technology to manipulate more than one music file from one device simultaneously, hard drives and hard-drive based units need to be defragmented regularly to ensure the integrity of the streamed files.

Fragmentation refers to “the condition of a disk in which files are divided into pieces scattered around the disk. Fragmentation occurs naturally when you use a disk frequently, creating, deleting, and modifying files. At some point, the operating system needs to store parts of a file in non-contiguous clusters. This is entirely invisible to users, but it can slow down the speed at which data is accessed because the disk drive must search through different parts of the disk to put together a single file.”

Maintaining these storage devices must be done via your computer, and should be performed whenever there has been a substantial change to your music library (adding/deleting music). Note that failure to maintain your storage devices might result in delayed access times and glitchy audio playback.

- **With Windows XP based machines**

First, connect the storage device that you wish to defragment. If you are connecting a hard-drive based music player, such as an Apple iPod or Microsoft Zune, make sure to exit any applications that may be launched on connection.

To load **Disk Defragmenter**, go to the Start menu, and find **Disk Defragmenter** under Accessories/System Tools.

When **Disk Defragmenter** has been loaded, select the device to be defragmented, and click the ‘Defragment’ button at the bottom of the window.

For more information on defragmenting, consult the Windows Help guide.

- **With Apple Macintosh Machines**

According to Apple, provisions within the HFS file allocation system diminish the need for any type of defragmentation. Because of this, there is no software included in OSX to accomplish this. However, this does not guarantee that defragmentation will not be necessary for external storage devices and portable music players.

For more information on Apple’s claims, see this article:
<http://docs.info.apple.com/article.html?artnum=25668>

Always Make Backups!

Due to the sometimes fragile state of PC components, we insist that you make backups of the storage devices that you plan on using with the Cortex. **All** hard drives (and hard-drive-based portable music players), are prone to failure - they have moving parts inside. Instead of taking a chance that your hard drive will last one more performance, one more month, or one more year, it is a far more intelligent choice to back up your data for the worst case scenario.

Neither Cortex nor your retailer will be held responsible for data loss because of the lack of backups.

Cleaning the Unit

To clean the HDTT-5000, use only a dry soft cloth and/or compressed air. If the unit is soiled with stubborn dirt, we suggest using a 2:1 solution of distilled water and 30% isopropyl alcohol. Avoid using harsh cleaning chemicals such as benzene, paint thinner, bleach, or hydrochloric acid, which will damage the unit.

Operating Conditions

For optimum performance, the temperature of the operating environment should be between +5° C to +35° C (+41° F - +95° F). Failure to maintain proper operating temperature may result in difficulty reading the LCD display, thermal overload, or system-wide instability. Avoid exposing the unit to direct sunlight.

When placing the unit in an installation, make sure that it is placed on a stable surface, as far away from vibrations as possible. Even though the Cortex is impervious to vibration, the storage devices (specifically hard drive based ones) that are designed to be used in conjunction with it are typically not. Also be sure *not* to place or use the player on heat generating sources, such as amplifiers or near spotlights.

Lawful Use of HDTT-5000

Neither Cortex nor its dealers assume responsibility for the use made of the HDTT-5000. The user must ensure he/she has all relevant licenses and consents in place (whether for copyright/public performance, performers rights, moral rights or otherwise) to allow the lawful use of the HDTT-5000. This is likely to include licenses from organizations administering performance rights in audio recordings or consents from any other relevant rights holders.

The Cortex line of units, although designed to streamline the process by which DJs perform, is not designed as a tool to facilitate media piracy. We urge that our users legitimately purchase the music they plan to use, and support the artists.

Parts Diagram and Functions

Rear Panel



NOTE-POWER BUTTON IS LOCATED ON THE FRONT PANEL. PLEASE PRESS AND HOLD THE POWER BUTTON FOR 2 SECONDS TO BOOT YOUR UNIT.

1. AUDIO OUT L/R RCA connectors, (MASTER)

RCA type unbalanced stereo audio output. These connectors output audio signal generated from Side 1 (**MAIN or MASTER**) of the HDTT-5000 unit.

2. AUDIO OUT L/R RCA connectors, (SLAVE)

RCA type unbalanced stereo audio output. These connectors output audio signal generated from the second HDT-5000 that is chain linked or (**SLAVED**) to this HDT-5000

3. USB connector (type A)

These connectors are used to attach the USB mass storage devices (MSD) that contains your music library. Suitable mass storage devices include, but are not limited to: external hard drives, flash memory, portable digital music players, CD/DVD-ROM drives, memory card readers, and active USB hubs.

4. Power Cord Connector

This connector is used to connect the power cord to your HDTT-5000. Note that the power supply automatically switches as long as you have a compatible power cable, you will be able to use your HDTT-5000 in any region regardless of power (USA, UK, EURO, ETC)

5. Chain Link Ports

These ports are used to connect HDTT-5000's together for device sharing and using audio outputs from one unit for both sides. The first thing you must do is select if the unit will be the Master or Slave unit by flipping the switch to "M" or "S". From the master unit you have 2 audio outputs, one for each side. Connect all audio leads to this HDTT-5000.



Power Button
(Press and hold.)

1. USB connector (type A)

This connector is used to attach the USB mass storage device that contains your music library. Suitable mass storage devices include, but are not limited to: external hard drives, flash memory, digital music players, CD/DVD-ROM drives, memory card readers, and active USB hubs.

2. JOG MODE button/indicator

Each time this button is pressed, this button controls alternately whether the JOG WHEEL functions as PITCH BEND or FF/REW. When the LED indicator is lit, it indicates that the JOG WHEEL functions as FF/REW.

3. INFO button

After powering on the HDTT-5000 and before you choose a storage device, pressing the info button will display which version of the operating system is currently installed, after you have chosen a storage device pressing the INFO button will change the LCD DISPLAY to show all of the attributes of the currently playing track. When the unit is in SEARCH MODE, pressing INFO on a highlighted digital music file will also show these attributes.

4. PLAY MODE button

When this button is pressed, the LCD DISPLAY will return to the state that relates to playback. This means that the track name, time remaining (or elapsed), pitch percentage, and visual time indicators will be displayed on the screen. This button can be used at any time.

5. SEARCH MODE button

When this button is pressed, the LCD DISPLAY will return to the state that relates the search function of the unit. This means that track titles, artist names, album names, genre classifications, playlists, file names, or search criteria will be displayed on the screen. This button can be used at any time, with the exception of when the unit is creating a database.

6. LCD DISPLAY panel

This blue-backlit display is a 192x128 LCD that displays information such as track/waveform, folders, parameter adjustments and search information. Contrast is available in the Edit menu.

7. PITCH ON/OFF indicator and PITCH BEND buttons

Pressing both PITCH BEND (+) and PITCH BEND (-) simultaneously toggles whether or not the unit will respond to changes made to the pitch via the PITCH BEND buttons, PITCH CONTROL slide, and JOG WHEEL. PITCH is engaged when the LED indicator is lit. Momentary adjustments to PITCH can be made by pressing the PITCH BEND (+) or PITCH BEND (-) button. The range of the PITCH CONTROL can be changed by holding the SHIFT and pressing the PITCH BEND (+) or PITCH BEND (-) button. The pitch range will be displayed in the lower right hand corner of the LCD DISPLAY panel. If KEY ADJUST is enabled then these arrows adjust KEY in +/-5 half steps.

8. PITCH CONTROL slide

This slide, when pushed towards the bottom of the unit (+), increases the tempo of playback. When the slide is pushed towards the top of the unit (-), the tempo of playback is decreased.

9. PLAY/PAUSE button/indicator

When the LED indicator which illuminates this button is lit solidly, it indicates that the unit is in PLAY mode. When the LED indicator is flashing, it indicates that the unit is in PAUSE mode.

