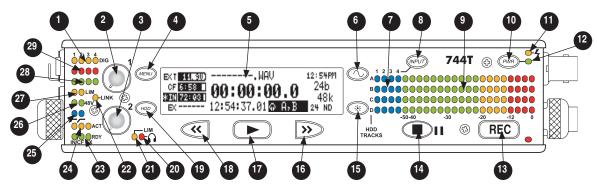
744T Quick Start Guide - U.T. Austin

(with thanks and a hat tip to Cal Arts and Sound Devices)

Front Panel Descriptions



1) Digital Input LEDs

Indicates the presence of digital signal on the respective input. When flashing, indicates that digital input is selected but no valid digital clock signal is pres-ent.

2) Input 1 Gain

Controls the analog gain (input trim) of the channel 1 input. Normal mic input range is from 25 dB to 70 dB, low gain mic range is from 10 dB to 55 dB, line input range is from –6 dB to 18 dB. For line-level inputs, this control can be defeated and gain can be setup menu-controlled. If the LCD display shows "locked" when the pot is turned, gain control of the line-level input is menu-controlled. When inputs are linked as a stereo pair, Input 1 Gain controls the gain of both inputs.

3) Input 2 Gain

Controls input 2 gain, as in #2 above. When inputs are linked as a stereo pair, Input 2 Gain controls left-to-right balance.

4) **MENU Key**

Used to access all 744T setup menu selections. When in menu mode, used to move up through the menu selections. Pressing the HDD and MENU keys simultaneously brings up the time code jam menu.

5) LCD Display

Primary display of 744T status. The LCD is backlit using the LCD backlight control (#15).

6) Tone Oscillator

Press to activate the tone oscillator, press and hold for two seconds or longer to latch on, press again to deactivate.

7) Input-to-Track Matrix LEDs

Blue LEDs indicate inputs (1, 2, 3, 4) enabled for recording to tracks (A, B, C, D).

8) INPUT Select Key

Pressing the INPUT key brings up the input muting and routing menu. Hold down the INPUT key and press one of the four indicated soft keys to mute inputs. Pressing the STOP key and the INPUT select key cycles through the six factory preset input-to-track routing combinations plus the custom routing menu. In the custom routing menu any input can be routed to any track. (See *Input-to-Track Routing*)

9) Level Meter LEDs

Four, 19-segment track level-meters indicate level in dBFS. Metering ballistics are selected in the setup menu.

10) Power Key

Press and hold to power up the 744T. Press and hold to power down.

11) Charge LED

Indicates the charge status of the on-board battery charger. LED fl ashes when external power is connected and the removable battery is charging; illuminates solid when battery is fully charged.

12) Power LED

Indicates the 744T is powered and available for operation. LED fl ashes when the removable battery or external DC is in a low-voltage state.

13) Record Key

Press to record. The 744T is a recordpriority device; pressing this key starts recording and discontinues all other functions, except file operations. Pressing key during recording can set a cue marker or start a new file, as selected in the setup menu.

14) Stop/Pause Key

Press and hold this key for 150 ms to stop recording. In Record Pause mode the STOP key will pause the recording, pressing it twice will finalize the recording. In playback mode, a single press pauses playback (play-pause), allowing audio scrubbing with the FF and REW keys. Another press of the key enters play-stop mode where the FF and REW keys select fi les for playback from the current directory. One more press of the key exits playback mode. In the setup menu the stop key is also used to exit from any menu, returning to the main display.

15) LCD Backlight Key

Press to toggle LCD and keyboard backlighting. Hold the key and turn the Rotary Switch to adjust the brightness of LEDs. In menu mode, functions as the cancel key.

16) Fast-Forward Key

Performs fast-forward (FF) scrubbing through the played fi le when pressed in playback and play-pause mode. Playpause indicated by fl ashing A-time on LCD. Fast forward rate increases the longer the key is held. In play-stop mode (indicated by fl ashing fi lename on LCD) selects the next fi le in the record folder (either daily folder or main folder).

17) Play Key

Plays back the file displayed in the LCD. If pressed immediately after recording is stopped, the most recently recorded file is played back.

18) Rewind Key

Performs reverse (REW) scrubbing through the played file when pressed in playback and play-pause mode. Playpause indicated by flashing A-time on LCD. Reverse playback rate increases the longer the key is held. In play-stop mode (indicated by flashing filename on LCD) selects the previous file in the record folder (either daily folder or main folder).

19) HDD (File Viewer) Key

Press to enter the File Viewer. The selected medium shown in white type will be the destination when the but-ton is pressed. Press-and-hold to toggle between available media. If only one media is present, press-and-hold is disabled. Pressing simultaneously with MENU opens the time code jam menu.

20) Headphone Output Peak LED

Indicates overload of the headphone amplifi er. When lit, the headphone circuit is overloading. Reduce headphone level.

21) **LIM LED**

Indicates that the microphone input limiters are engaged. This LED does **not** show input limiting activity (*see descriptor* #27, *Microphone Input Limiter LEDs*).

22) Link LED

Indicates that channels 1 and 2 are linked as a stereo pair. In link mode in-put 1 potentiometer controls gain, input 2 potentiometer controls left-to-right balance. Inputs can be linked as either a stereo L/R pair or as a Mid-Side (MS) pair.

23) Media Ready LEDs

Indicates storage media is present and available to record; IN (internal hard drive), CF (CompactFlash), EX (external FireWire device). Flashing indicates media problem.

24) Media Activity LEDs

Indicates storage media read/write activity. IN (internal hard drive), CF (Compact Flash), EX (external FireWire device).

25) High-Pass Filter LEDs

Indicates that the high-pass (low-cut) filter is active for the input. High-pass only operates when the input is set to microphone level.

26) Phantom Power LEDs

Indicates that phantom power (48 volts) is active for the individual input. Phantom can be applied to microphone or line-level signals (menu-selected).

27) Microphone Input Limiter LEDs

Illuminates orange when limiting is occurring on the microphone input. If constantly lit, the microphone input is being hit with too "hot" of a signal. Reduce the input sensitivity until limiting occurs infrequently.

- 28) **Input Signal Presence LEDs** Indicates presence of analog or digital signal and its relative level on each of the four inputs.
- 29) **Input Peak (Overload) LED** Indicates analog signal is approaching clipping (–3 dBFS) on each of the four inputs. Also used to indicate that an input is muted.

Panel Lock

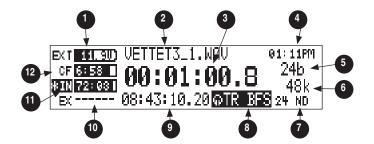
Press and hold the backlight key then the tone key to bring up the front panel Button Lock Screen. Button lock prevents unintentional changing of settings or record status. The 744T displays any button lock options enabled.



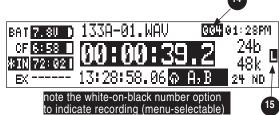
There are three modes:

- **Unlocked** all buttons are accessible and operate normally.
- Non-Transport Lock All front panel controls are locked except the Record, Stop, Play, Rewind and Fast Forward.
- Lock All All front panel keys are locked except the Record key. The Record key is kept active so the user can initiate recording after entering this mode and enter cue markers. To stop recording in this mode, you must disengage the panel lock and hit the stop key.

LCD Display Descriptions







1) Battery Level Indicator

Shows voltage level of the removable battery or external power sources. External power overrides battery power when present. Graphical bar for relative level and numeric indicator for precise voltage measurement.

2) File Name Display

Shows file name actively being recorded or played back. In playback-stop mode, flashing file name indicates that the fast-forward and rewind keys can be used to step through files in the current play-back directory.

3) Absolute Time (A-time) Display

Shows the elapsed time of the file being recorded or played back in hours, minutes, seconds, and tenths. The A-time and the time code display can be exchanged if a large time code display is needed. This display can be set to reverse or flash during recording. Flashes in playback-pause mode.