10. CUE button/indicator

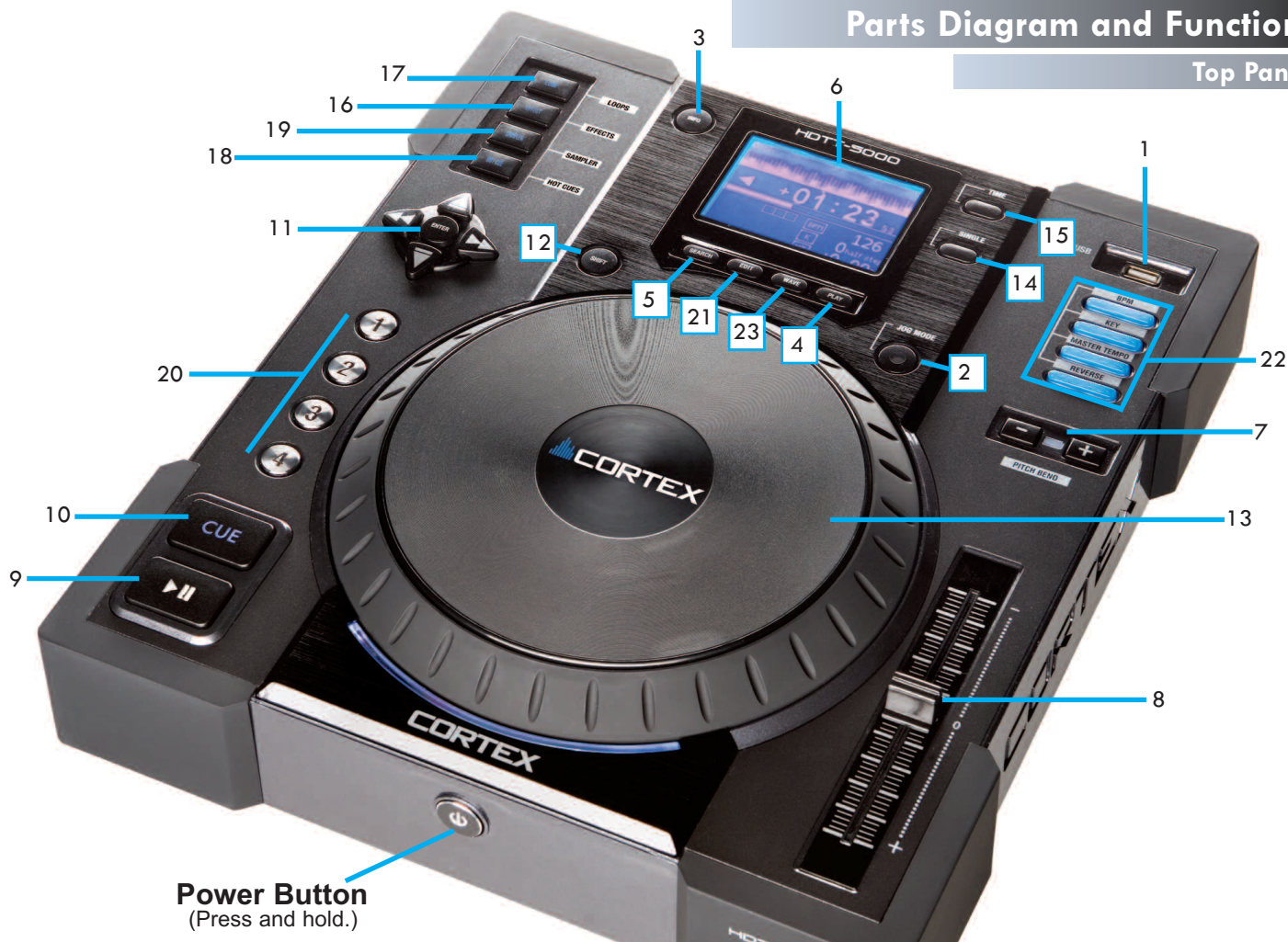
When the LED indicator which illuminates this button is lit, it indicates that there is a CUE POINT memorized. See page 20 for detailed information about setting, memorizing, and recalling CUE POINTS.

11. NAVIGATOR keypad

These buttons allow the user to navigate through menus and features of the HDTT-5000. Depending on the mode of the unit, the buttons may serve different purposes.

Parts Diagram and Functions

Top Panel



Power Button
(Press and hold.)

12. Shift Button

Holding down the SHIFT button extends the use of certain buttons on the unit, by providing alternate functions.

13. JOG WHEEL

The JOG WHEEL controls many aspects of the unit, and can be used for navigating through menus, searching through music and manipulation of pitch. The behavior of the JOG WHEEL is dependent on the mode of operation, as well as the status of the PITCH ON/OFF indicator and JOG MODE. The JOG WHEEL is also touch sensitive allowing you to press down on it to stop the music and/or manipulate your music like a vinyl turntable would, an indicator on the LCD DISPLAY in the shape of a record with a line to mark its position tracks the movement of the wheel so you can view the exact location of the wheel for Cueing, Scratching and/or Backspinning.

14. SINGLE button

When this button is pressed momentarily, the state of playback (SINGLE or CONTINUE) will be displayed on the LCD DISPLAY. To change the state of playback, press the SINGLE button. The new state of playback (SINGLE or CONTINUE) will then be displayed on the LCD DISPLAY panel.

15. TIME MODE button

This button dictates how TIME will be displayed both visually and numerically, pressing the TIME button toggles between two TIME modes ELAPSED TIME and TIME REMAINING.

16. Effects button

This button engages the DSP menu. From this menu, DSP effects such as filter, flange, echo, etc can be both engaged and edited. Any changes that are made can be saved to the unit for recall at a later point.

17. Loops button

This button engages the loop menu. Up to 4 loops can be saved and edited per song, and upon loop creation the in and out points can be

edited on the fly. Loops are automatically saved to the MSD for later use.

18. Hot Cue button

This button engages the Hot Cue menu. Up to 4 hot cue's are available per song. Hot Cues are automatically saved to the MSD for later use.

19. Samples button

This button engages the samples menu. Up to 4 samples can be used.

20. Multifunction buttons (1-4)

Depending on which menu you are in, these buttons do everything from engage loops to select parameters. These options are specific to each menu-please read each section of the manual relating to the specific menu in question to learn the function of each key.

21. Edit button

This button will engage the edit menu. From this menu the user can edit low level functions of the unit, such as pitch range, device selection, waveform creation and even the unit's internal clock.

22. BPM/Key Adjust/Master Tempo/Reverse buttons

These buttons engage functions that change how the pitch is used. BPM will display the Beats Per Minute of the track in real time, and reflect any changes made on the pitch fader. Key adjust changes the key of the song without changing the speed. Master Tempo changes the speed without changing the pitch. Both Master Tempo and Key can be used in combination with the BPM button as well. When **Key Adjust** is enabled then the **PITCH BEND** buttons act to change KEY instead of acting as a **PITCH BEND**. The **Reverse** button reverses the audio playback.

23. Wave button

Pressing this button cycles through Waveform times displayed on screen-from 5-40 seconds.

Preparing for Use/Master Slave operation

STEP ONE

Connect the Power Cord to the power outlet, found on the rear of the unit.



Fig 1.1 - Connect Power

STEP TWO

Connect the RCA audio outputs of the unit to a suitable audio mixer. When connecting the unit, make sure you note that the MASTER outputs carry audio from the MASTER or MAIN deck, and SLAVE outputs carry audio from the SLAVE or AUX deck.

Note: When in SLAVE mode the outputs of the SLAVE unit will not operate instead all outputs are routed through the MASTER unit.



Fig 1.2 - Connect Audio

STEP THREE

Connect your primary USB device to the port found to the right of the rear panel. You may choose any driverless device that follows FAT32, NTFS, or HFS+ file systems. You may also connect a powered (active) USB hub to augment the amount of available ports.

If you wish to link 2 HDTT-5000s together, select the unit you desire to be Master, flip the Master/Slave switch to "M", then power on. Do the same for the unit that you wish to slave off the unit, only select "S" on the Slave unit. Connect a standard USB cable to the chain link OUT port on the MASTER and then to the chain link IN port on the SLAVE. Then connect the audio outputs for both units to the Master unit.



Fig 1.3 - Connect USB

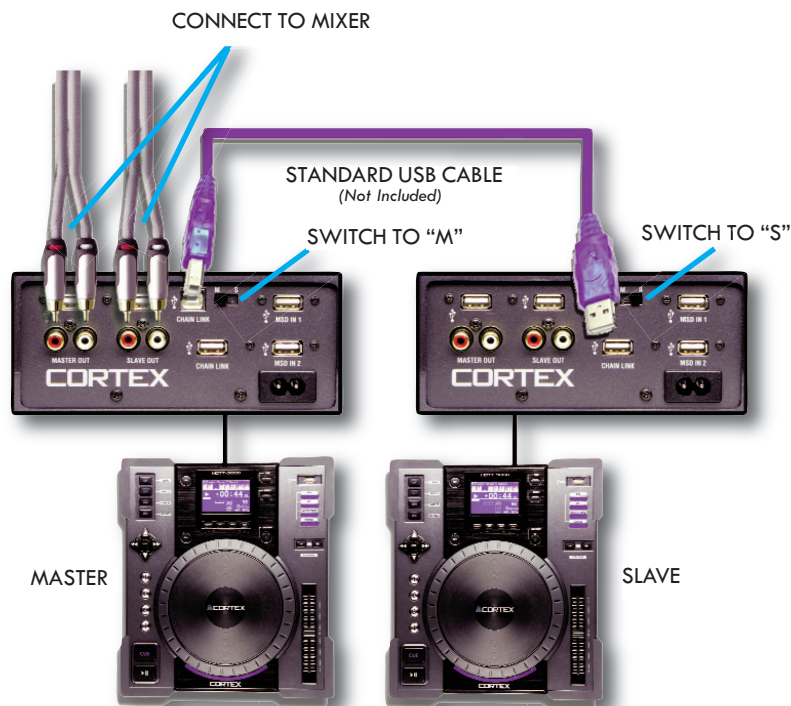


Fig 1.4 - Master/Slave Connection

STEP FOUR

Press and Hold the Power button located in the center of the front panel for about 1-2 seconds. The unit will take about 5-10 seconds to boot up as well as detect any USB devices that are currently connected.



Fig 1.5 - Turn Power ON

Selecting Devices & Database Creation

STEP ONE - DEVICE SELECTION

When prompted, select the desired storage device, on each side, that you wish to access. Use the Navigator Keypad to advance through the list of devices, and press Enter to select.

If necessary, you can also connect other USB storage devices without powering down the unit.

Note that when you select a storage device on one side, the unit will be required to complete any necessary Database Creation before being able to select a device on the opposite side. During this time, the opposite screen will display "Wait for other side."

STEP TWO - INDEXING

Once you have selected a device, the unit will search for a database of the music that exists on that device. If it is the first time you are using that particular unit with the HDTT-5000, the unit will prompt you to perform indexing, so that you can search for any song within seconds. If you already have used the storage device with the HDTT-5000, skip to STEP TWO - VERIFICATION.

If you wish to create the database using the HDTT-5000, select 'YES' from this prompt.

During the indexing procedure, the unit must create a database based off of the ID3 tags that exist on the storage device. The speed of this procedure directly relates to how many songs are stored on the connected device. If you are using a hard drive over 20 gigs, or an NTFS device, we suggest that you use the Cortex Database Creation PC application to perform the indexing, as it will save time (especially with a fast CPU). The Cortex Database Creation software is available for **FREE** from <http://www.cortex-pro.com> in the HDTT-5000 section of the site.

Once the indexing procedure has begun, it can be cancelled by pressing the **Info** button.

VERIFICATION

If your storage device has already been indexed, you will be presented with a prompt allowing you to verify the database. For each time that you add files to your storage device, you will either have to use the Verify function to add those files to the index, or use the Cortex Database Creation PC application.

We strongly suggest using the Database Creation Software, as it can process files at many times the speed of the HDTT-5000 itself.

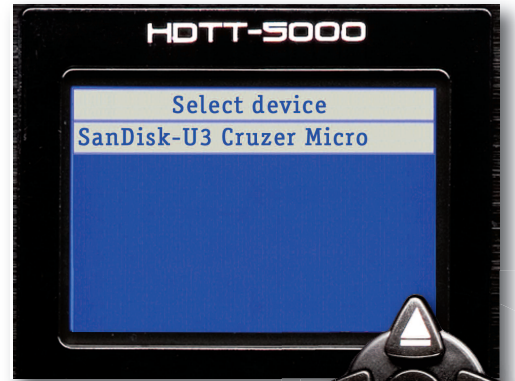


Fig 2.1 - Select USB device for either the MASTER or SLAVE units

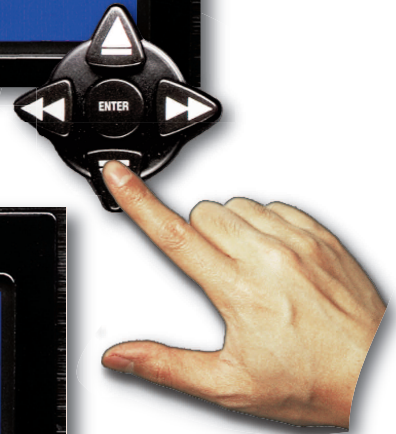


Fig 2.2 - Create Database by selecting 'YES'

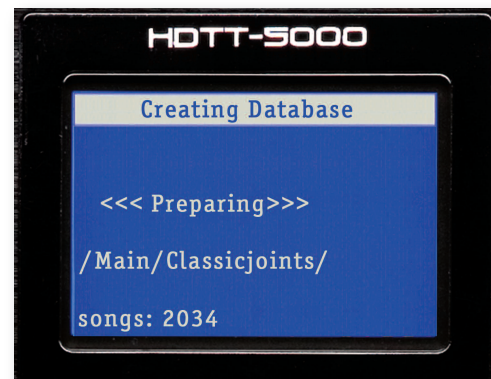


Fig 2.3 - Database Creation Screen



Fig 2.4- Every time music is added to your storage device, the database must be verified and updated in order to index the new songs.

Section Sixteen: Firmware Updates

One of the most powerful features of the HDTT-5000 is the capability to upgrade the internal software. This lends itself to the addition of new features and support, the optimization of current processes, and the capability to fix bugs as they arise.

Firmware updates will be issued periodically at <http://www.cortex-pro.com>.

We suggest that you stay as current as possible with all updates in order to insure the highest level of functionality and compatibility that Cortex has to offer.

To check the version of firmware installed:

1. Power on the HDTT-5000 with **NO DEVICES CONNECTED**.
2. At the prompt that says 'Insert Devices,' press the **INFO** button.
3. The screen will display the version number of the currently installed HDTT-5000 firmware.

To update the firmware, follow these steps:

1. Using Internet Explorer or other web browser of your choice, download the latest firmware upgrade from <http://www.cortex-pro.com>.
2. Place the file in the root directory of your external USB storage device.
3. Connect the USB storage device to the HDTT-5000, and select it from the Device Menu (during startup). Make sure your HDTT-5000 is connected to a stable power source, where there is no potential of the unit losing power during update.
4. When the HDTT-5000 detects the firmware in the root directory of the USB storage device, it will ask you if you want to apply the update. You must answer YES. If the version of firmware on the storage device is the same or older than what you have, it will be ignored.
5. When updating, the unit will go through 8 stages. This will take only a few minutes. If the power is interrupted or the USB device is removed during this process, it can damage the operating system of the unit.
6. When the update is completed, the unit will shut itself down. You must press power to restart the unit. Once the unit has booted up again, the new software will take effect. You may then erase the firmware update from your USB device at your convenience (it will not be detected again).



Fig 3.1 - Automatic detection of new firmware, option to update

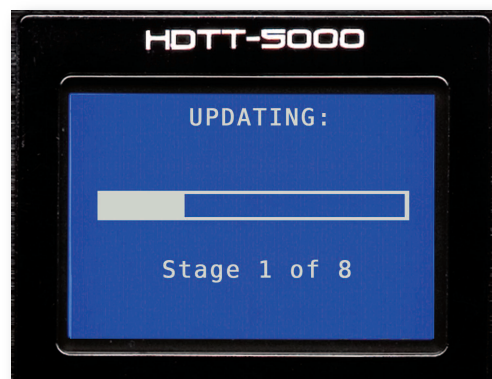


Fig 3.2 - Updating the firmware in 8 stages



Fig 3.3 - Power shuts off completely when the update is complete

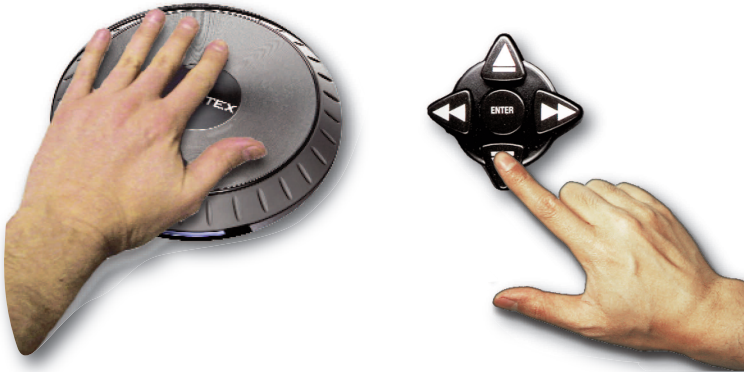
File Browser and Search Options

Section Three: File Browser and Search Options

USING THE FILE BROWSER

The File Browser is designed to allow you to view the directory structure found on a connected storage device, rather than search by specific criteria. This can be helpful if you keep your music collection in order, but can also help to locate a song that may not have the appropriate ID3 tag information. When a track does not have an ID3 tag, it will not be added to the searchable database of tracks, but will still be accessible via the string search option.

Once you enter the File Browser, you will be presented with the file structure exactly as it exists on the storage device. Use the **Jog Wheel** or the **Navigator Keypad** to advance through entries. To go back to the Main Menu, press the left **Arrow Key**.



When you have found the MP3 file that you wish to play, simply press Enter, and the track will load into the temporary playlist. Press **Enter** again to load the track for play. You may press the **Search Mode button**, found at the top of the unit, at any time to return to the Search Options menu. Similarly, when you are in Search Mode, you may press the **Play Mode button** to return to the play screen.

SEARCH OPTIONS

The database-driven searching of the HDTT-5000 provides DJs with a quick and easy way to find tracks amongst a large library, by allowing the user to search by Song, Artist, Genre, Album, or String. Simply choose one of these Search Options, and that particular criteria will be displayed in alphabetical order.

Search by Songs

When you Search by Songs, you will see presented with all of the track titles in the database that has been created by the HDTT-5000 or the helper software application.

Search by Artists

When you choose Search by Artists, you can narrow down the amount of results by first selecting the artist you wish to browse, then you can easily select the track you want to play.

Search by Genres

When Search by Genres is chosen, you will be presented with a list of all of the genres found in the database. Because not every MP3 has ID3 genre tagging, some tracks may not be displayed in this search. Once you select a genre from the list, you will be able to browse all songs within that genre.

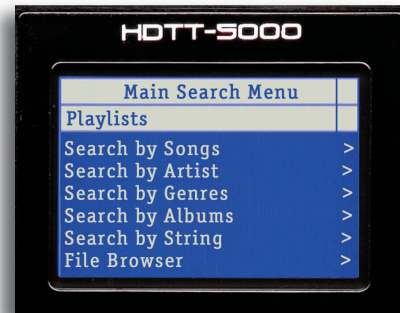


Fig 3.1 - Selecting File Browser from Main Menu



Fig 3.2 - Browsing file/directory structure using File Browser



Fig 3.4 - Searching by song title



Fig 3.5 - Searching by artist



Fig 3.6 - Searching by genre

SEARCH OPTIONS (CONTINUED)

Search by Album

Using the Search by Album option will allow you to search by the name of the album that a track is from. Keep in mind that this option also may not allow you to access all tracks, because sometimes singles are sold separately and are not taken from any specific album. Once you select an album, all of the tracks found under that album will be displayed.

Search by String

One of the most convenient features of the HDTT-5000 is string search, which allows you to find a specified word or string of words within the database. This is exceptionally helpful when you (or your client) has a request, but does not know the exact title or artist.

You can either start typing (If you have a standard USB keyboard attached to one of the USB ports) and the HDTT-5000 will jump right to String search mode or in the search options menu just select 'Search by String,' and you will be presented with a prompt where you may input a word or series of words that will be used when querying the database.

Either using a **Keyboard** the **Jog Wheel** or **Up/Down arrows** (on the **Navigator Keypad**), enter the first letter of the Search String. Use the **Space bar**, **Right arrow** or the **Enter Key** to advance to the next space, and enter the next letter. You may press the **Left arrow** and/or the **Delete** key to go back to the previous letter, or press **Shift+Left** to back-space (deletes the previous letter).