4) Time & Date Display

Alternating display between the set date and time of the 744T. This information is written as the creation and modification date for generated audio files.

5) Bit Depth Indicator

Shows the set record bit depth. In play-back, shows the file bit depth.

6) Sample Rate Indicator

Shows the set record sampling rate. In playback shows the file sampling rate.

7) Time Code Rate

Shows the set time code frame rate. If a file has time code information embedded, the playback frame rate is indi-cated. If external time code is connected and the external rate differs from the rate set internally, the time code rate will flash.

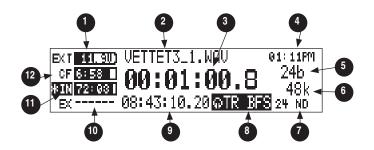
8) **Headphone Source Display** Indicates the source for headphone output. Sources and selection order are user selectable in the setup menus.

9) Time Code Display

In stop and record, shows the time code generated or received by the 744T. In play mode, the display shows the play file's time code information (if available). If nontime code files are playing, the display shows dashes. The time code display can be exchanged with the A-time display via a user menu selection.

10) External Media Space Status (space remaining/record ready) If a

drive is not attached the indicator shows dashed lines. Bar graph indicates amount of record time remaining on the external FireWire volume. Numbers show time in hours and minutes based on the presently selected number of record tracks, sample frequency, bit rate, and file type.







Internal Hard Drive Status (space remaining/record ready)

Bar graph indicates amount of record time remaining on the internal hard drive. Numbers show time in hours and minutes based on the presently selected of number of record tracks, sample frequency, bit rate, and file type.

12) CompactFlash Status (space remaining/record ready)

Bar graph indicates amount of record time remaining on the CompactFlash media. Numbers show time in hours and minutes based on the presently selected number of record tracks, sample frequency, bit rate, and file type.

For all three media types, an asterisk in front of the media descriptor indicates that the media is selected for record. Highlighted media descriptor indicates media selected for record monitoring, playback or file directory display.

13) Input 1/2 Level

When input 1 or 2 gain is turned this indicates the gain level in dB for inputs 1 and 2. Gain levels can be selected to always be displayed in the Setup Menu option LCD: GAIN DISPLAY. Normal mic input gain range is from 26 dB to 70 dB, low gain mic range is from 10 dB to 50 dB, line input range is from –6 dB to 18 dB. "Locked" will be displayed on the LCD when the pot is turned with digital inputs selected or with line inputs set to menu control.

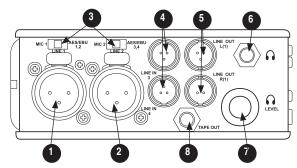
14) Cue Marker Display

In record mode, indicates when cue markers are set. Markers set by pressing the record key (option must be selected in setup menu). In playback mode, displays cue points numerically as they are reached in a file.

15) External Digital Clock Indicator

The 744T is locked to a valid external digital or word clock source for recording when the L is in the display.

Left Panel Connectors and Controls



1) XLR Input 1/AES3 Input 1&2 Dual

function input connection. Input type set with switch above. Active-balanced analog microphone- or line-level input for input 1. Transformer-balanced two-channel AES3 input (1 and 2).

- 2) **XLR Input 2/AES3 Input 3&4** Dual function input connection. Input type set with switch above. Active-balanced analog microphone- or line-level input for input 2. Transformer-balanced two-channel AES3 input (3 and 4).
- 3) **Mic-Line-AES3 Input Switch** Selects the input level and mode of the associated XLR input connector.
- 4) **TA3 Channel 3&4 Line Inputs** Active-balanced line-level input connec-tors. Pin-1 ground, pin-2 (+), pin-3 (-).

5) TA3 Master (L/R) Analog Outputs

Active-balanced, line-level analog L/R outputs for the Master Output Bus. Program source and attenuation level are user selectable. Pin-1 grnd, pin-2 (+), pin-3 (-).

6) Headphone Output

3.5 mm TRS stereo headphone connector. Can drive headphones from 8 to 1000 ohm impedances to very high levels. Tip-L, ring-R, sleeve-Gnd.