Finally, when the Search String is entered, you will need to press the **Enter** key twice, and the unit will execute the search.

Once you press **Enter** twice, the unit will begin processing your search. Depending on the size of your library, this may take awhile.

After the unit is finished executing the search, it will display the results that were found for each category: Titles, Artists, Genres, and Albums - each of which can be accessed by using the **Navigation Pad Arrow Keys** or the **Jog Wheel**. Note that the amount of results found under each category will be displayed in parenthesis. In this example, there are (0) titles of songs with the word "RUN" in them, and 1 artist.

Once you have chosen a category - Titles, Artists, Genres, or Albums, you will browse through the selections as if you were in any of the other search modes. Once again, you may select a track using the **Jog Wheel** or **Navigation Pad**, and press **Enter** to load it.

USB Keyboard control

You can control your Cortex player from any wireless or corded USB keyboard. Just plug in a USB keyboard into any of your Cortex players USB ports and you can control many of the functions of your player from the keyboard. Also once connected you can identify if either the MASTER or SLAVE unit is being controlled by the keyboard by a small letter (K) displayed in the top right hand corner of the LCD display (fig 4.0). If initially you do not see a (K) pressing the TAB key will engage this function.

Below is a list of key names and their corresponding functions.

KEYBOARD	CORRESPONDING FUNCTION / KEY ON PLAYER
TAB	Switch active side the keyboard is controlling (no affect on single units)
ENTER	Enter
Arrows	MF Navigator keypad
+	Pitch bend +
-	Pitch bend -
Shift	Shift
CTRL-S	Search Mode
CTRL-P	Play Mode
CTRL-C	Cue
CTRL-Space	Play/Pause
CTRL-J	Jog Mode
CTRL-I	Info
CTRL-T	Time
CTRL-1	Single
CTRL-D	Device Menu

Search Options (continued)

Fig 3.7 - Searching by album

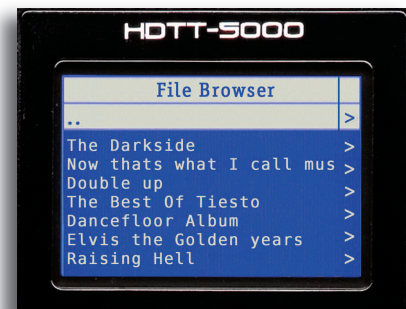


Fig 3.8 - Using Keyboard or Jog wheel to input a search string



Fig 3.82- Displaying result categories



Fig 3.9- Selecting a matching title from the executed search



Fig 4.0 A small letter (K) identifies which HDTT-5000 is being controlled with the USB Keyboard



Info Button & Track Attributes

Section Four: Info Button and Track Attributes

You will find the Info Button located to the top left of the main display and will become an indispensable part of using the HDTT-5000. Despite the HDTT-5000 being able to display an adequate amount of information on the LCD, not every attribute of each track can be displayed all at once. Additionally, there will be times when you may run into two tracks with the same title, and the **Info** Button will help to reveal which track you truly want to select.

While in Play Mode or Search Mode, pressing the **Info** button will display all attributes relating to the currently playing or currently selected track (depending on whether you are in Play or Search Mode).



Fig 4.1 - The Info Button is used to display all track attributes

The Info function displays:

Artist - Artist as per what is listed in the ID3 tag

Title - Title as per what is listed in the ID3 tag

Album - Album as per what is listed in the ID3 tag

Type of File - Whether the file is MP3 or WAV

Genre - Genre as per what is listed in the ID3 tag

Path & Filename - Exactly how it exists in the directory structure of the storage device

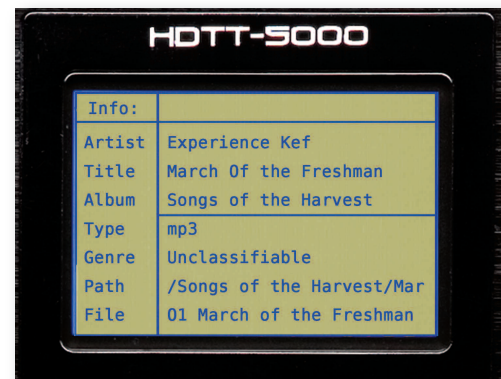


Fig 4.2 - Information Screen

Note that most of the attributes are taken directly from the ID3 tag found in the MP3 file. If the ID3 tag is missing any of these attributes, they will not be displayed in the Info screens. Also note that if you are using a .Wav file, that .Wav files do not use ID3 tags, and as such the DB software will place the file name into the Title section of the Info field.

Once you have pressed the **Info** button, you will be presented with all of the attributes relating to the currently playing or selected track. You may use the **Navigation Keypad** or the **Jog Wheel** to scroll up and down to view all of the information.

To exit the Info screens, you may press the Info Button again, or you may press either the **Search** or **Play** Mode buttons to jump immediately to those modes, when applicable.



Fig 4.3 - Exit Info Screen

Play Mode and Single Auto Cue

Section Five: Play Mode

The Play Mode is the heart of the Cortex HDTT-5000. Just like conventional CD players, the HDTT-5000 allows you to select multiple pitch ranges, memorize cue points, and frame accurate searching. The HDTT-5000 excels over traditional CD players, as it is much faster at loading and starting playback, it has a more informative LCD display, and it can memorize cue points for future performances.

Entering Play Mode

By default, when you press Enter to select a track from Search Mode, the unit will immediately load the track and enter Play Mode.

If music is already playing and you wish to return to the Play Mode screen, simply press the **Play Mode** button.

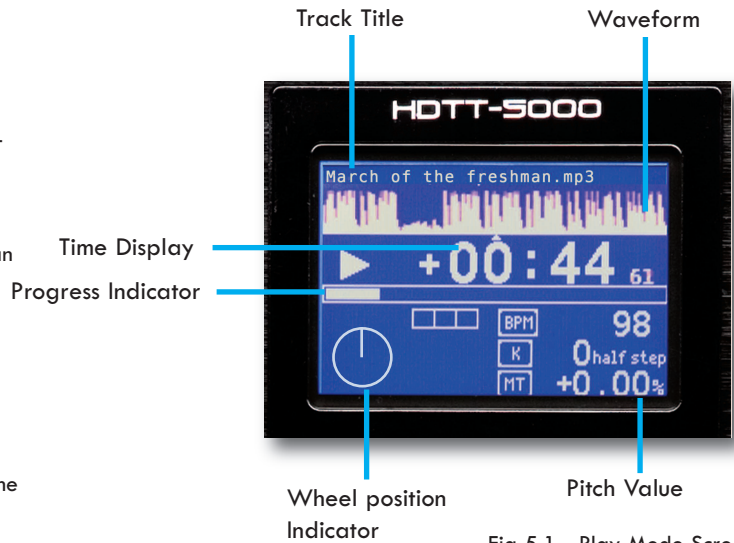


Fig 5.1 - Play Mode Screen



Fig 5.11 - Entering Play Mode

Single Mode (Single Auto Cue)

When a track is loaded with the HDTT-5000 in **SINGLE ON** mode the track will automatically cue to the first frame of audio, and then wait for you to press play. At the end of that track, the unit will pause.

Respectively when the unit is in **SINGLE OFF** mode and you load a track, the unit will begin playing immediately. At the end of that track, the unit will continue to play the next file displayed in the Search Results, this gives you the ability to play all of the Search Results in the order that they were displayed.. If there are no search results, or you get to the end of the Search Results the HDTT-5000 will just stop at the end of the last track on the list.

You may toggle between both modes by pressing the **SINGLE** button to the right of the LCD screen.



Fig 5.2 - LCD Display shows status of Single Mode



Fig 5.3- Use the Single button to toggle between Single on and Single off mode

Section Six: Edit Mode

The Edit Mode on the HDTT-5000 is the command center for the unit. In Edit Mode, the user can edit options for how the unit functions, playlists and choose the active device.

Settings Menu

This mode is probably the one you will use the most in the Edit menu. From here you can edit the following options-

- Wave Options-Lets user choose where waveform is created, if it is saved to media and the size in seconds of the waveform displayed on the screen.
- Wave menu-Adjustments for Waveform Display
- Shuffle-Toggles Shuffle On/Off
- Auto Cue-Sets the Cue to the start of the audio of a track
- LCD Level-Adjust the Contrast of the LCD Screens
- Pitch-Turns Pitch On/Off
- Pitch Bending-Sets speed of pitch bend-slow/medium/fast
- Pitch Range-Sets range of pitch fader-4/8/16/24%
- Time-Toggles display between time elapsed/remaining
- Single-Toggles Single play mode
- Touch Wheel-Toggles the Touch Sensitive Wheel On/Off
- Jog-Toggles the Jog wheel On/Off
- Jog mode-Toggles between the two Jog modes Search/Pitch
- BPM-Turns the BPM counter on/off
- Language-Toggles between languages English,Spanish,French & German
- Database Creation-Toggles DB creation for new media on/off
- Date Menu-Allows user to set the internal Date and Time
- Recall Cues/Loops-Turns on/off auto save/recall of Loops and Hot Cue
- Restore Defaults-Restores factory settings.

DSP effects editor

This menu allows the user to control the HDTT-5000 effects, see section fourteen on page 25 for more information.

HOT CUES editor

This menu takes you to the HOT CUES editor which is described in further detail in section twelve on page 23

LOOPS editor

This menu allows the user to control the HDTT-5000 effects, see section fourteen on page 25 for more information.

SAMPLE editor

This menu lets the user edit the four available sample segments, more info in section fifteen on page 26.

PLAYLIST editor

This menu lets the user enter the playlist editor menu. For more information please see section Nine on page 20.

MSD control

This menu lets the user toggle between devices connected to the unit. This can come in handy if the user chooses to switch between multiple storage devices or a CD-rom.

Fig 6.1 -Main Edit Menu

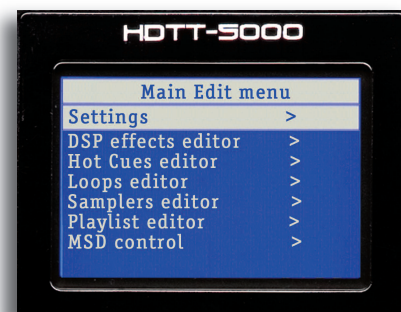


Fig 6.2a - LCD Display shows Settings Mode page #1

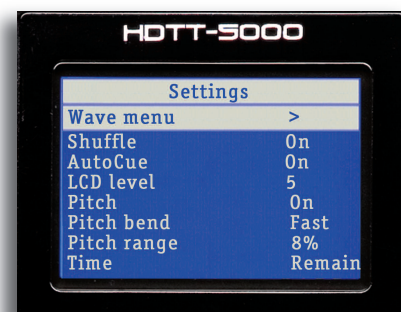


Fig 6.2b - LCD Display shows Settings Mode page#2

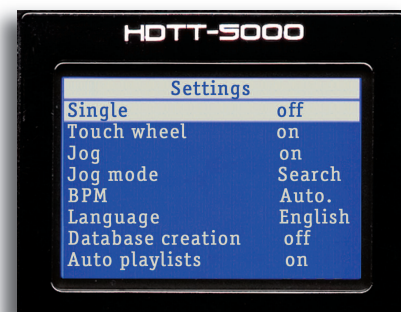


Fig 6.2c - LCD Display shows Settings Mode page#3



Fig 6.3 - Mass Storage Selection



Shuffle Mode and Waveform Display

Section Seven: Shuffle Mode and Waveform Display

Shuffle Mode

A useful feature for unattended playback is Shuffle Mode. This feature randomly selects tracks based on what is narrowed down using the Search Criteria and loaded into a Playlist. For instance, if you select All Songs as your Search Criteria and load them into a Playlist, then the unit will randomly select songs from that list. Shuffle Mode can be turned on/off directly from the Settings Menu.



Fig 6.4 - LCD Display shows Shuffle Status

Waveform Display

Waveforms are a visual representation of the program material. Using the waveform display, you can not only see volume fluctuations in the music but even when the "breakdowns" are coming. This can help to visually mix as well as mix by audio.

Waveforms can be created in two places-in the unit or in the Cortex DB software. This can be downloaded from www.cortex-pro.com.

Waveform Menu

-Create with DB - Creates a waveform for all the songs at one time when you create a database.

-Create on load - Creates a Waveform for each individual song upon loading it.

-Save to MSD- Save the created waveforms to your Mass Storage Device

-Length - Determines the length of of time represented by the Waveform Display the choices are 5,10,20 and 40 Seconds.you can also toggle between the four choices instantly by pressing the WAVE button under the LCD display.



-Wavescroll - Determines weather the wavform will scroll across the screen or if the Cursor will scroll across the waveform.

Due to processing time we recommend you create the waveforms in the DB software so there is no delay in being able to play your music. If you wish to cancel the creation of a waveform at any time press the **Enter** button to cancel the process. If the same song is loaded on both HDTT-5000's then only one unit will create the waveform.

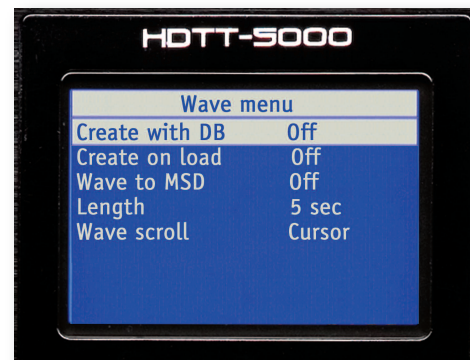


Fig 7.0 The Wave Menu

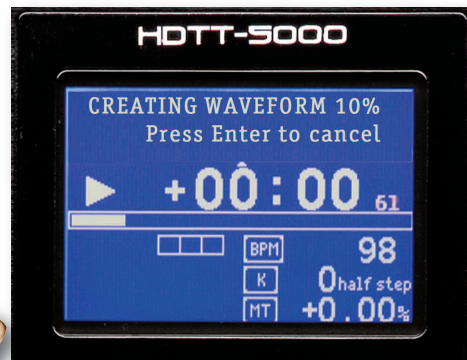


Fig 7.1 - Waveform Creation

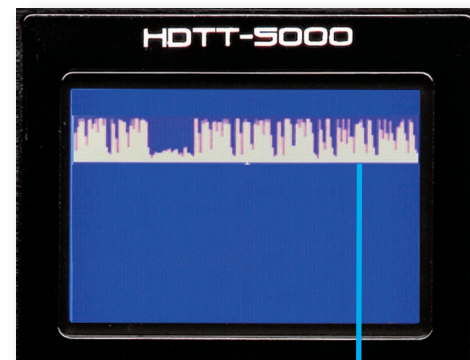


Fig 7.2 - Waveform Display

Time Display and Pitch Control

Section Eight: Time Display Modes

Changing the Time Display Mode is as simple as pressing the **Time button** to toggle between elapsed and remaining time. Elapsed Time shows how much time has past since the beginning of the track, and Remaining Time shows how much time is left before the track is over.

You may press **Time** to change the Time Display Mode for both sides. If you wish to change the Time Display Mode on both sides press **Shift+Time**.

When the Time Display Mode is changed, you will also notice that the Progress Indicator will also change to reflect either Elapsed Time or Remaining Time.

Pitch Control, Pitch Bend, and Pitch Ranges

The Pitch Control allows you to speed up or slow down the playback of a track by a desired percentage. The HDTT-5000 offers Pitch Ranges of 4, 8, 16, and 24%, in order to provide a wide level of flexibility when manipulating digital music files. In all modes, 0.05% Pitch Resolution can be achieved, allowing for a more precise level of adjustment.

To toggle Pitch On or Off (the unit will not respond to pitch changes when Pitch is Off), press both the **Pitch Bend (+)** and **Pitch Bend (-)** buttons simultaneously. The LED indicator will illuminate when Pitch has been turned On.

To change Pitch Ranges, press **Shift+Pitch Bend (+)** OR **Pitch Bend (-)** buttons simultaneously. The Pitch Display on the LCD screen of that respective side will momentarily display the new Pitch Range.

For a momentary change in Pitch, the **Pitch Bend (+)** and **Pitch Bend (-)** buttons will temporarily increase or decrease pitch relative to the amount of time either button is held down.

When the Jog Mode is not engaged (LED remains unlit), you may also use the **Jog Wheel** to perform a Pitch Bend.

Key Adjust and Master Tempo

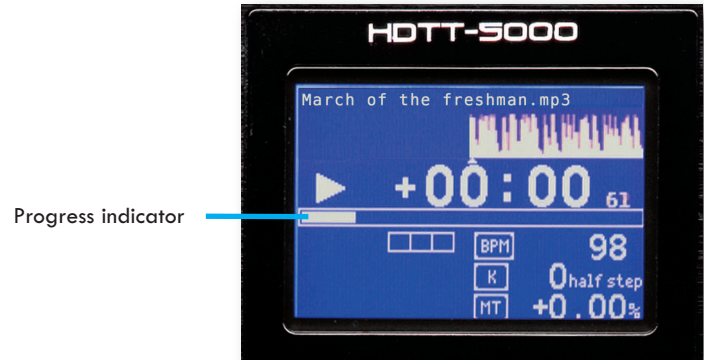
The Key Adjust and Master Tempo controls allow you to have independent controls of Key Adjust and Tempo. When Master Tempo and Key adjust are enabled, the **Pitch Bend (+)** and **Pitch Bend (-)** buttons become Key Adjust buttons, with a range of +/-5 half steps, displayed in Sharp/Flat for +/-, and the Pitch Slider and Jog Wheel control Master Tempo and Master Tempo bend.

To enable **Master Tempo** and **Key Adjust**, first you need to press the **Master Tempo** button. If you press **Key** alone **Key** will not be enabled, and must be turned on within **Master Tempo** mode.

To disengage Key Adjust, simply press the Key Adjust button at any time, and the Key will return to it's original value. To return to Pitch mode simply press Master Tempo or press **Pitch Bend (+)** and **Pitch Bend (-)**. If Key adjust is enabled then that will be turned off as well at this time.

Reverse

When enabled **REVERSE** will start playing the music backwards until disengaged.



Progress indicator

Fig 8.1 - LCD Display and progress indicator in time elapsed



Fig 8.2 - LCD Display and progress indicator in time remaining



Fig 8.3 - Pitch On/Off by pressing both buttons simultaneously. If in Master Tempo Mode doing this will return the unit to Pitch.

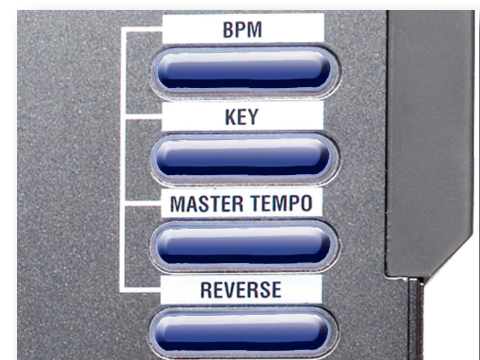


Fig 8.4 BPM, Key, Master Tempo and Reverse Buttons.