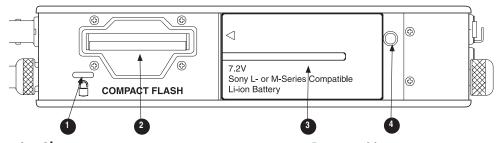
7) Headphone Volume

Adjusts the headphone volume. NOTE: the 744T is capable of producing ear-damaging levels in headphones.

8) Tape Output

Unbalanced tape (-10 dBV nominal) output on 3.5 mm TRS stereo connector. Signal source is identical to the Master Output Bus. Tip-L, ring-R, sleeve-Grnd.

Back Panel Descriptions



1) Security Slot

Compatible with the Kensington® Security Slot specification. Useful for securing the recorder to a fixed object with a compatible computer lock.

2) CompactFlash Slot

Accepts CompactFlash medium with the label-side up. Compatible with Type I, Type II, and MicroDrives.

3) Battery Mount

Accepts Sony® InfoLithium L- or M-Series batteries. Also accepts batteries conforming to this mount. Numerous capacities, from 1500 mAh to 7000 mAh are available.

4) Battery Release Pin

Push down the pin with a long skinny object such as a key, screwdriver, or a pen. With the pin pushed in, slide the L- or M-Series battery to the right to release the battery.

BASIC RECORD OPERATION: (Note: Menu #s may change as software is updated)





To setup the unit for your needs, press



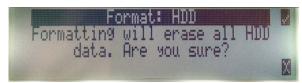
Exit menus by pressing X ...

Scroll through the menu using the 1 www & 1 www buttons just to the left of the screen, or by turning the multi-function controller on the right panel.

If you have just gotten the recorder from checkout & don't have any recordings on it, select **menu** item 81) INHDD: Erase/Format by pushing the $\sqrt{\ }$ button, or by turning & pushing the multifunction controller on the right panel.



By pushing the $\sqrt{}$ button, you select the highlighted menu item.



Follow directions to erase all data from the recorder. **THIS IS PERMANENT**.



Select Menu item 1) Quick Setup



Select: Load Film Settings by pushing the
button, or by turning & pushing the multifunction controller on the right panel.



This will give you:

- 48 kHz
- · 24 bit samples
- · 30 fps time code
- free run generator
- wav poly files
- record on hard drive AND compact flash
- · phantom power on
- · normal gain on mic inputs

Set the time format,#60, to 24 Hr and set date and time of day at #62 to current time and date



Scroll down to and select menu item 46) Time Code: Frame Rate.



Select 23.976 for HD. Shooting film? Choose 30 and find out about about the 48.048kF sampling rate.



Scroll down to and select menu item 47) Time Code: Mode.



Since we are not using time code slates, select **24h Run**. The internal generator will automatically jam from time of day on power-up.



If you are using only one mic, connect it to the left XLR. move the slider to **Mic 1**.



Hold the **STOP** button & press the **INPUT** button until only the blue light next to **A** & **1** is lit.



If you are using two mics, connect the second cable to the right XLR. move the slider to **Mic 2**.



Hold the **STOP** button & press the **INPUT** button until only the blue lights next to **A** & **1**, and **B** & **2** are lit.



Turn the headphone level control to 12 o' clock to start.

Connect your headphones. (*Don't* connect to the **TAPE OUT** jack!)



Adjust your mic level(s) with **GAIN** control(s) **1** & **2** for proper recording levels, watching the green, yellow, & red level LEDs. (If the knobs aren't sticking out, press them in until they click.)



Now adjust the headphone level until comfortable.

Now press the **Record** button.



You're recording! the name at the top of the display (i.e.: **T1.WAV**) is the name of the file being recorded to. each time you record, a new file will be created. Also, if you press **RECORD** again while recording, the file you're recording to will be closed, and a new file (with a new name) will begin. No audio is lost.

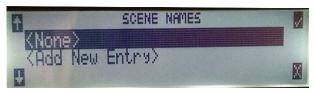
To stop recording, press the **STOP** button.