Jog Mode and Playlist Support

Section Nine: Jog Mode

When the **Jog Mode LED** is unlit, the **Jog Wheel** (when in Play Mode) will perform as a Pitch Bend.

When the **Jog Mode button** is pressed, the LED indicator will illuminate, and the **Jog Wheel** will then allow you to search (FF/REW) through each track. The faster the **Jog Wheel** is moved, the faster the unit will search through the playing track. In order to use the **Jog Mode**, the unit must be in the process of playing, *not* paused. (Note-Scratch mode is enabled by default, and is turned on/off in the Setup menu)

Playback Navigation Functions

Using the **Navigation keypad left & right buttons**, you can search through a track similar to using the Jog Mode function.

Using the **Navigation keypad up & down buttons** will allow you to skip to the previous or next track that was found in the Search Results. For instance, if you searched by Artist, and your Search Results displayed 10 tracks by that Artist, using the **Navigation keypad up & down buttons** will allow you to skip between those tracks.

Apple Playlist Support

The HDTT-5000 has support for both iTunes™ playlists that are contained on an iPod®, as well as playlists created within the unit stored directly to an iPod® or Mass Storage Device. From the main menu both types of playlists are accessible at any time. Playlists are created in real time within the HDTT-5000, and can be saved at the end of a gig so that your set can be recalled for future use. As well, if you wish to create a playlist from your computer, iTunes can be used to sort music into playlists before a gig.

Creating a Playlist

The beauty of the HDTT-5000 playlist system is that you are creating a playlist all time, whether you realize it or not! Every time a song is selected, it is loaded into a temporary playlist. This playlist does not need to be saved, though the option is there if you had a particularly inspired set and wish to try and replicate it in the future. To access the Temporary Playlist hit the edit button twice or access the playlist screen from the edit menu. You can save your playlist at any time, and if you need to write over a playlist this is possible so as to be able to update your playlist at any time.

If you perform a search or enter a folder and wish to load all songs matching your criteria into a playlist, simply press **Shift+Enter** to load all matching songs into the Temporary playlist.



Fig 9.1 - Switching Jog Mode between FF/REW and Pitch Bend using the Jog Mode button

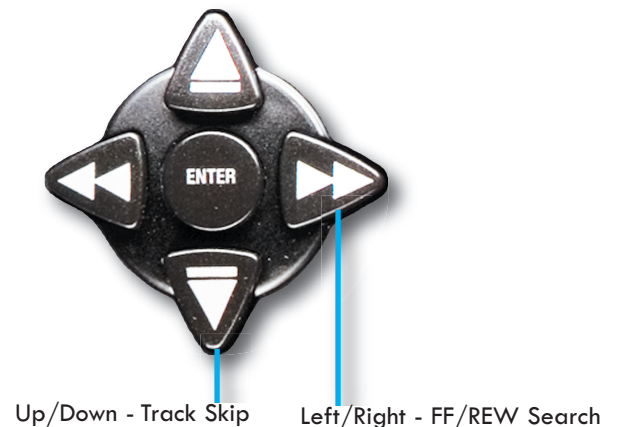


Fig 9.2 - Navigation keypad functions in Play mode



Fig 9.3 - iPod Playlist option from the Search Menu



Fig 9.4 -Temporary Playlist creation

Cue Points & Memorization

Section 10: Setting and Memorizing Cue Points

With the HDTT-5000, creating and memorizing cue points is quick and easy. There are two (2) types of cue points available at any given time, a traditional stutter cue, as well as four **Hot Cue buttons**.

By default, when there is no Cue Point set (or memorized), pressing the **Cue button** returns the unit to the beginning of the track (0:00.00) and pauses.

To set a Cue Point during playback at a time of your choice, simply press **Pause**, and then use the **Navigation keypad left & right buttons** or **Jog Wheel** to make any adjustments by frame. When **Play** is pressed to resume playback, the Cue Point will be stored.

To memorize the Cue Point and save it to the USB storage device (to be recalled each time the track is loaded), find the exact frame that you wish to set as a Cue Point, and press **Shift+Cue**. This will permanently set & save the Cue Point to the storage device. This process can also be done on the fly, without the unit being paused. The screen will indicate when a Cue Point has been stored.

To advance back to the set Cue Point, simply press the **Cue button** during playback. Do *not* press **Pause** first, as this will instead set a new point. Once advanced to the Cue Point, the unit will remain in Pause mode.

To memorize a new Cue Point, you do not have to erase the previously set one. You can simply press **Shift+Cue** again, and it will replace the old Cue Point.



Fig 10.1 - Pressing CUE to return to 0:00:00.



Fig 10.2 - Cue Point Memorization using Shift+Cue



Please note that in order for a Cue Point to be saved to the connected USB storage device, it must be a FAT32 file system. If it is an iPod® it must be a Windows (Fat32) formatted iPod® as well.



Fig 10.3 - Cue Point Deletion using Shift+Cue

Device Menu

Section 11: Changing, Adding, and Ejecting USB Storage Devices

To access the **Device Menu** from any screen, press **Shift+Power**. From this menu, you can choose to Change or Eject Devices.

Since USB is hot-swappable, you can connect (but not disconnect) a USB device at any time, regardless of whether the unit is powered On or not and regardless of what mode the unit is in.

- To Change devices:

- 1. Select **Change device** from the **Device Menu**.
- 2. Select the new device you wish to switch to using the **Navigation keypad** or **Jog Wheel**.
- 3. Perform any necessary cataloguing or verification (as found in **Section Two: Selecting Devices & Database Creation**)

- To Eject devices:

- 1. Select **Eject device** from the **Device Menu**.
- 2. Select the new device you wish to Eject using the **Navigation keypad** or **Jog Wheel**. Press Enter to eject the device.
- 3. If the device you have ejected is being used by both of the HDTT-5000's (if you have a MASTER/SLAVE setup), the MASTER unit will warn you by displaying "The device is also attached to other side!" This simply means that if you intend to remove the device from the HDTT-5000, you must eject both sides before unplugging it.
- 4. When the display reads "The device can be safely removed," you may disconnect the USB device.
- 5. If you are using a USB CD-ROM or DVD-ROM drive, you must use the Eject procedure in order to open the CD/DVD tray.

If the Eject procedure is not followed, there is risk of corrupting any files that are open when the device is disconnected.

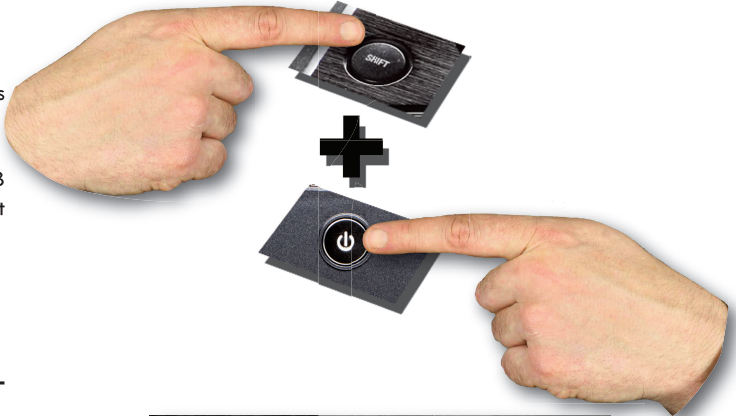


Fig 11.1 - Pressing Shift+Power to access the Device Menu



Fig 11.2 - Wait while the device ejects

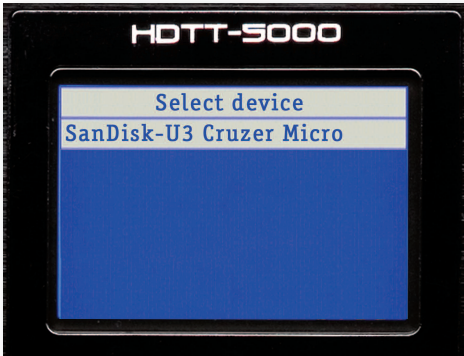


Fig 11.3 - Only remove the USB device after the eject procedure

Hot Cue Menu

Section Twelve: Hot Cue Mode

Hot Cues are cue points that can be set on the fly (while the song is playing) and differ from traditional cue points in that the program material will continue to play from the point that you press the button, instead of needing to continue to hold the play button down. To make use of the hot cues, first press the **Hot Cue** button to engage the hot cue menu.

From the Cue menu, you can view both which Cue "slots" are open, as well as the Minute/Second/Frame points of each Cue. To record a hot cue, first press the corresponding button (**Multifunction Buttons 1-4**) to the location you wish to save to. To alter the hot cue position, use the navigation arrows to highlight the chosen hot cue, then use the **Jog wheel** to alter time. To delete the hot cue, press shift plus the chosen location.

Hot Cues can also be created/edited from the Play screen. To go into Hot Cue mode in the play screen, press the **Hot Cue** button twice. You will see a small "Cue" symbol on the play screen. Creating / editing / deleting Hot Cues in this mode is the same as in the edit screen-the main difference is you cannot edit in points unless you re-enter the Edit mode. To exit Hot Cue mode while in the play screen simply press the **Play Button** above the screen (not the main **Play/Pause** button!)

Hot Cues are saved to the MSD on a per-song basis, and are automatically recalled with each song if the **AUTO RECALL** option is turned on in the **EDIT** menu. They will remain in memory until they are deleted, so if you create a Hot Cue that you wish to save don't worry-it's already saved! Keep in mind that loading these points will create a slight pause with the loading of your songs, so if you do not need to save these points you can leave it off to speed up song loading.