To change the way Scenes & Takes are numbered, use **menu items 7 and**



Select <Add New Entry>

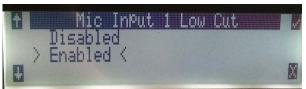


Use the multifunction knob on the right to call up letters and numbers. Scene names can be nine characters long. You can store the names and use them again (if you haven't reformatted)



Use menu items 21 to 24 to enable the Low Cut. Unless you are recording music or something else that must have bass, enable the Low Cut.





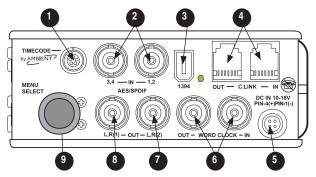
Start with the low cut frequency at 40Hz.



Enabling Low Cut will illuminate the **Low Cut** lights on the front panel.



Right Panel Connectors and Controls



1) Time Code Multi-Pin

Time code input and output on 5-pin LEMO® connector.

2) **AES3id Inputs 1/2 and 3/4**

Unbalanced digital input accepts two channel AES3 (or S/PDIF) on BNC connectors. Supports sample rates up to 200 kHz.

3) FireWire (IEEE-1394) Port

Connection to a computer (Mac OS, Windows 2k/XP, Vista, Linux) to access the internal hard drive and Compact-Flash volumes as mass storage devices. Also used to attach external FAT32-formatted FireWire drives to the 744T for direct recording and copying.

4) C. Link In/Out

RS-232 protocol interface on 6-pin modular ("RJ-12") connector for linking multiple 7-Series recorders together. Word clock, machine transport, and time code are carried on the C. Link connector.

5) External DC In

Accepts sources of 10–18 volts DC for unit powering and removable Li-ion battery charging. The Hirose 4-pin connector is wired pin-1 negative (–), pin-4 positive (+). Pin-2 (–) and pin-3 (+) are used to charge the removable Li-ion battery. DC ground at both pins-1 and 2 is at the same potential as chassis and signal ground.

6) Word Clock Input and Out

Provides clock input and output for the 744T. Word input accepts sampling rates between 32 kHz and 192 kHz. Word clock output is the rate that box is running. There is no sample rate conversion onboard the 744T.

7) AES3id Output Bus 2

Unbalanced digital output, two-channel, for Output Bus 2. Signal source is menuselected.

8) AES3id Master Output Bus

Unbalanced digital output, two-channel, for the Master Output Bus. Signal source is menu-selected and is identical to the Analog Master Output Bus signal.

9) Multi-Function Rotary Switch

When in the setup menu, the rotary switch moves between menu selections; push to enter selection or enter data. In record and playback modes, selects headphone monitor source; push action is user selectable.

Setup Menu Presets

Presets are useful shortcuts to speed setting the numerous parameters available in the setup menu. The 744T has four built-in presets and unlimited user presets.

Built-In Presets

The 744T is shipped from the factory with the factory preset applied. Its settings are listed below. Three additional presets, film, reporter, and music presets allow for quick setup of typical parameters for the defined application. Presets are applied by entering the setup menu and selecting the preset. All previous settings are lost when a preset is applied.