Fig 12.1 - Entering the Hot Cue Menu. Press the Hot Cue button twice to use Hot Cues from the Play Screen. Using Hot Cues from the Play Screen is the same as in the Cue Menu.



Fig 12.2 - Choose a number for your hot cue. Press your chosen number once to enter the hot cue in, and shift plus the number to delete.

Seamless Loop Menu

Section Fourteen: Loop Mode

Loops are small repeating segments of a song that can be created, engaged and edited on the fly. With these, you can do everything from creating an extended intro to a song to mix into, to extending a break in a song. To use the loop function, press the **Loop** button above the Jog Wheel-this will engage the Loop menu.

From the Loop menu, you can view both which Loop “slots” are open, as well as the in/out (start/stop) points of each loop. To create a loop, the first thing to do is choose a loop number. If there is no loop saved in the chosen position, press the chosen number (**Multifunction Buttons 1-4**) to create an in point. Press the number again to create an out point. The Loop will automatically be engaged, and will not exit till you press the **Shift** button plus the number of the chosen loop. To reloop, simply press the number again to reengage. To edit a Loop In/Out point, using the arrow keys scroll over to the option you wish to edit and use the **Jog Wheel** to edit an option. To delete, simply hold down **Shift** plus the number of the Loop you wish to delete.

Loops can also be created/edited from the play screen. To go into Loop mode in the Play screen, press the **Loop** button twice. You will see a small “Loop” symbol on the Play screen. Creating/editing/deleting Loops in this mode is the same as in the Edit screen-the main difference is you cannot edit in/out points unless you re-enter the edit mode.s. To exit Loop mode while in the Play screen simply press the **Play** Button above the screen (not the main **Play/Pause** button!)

Loops are saved to the MSD on a per-song basis if **AUTO RECALL** option is turned on in the **EDIT** menu. They will remain in memory until they are deleted, so if you create a Hot Cue that you wish to save don't worry-it's already saved!

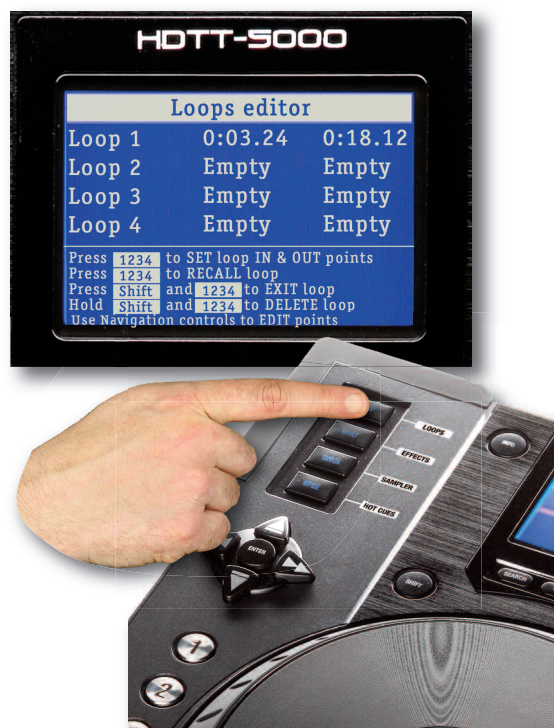


Fig 13.1 - Entering the Loop Menu. Press the Loop button twice to use Loops from the Play screen. Looping from the play screen is the same as from the Loop menu.



Fig 13.2 - Choose a number for your loop and press the button twice, once to enter the start point and once to enter the end point. To exit press Shift+the loop number, and to reloop press the number again.

DSP Effects Menu

Section Fourteen: DSP Menu

DSP (Digital Signal Processing) effects are available at any time on the HDTT-5000 to alter your music in any way you choose. From filtering out certain frequencies, adding an echo or reversing audio, the only limit really is your creativity.

All HDTT-5000 effects can be divided into 2 categories. Category one includes all effects available without entering a menu-Scratch, Reverse, Master Tempo and Key Adjust. Category two includes the following-

- " Filter (Low/Band/Highpass types selectable)
- " Flanger
- " Echo
- " Delay
- " Decimator
- " Vocoder
- " Vibrato
- " Phaser
- " Transform
- " AutoPan
- " Brake
- " Chorus

To engage an effect, first engage the DSP menu by pressing the **DSP** button. This will enter the DSP menu. From here, scroll down to the effect of your choice and press **Enter**. This will enter the DSP edit menu. Depending on which effect you choose, you can alter various parameters such as "frequency", "type", and "tempo". The only shared parameter is "Dry/Wet" which controls the ratio between the original material and the effected signal.

DSP Effects can also be created/edited from the Play screen. To go into DSP mode in the Play screen, press the **DSP** button twice. You will see a small "DSP" symbol on the play screen. Creating/editing/deleting loops in this mode is the same as in the edit screen-the main difference is you cannot edit in/out points unless you re-enter the Edit mode. To exit **DSP** mode while in the play screen simply press the **Play** Button above the screen (not the main **Play/Pause** button!). To stay in **DSP** mode but turn off the selected **DSP** effect use the **Left/Right arrow** buttons to select "**Pass**" on the screen and press Enter.

All changes made to the default FX values are saved to the MSD and re-loaded upon start up of the unit. To discard these values and reset to the factory defaults, enter the **Main Edit Menu** and select "**Restore Default**".



Fig 14.1 - Entering the DSP Menu. Press the DSP button twice to use DSP effects from the Play screen.

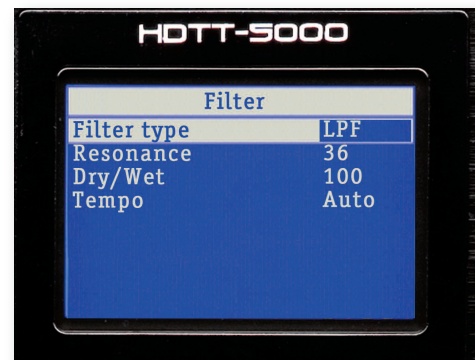
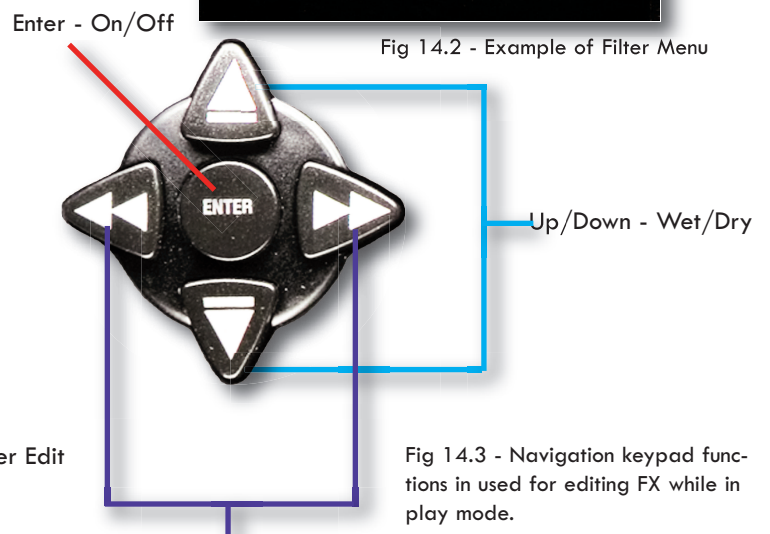


Fig 14.2 - Example of Filter Menu



Left/Right - FX Parameter Edit

Fig 14.3 - Navigation keypad functions in used for editing FX while in play mode.

Left/Right - DSP Select-Select "Pass" to turn selected effect off.

Sample Menu

Section Fifteen: Sample Menu

The sample menu is much like the loop menu. Samples are small segments of audio material that can be played separately from the main audio material. These can be everything from loops to small vocal samples. To create a sample, first press the sample button to engage the sample menu. From there, you can choose to record a sample to a slot by pressing the corresponding number on the keypad, or using the navigation buttons plus the **Shift** button to engage the **Sample Edit** menu.

Each sample has two options for sample type, "Loop" or "One Shot". A loop is a repeating segment of music, while a one shot will play once and disengage. If you have chosen either "One Shot" or "Loop" option, then you must press the number (**Multifunction Buttons 1-4**) of your chosen sample once to create the in point of your sample and once again to create the out point. Unlike the Seamless Loop option, if you have chosen a looping sample it will not be engaged automatically, but instead must be engaged by pressing the chosen number once again. To disengage, simply press the number once again. If you wish to delete the sample, hold the **Shift** button down along with the chosen sample number.

Samples can also be created/edited from the Play screen. To go into Sample mode in the play screen, press the Sample button twice. You will see a small "Sample" symbol on the play screen. Creating/ editing/ deleting Samples in this mode is the same as in the edit screen-the main difference is you cannot edit in/out points unless you re-enter the Edit mode.

Samples will remain in memory until the unit is shut down, and will carry over track to track unlike Hot Starts/Loops, which are saved on a Track-by-Track basis. All 4 samples can be from different songs, though once your 4 slots are filled then you must empty out a sample slot if you wish to record another.

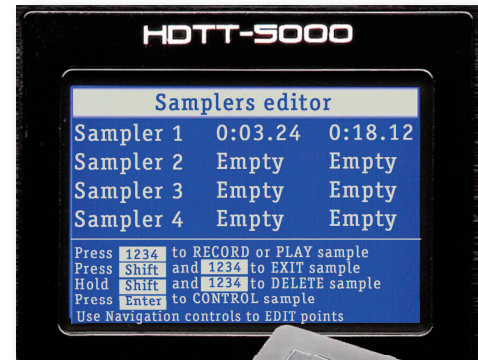


Fig 15.1 - Entering the Sample Menu. Press the Sample button twice to use Loops from the Play screen. Using Samples from the play screen is the same as from the Sample menu.



Fig 15.1 - Sample Edit Menu

Fig 14.3 - Navigation keypad functions in used for editing FX while in play mode.

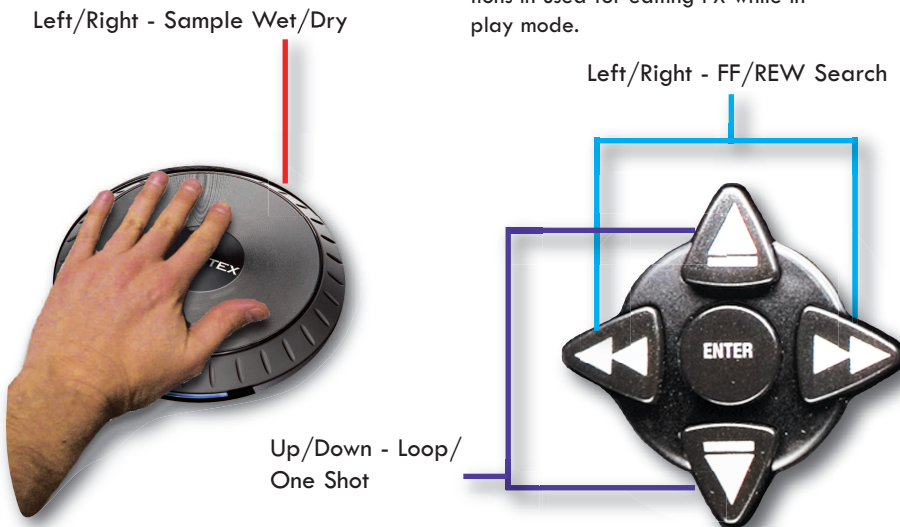


Fig 15.2 - Choose a number and press the chosen button to record the start point of a sample.. Press it again to record the out point, at which point the sample will engage. To exit, press shift plus the number of the sample. To delete, press shift plus the number again.

Section Seventeen: Troubleshooting

Error Messages

If you experience an error message while navigating the unit, here are a few explanations of those errors and how they can be corrected. For a more complete troubleshooting guide, consult our website at <http://www.cortex-pro.com>.

“Can’t access device” will be displayed because of one of the following problems with the storage device:

- Device is write protected

In the case of a USB flash drive, some units have a switch to enable write access.

- Device has already been ejected using the eject procedure.

Remove the USB device and plug it back in.

- Device is using an unsupported file system

The file systems supported are FAT32, NTFS, HFS+, CDFS, and UDFS.

- Device is not able to run without a proprietary hardware driver

Some devices require proprietary hardware device drivers. Although with the introduction of USB, this is less common, it still sometimes presents an issue. These devices are not compatible with the HDTT-5000.

- Device has been removed while before using the eject procedure

If the device is removed from the USB port without using the proper ejection procedure, it is possible that the unit will not detect the absence of a USB storage device, and will try to access the port anyway.

- If the device is powered by an external power supply, make sure that the unit is receiving power.

If the device is removed from the USB port without using the proper ejection procedure, it is possible that the unit will not detect the absence of a USB storage device, and will try to access the port anyway.

“Error creating DB” may be displayed if there is not a sufficient amount of space left on your storage device to create the necessary database files required to search through your music library.

- If you are out of space, try to delete some files and try the database process again.

- Check the USB cable that is being used to connect the storage device to the HDTT-5000.

- If the device is powered by an external power supply, make sure that the unit is receiving power.

From time to time new features will be added to your unit. For the most up to date information and help, please visit us on the web at www.cortex-pro.com.



Fig 4.1 - Error message

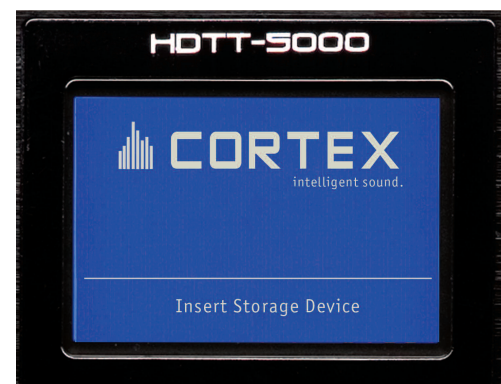


Fig 4.2 - Insert storage Device

Specifications

1. General

Type of unit.....	Streaming Digital Audio Controller
Format compatibility.....	MP3, WAV, CD-Audio
MP3 format.....	8 kbps ~ 320 kbps, CBR/VBR, 44.1 kHz
WAV format.....	44.1 kHz, 16 bit stereo
Instant Start.....	<0.1 second
Pitch ranges.....	4, 8, 16, 24%
Pitch increment.....	0.05% at 4 and 8%
.....	0.1% at 16 and 24%
Power.....	AC 100~240V, 50/60 Hz
Power consumption.....	12 watts
Operating environment temp.....	+5° C to +35° C (+41° F - +95° F)
Operating environment humidity.....	5-85%
Weight.....	10 lbs
.....	4.54 kgs
.....	3.25" H x 14.25" L x 12.25" W inches
.....	83 x 362 x 311 mm

2. Audio output section

Audio output.....	4 Channel (2x2)
Output level.....	1.2 V RMS (1 kHz, 0dB)
Output connectors.....	Unbalanced RCA Type
Frequency response.....	20 Hz - 22 kHz
S/N ratio.....	90dB
Total harmonic distortion.....	<0.05%

3. USB interface section

Connector type.....	USB Type A and B
USB protocol support.....	1.0, 1.1 (Full Speed) and 2.0 (Hi-Speed)
Number of ports.....	7
Maximum number of connected devices (via USB hub, sold separately)....
.....	4 per device (Plus Keyboard)
File system support.....	FAT32, NTFS, HFS+, CDFS, UDFS

4. Included Accessories

RCA audio cables.....	1
Power cable.....	1
Operating instructions.....	1
USB port protector cap.....	1

5. Replaceable Parts (order from GCI by part number if needed)

Power Cable.....
USB port protector cap.....	003-807-R
Pitch control knob.....

Should your Cortex product require warranty or non-warranty service in the USA, or if you wish to purchase replacement parts, operating instructions, or accessories, please contact GCI Technologies at the phone number listed below:

732-346-0061

Do not, under any circumstance, ship your product to GCI without first calling the Technical Support Department at the number listed above. Failure to establish an RMA (Return Merchandise Authorization) number prior to shipping your product will delay your repair indefinitely. GCI reserves the right to refuse all packages that arrive without an RMA number.

For warranty information, please refer to the warranty page included in this manual.

Once an RMA number is established, your unit should be sent to the address specified by your customer service representative, with the RMA clearly written on the outer carton:

For support or repair outside of the USA, please visit the Cortex website at <http://www.cortex-pro.com>.

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GCI United Kingdom LTD:	+44 (0)87 087-00880
GCI France	+ 33 1 69 79 97 72
GCI SA (Spain):	+34 93 436 37 00
GCI GmbH (Germany):	+49 8131 39171-0



Cortex products are designed and manufactured to the highest standards in professional audio. With proper care and maintenance, your product will provide years of reliable service. Please register your product online at <http://www.cortex-pro.com>

Limited Warranty:

In the USA, Cortex guarantees its products against defects in workmanship for the period of One (1) year* from the original date of purchase.

This limited warranty does **not** cover damage or failure caused by abuse, misuse, abnormal use, faulty installation, improper maintenance or any repairs other than those provided by an authorized service center.

There are no obligations of liability on the part of GCI, Cortex, or any of its retailers for consequential damages arising out of or in connection with the use or performance of the product or other indirect damages with respect to loss of property, revenues, profit, or costs of removal, installation, or reinstallation. All implied warranties for GCI, including implied warranties for fitness, are limited in duration to **One (1) year** from the original date of purchase, **unless otherwise mandated by local statutes.**

Returning Your Product for Service:

In the U.S.A., please call our helpful Customer Service Representatives at (732) 346-0061, and they will be happy to give you a **Return Merchandise Authorization (RMA)** number and the address of an authorized service center closest to you.

After receiving an **RMA**, include a **copy** of the **original sales receipt**, with defective product and a description of the defect. Send by insured freight to GCI Technologies Corporation, and use the address provided by your customer service representative. **Your RMA must be written on the outside of the package, or processing will be delayed indefinitely! GCI reserves the right to refuse all packages that arrive without an RMA number.**

Service covered under warranty will be paid for by GCI and returned to you. For non-warranted products, GCI will repair your unit after payment is received. Repair charges do not include return freight.

Your warranty is valid only in the country where the unit has been purchased. Repairs performed outside of the country of purchase will be treated as out-of-warranty.

For warranty service, **you pay for shipping to GCI; we pay for return shipping within the Continental United States.** Alaska, Hawaii, Puerto Rico, Canada, Bahamas, and the Virgin Islands **will be charged for freight.**

Please allow **2-4 weeks** for return of your product. Under normal circumstances your product will spend no more than **10** working days at GCI. We are not responsible for shipping times.

For repairs and warranty information outside of the USA, please call the GCI affiliate closest to where you reside, listed on the specifications page of this manual (page 28), or visit the Cortex website at <http://www.cortex-pro.com>.

* Unless otherwise mandated by local statutes.

For Your Records

Model Number of Product: <small>(HDC-1000, HDC-3000, HDTT-5000, DMIX-300)</small>	
Serial Number of Product: <small>found on rear panel of unit</small>	
Original Purchase Date:	
Name of Retailer:	

Please register your warranty online at <http://www.cortex-pro.com>