744T Presets	Factory Preset	Film Preset	Reporter Preset	Music Preset
Rec: FireWire Connection	External Drive	External Drive	Computer Connect	Computer Connect
Rec: Sampling rate	48 kHz	48 kHz	44.1 kHz	44.1 kHz
Rec: Bit Depth	24 bits	24 bits	16 bits	16 bits
Rec: File Type	.wav poly	.wav poly	.wav mono	.wav poly
Rec: Media Select	EXHDD and INHDD and CF	EXHDD and INHDD and CF	INHDD only	INHDD only
Rec: Scene Name/Number	None	None	None	None
Rec: Track Names	Track A: Track A Track B: Track B Track C: Track C Track D: Track D	Track A: Track A Track B: Track B Track C: Track C Track D: Track D	Track A: Track A Track B: Track B Track C: Track C Track D: Track D	Track A: Track A Track B: Track B Track C: Track C Track D: Track D
Rec: Take Name/Number	T 01	T 01	T 01	T 01
Rec: Take Reset Mode	When Scene is changed			
Rec: Pre-Roll Time	2 Sec	2 Sec	2 Sec	2 Sec
Rec: Dither	Off	Off	On	On
Rec: Timer Start	Disabled	Disabled	Disabled	Disabled
Rec: Timer Stop	Disabled	Disabled	Disabled	Disabled
Rec: Record Indicator	Normal Numbers	Normal Numbers	Normal Numbers	Normal Numbers
Rec: Record Pause	Disabled	Disabled	Disabled	Disabled
Input: Routing	1->A / 2->B / 3->C /4-> D	1->A / 2->B / 3->C /4-> D	1->A,B / 2->A,B	1->A / 2->B
Input 1: 48V Phantom	Off	On - Mic	On - Mic	On - Mic
Input 2: 48V Phantom	Off	On - Mic	On - Mic	On - Mic
Mic Inputs: Limiter	Enabled	Enabled	Enabled	Enabled
Mic Input 1: Low Cut	Disabled	Disabled	Enabled	Disabled
Mic Input 2: Low Cut	Disabled	Disabled	Enabled	Disabled
Mic Input 1: Low Cut Frequency	40 Hz, 12 dB/oct	40 Hz, 12 dB/oct	40 Hz, 24 dB/oct	40 Hz, 12 dB/oct
Mic Input 2: Low Cut Frequency	40 Hz, 12 dB/oct	40 Hz, 12 dB/oct	40 Hz, 24 dB/oct	40 Hz, 12 dB/oct
Mic Input 1: Gain Range	Normal	Normal	Normal	Normal
Mic Input 2: Gain Range	Normal	Normal	Normal	Normal
Input 1,2: Source	Auto Select	Auto Select	Auto Select	Auto Select
Input 3,4: Source	Auto Select	Auto Select	Auto Select	Auto Select
Input 1,2: Linking, MS	Unlinked	Unlinked	Unlinked	Linked 1,2
Line Input 1,2: Gain Ctrl	Use Front Panel Knobs			
Line Input 3: Gain	0.0 dB	0.0 dB	0.0 dB	0.0 dB
Line Input 4: Gain	0.0 dB	0.0 dB	0.0 dB	0.0 dB
Input 1: Delay	0 msec	0 msec	0 msec	0 msec

744T Presets	Factory Preset	Film Preset	Reporter Preset	Music Preset
nput 2: Delay	0 msec	0 msec	0 msec	0 msec
put 3: Delay	0 msec	0 msec	0 msec	0 msec
put 4: Delay	0 msec	0 msec	0 msec	0 msec
le: Marker Mode	New File	New File	New File	New File
e: Max Size	2G CF (1.8 GB)	2G CF (1.8 GB)	2G CF (1.8 GB)	2G CF (1.8 GB)
le: Folder Options	None	None	None	None
e: Copy Files	Copy all INHDD> CF	Copy all INHDD > CF	Copy all INHDD > CF	Copy all INHDD > CF
e: Copy Flag Reset	Enabled	Enabled	Enabled	Enabled
me Code: Frame Rate	30	30	30	30
me Code: Mode	Free Run	Free Run	Off	Off
me Code: Hold Off	2 sec	••••	••••	••••
me Code: User Bits	mm:dd:yy.tt	mm:dd:yy.tt	Not Used	Not Used
ne Code: Jam Menu	Jam RX TC	Jam RX TC	Jam RX TC	Jam RX TC
ne Code: Display Mode	Big A-time	Big A-time	Big A-time	Big A-time
utput1 Left: Source	Track A	Track A	Track A	Track A
tput1 Right: Source	Track B	Track B	Track B	Track B
utput1 L,R: Attenuation	0 dB	0 dB	0 dB	0 dB
utput2 Left: Source	Track C	Track C	Track C	Track C
utput2 Right: Source	Track D	Track D	Track D	Track D
tput2 L,R: Attenuation	0 dB	0 dB	0 dB	0 dB
gital Output: Mode	Consumer	Consumer	Consumer	Consumer
ay: AutoPlay Mode	Play All	Play All	Play All	Play All
ne/Date: 12/24 Hr	12 Hr	12 Hr	12 Hr	12 Hr
ne/Date: Date Format	MM/DD/YY	MM/DD/YY	MM/DD/YY	MM/DD/YY
D: Contrast	50%	50%	50%	50%
D: Gain Display	Bit Depth, SR & Gain	Bit Depth, SR & Gain	Bit Depth, SR & Gain	Bit Depth, SR & Gain
D: Scrolling Direction	Normal	Normal	Normal	Normal
eter: Ballistics	Peak Hold + VU	Peak Hold + VU	Peak Hold + VU	Peak Hold + VU
ter: Peak Threshold	0 dBFS	0 dBFS	0 dBFS	0 dBFS
eter: Stealth Mode	Off	Off	Off	Off
: Rotary Sw Function	Selects Favorite Mode	Selects Favorite Mode	Selects Favorite Mode	Selects Favorite Mode
P: Monitor Modes	01> Inputs 1,2 02> Inputs 3,4 03> Tracks A,B 04> Tracks C,D 05> Input 1,1 06> Input 2,2 07> Input 3,3 08> Input 4,4 09> Monitor A,B 10> Monitor C,D	01> Inputs 1,2 02> Inputs 3,4 03> Tracks A,B 04> Tracks C,D 05> Input 1,1 06> Input 2,2 07> Input 3,3 08> Input 4,4 09> Monitor A,B 10> Monitor C,D	01> Tracks A,B	01> Inputs 1,2 02> Inputs 3,4 03> Tracks A,B 04> Tracks C,D 05> Input 1,1 06> Input 2,2 07> Input 3,3 08> Input 4,4 09> Monitor A,B 10> Monitor C,D
P: Favorite Mode	Tracks A,B	Tracks A,B	Tracks A,B	Tracks A,B
P: Playback Mode	Tracks A,B	Tracks A,B	Tracks A,B	Tracks A,B
P: Warning Bell	-30 dBFS	-30 dBFS	-30 dBFS	-30 dBFS
P: Record/Stop Bell	Disabled	Disabled	Disabled	Disabled
ne: Level	-20 dBFS	-20 dBFS	-20 dBFS	-20 dBFS
ne: Frequency	1000 Hz	1000 Hz	1000 Hz	1000 Hz
ne: Mode	To Rec Tracks and Outputs	To Rec Tracks and Outputs	To Rec Tracks and Outputs	To Rec Tracks and Outp



744T Presets	Factory Preset	Film Preset	Reporter Preset	Music Preset
Tone: Record Lock	Locked While Recording	Locked While Recording	Locked While Recording	Locked While Recording
INHDD: Empty Trash	Empty Trash	Empty Trash	Empty Trash	Empty Trash
CF: Empty Trash	Empty Trash	Empty Trash	Empty Trash	Empty Trash
EXHDD: Empty Trash	Empty Trash	Empty Trash	Empty Trash	Empty Trash
Power: Ext Low Batt Volt	11.0 volts	11.0 volts	11.0 volts	11.0 volts
Power: Ext Power Function	Do Nothing	Do Nothing	Do Nothing	Do Nothing
Power: Power-up Messages	Enabled	Enabled	Enabled	Enabled
Ext Keyboard: Assign	F1 > Record F2 > Stop Button F5 > Rewind Button F6 > Play Button F7 > Fast Forward Button CTRL + C > File: Copy Files Last 24Hr CF > EXHDD CTRL + H > File: Copy Files Last 24Hr INHDD > EXHDD	F1 > Record F2 > Stop Button F5 > Rewind Button F6 > Play Button F7 > Fast Forward Button CTRL + C > File: Copy Files Last 24Hr CF > EXHDD CTRL + H > File: Copy Files Last 24Hr INHDD > EXHDD	F1 > Record F2 > Stop Button F5 > Rewind Button F6 > Play Button F7 > Fast Forward Button CTRL + C > File: Copy Files Last 24Hr CF > EXHDD CTRL + H > File: Copy Files Last 24Hr INHDD > EXHDD	F1 > Record F2 > Stop Button F5 > Rewind Button F6 > Play Button F7 > Fast Forward Button CTRL + C > File: Copy Files Last 24Hr CF > EXHDD CTRL + H > File: Copy Files Last 24Hr INHDD > EXHDD
Ext Keyboard: Langauge	English	English	English	English
CL-1: Re-Program	CL-1 Module	CL-1 Module	CL-1 Module	CL-1 Module
CL-1: Logic Out Assign	(Undefined)	(Undefined)	(Undefined)	(Undefined)

User Setup Data File

All of the set parameters in the table above can be saved in a date file to internal hard drive or to CF card. By entering QUICK SETUP from the Setup Menu, selecting SAVE USER TO INHDD/CF the user can save or restore parameters to and from this data file. This binary file is named 744T.SUP and is saved in the SOUNDDEV directory on the medium selected in the setup menu.

Setup Menu

The Setup Menu controls a wide range of parameters for the 744T, including all audio routing, recording settings, and time code options. The setup menu is a single, flat architecture with no submenus, easing navigation. Each setup controls a specific parameter with several selections. The chart below shows the setup number, a description of the control, and the menu options available.

#	Setup Name	Setup Description	Setup Options
1	Quick Setup	Allows the user to quickly apply default menu set- ups and save/retrieve user setups to disk or CF.	Load Factory Settings restores the factory default settings
			Load Film Settings applies typical setups for film production
			 Load Reporter Settings applies typical setups for voice recording
			Load Music Settings applies typical setups for music recording
			Load User from INHDD applies settings saved by user to hard disk
			 Load User from CF applies settings saved by user to CF
			Save User to INHDD saves present state to file on hard drive
			Save User to CF saves present state to file on CF
2	FireWire: Connection	Activates FireWire drive mode.	Computer/Connect (STOP+HDD buttons) External Drive
3	Rec: Sample Rate	Sets the audio sampling frequency of the 744T	• 32 kHz • 44.1 kHz • 96 kHz • 47.952 kHz • 96.096 kHz • 47.952k F • 96.096 k F • 48 kHz • 176.4 kHz • 48.048 kHz • 48.048k F
4	Rec: Bit Depth	Sets the bit depth of the 744T recordings.	• 16 bit, • 24 bit
5	Rec: File Type	Selects the file format (type) recorded to the selected medium.	. wav poly . wav mono . MP2 64 kb/s . MP2 96 kb/s . MP3 32 kb/s . MP2 128 kb/s . MP3 64 kb/s . MP3 64 kb/s . MP3 96 kb/s . MP2 128 kb/s . MP2 120 kb/s . MP3 128 kb/s . MP2 192 kb/s . MP3 128 kb/s . MP2 256 kb/s . MP3 192 kb/s . MP3 192 kb/s . MP3 256 kb/s . MP3 256 kb/s
6	Rec: Media Select	Selects the storage media used for recording. Media is selectable even if it is not present.	INHDD Only CF Only EXHDD Only EXHDD Only EXHDD and INHDD EXHDD and CF EXHDD and INHDD and CF
7	Rec: Scene Name/Number	User-defined, alpha-numeric file scene names can be pre-set and selected from a list. Scene name lists can be saved to hard drive. Up to 9 alpha-numeric characters can be entered for the scene name. Scene name can also be left blank	
8	Rec: Track Names	Used to identify a track name which shows up in iXML and BWF metadata	Track A Mix Boom Track C Add New Entry> Track D Calculated From INHDD> Save List From INHDD>



#	Setup Name	Setup Description	Setup Options
9	Rec: Take Name/Number	Numeric, auto-incrementing number used for take identification.	<selectable +="" 32000,<br="" alpha="" character="" integers="" to="" up="">with or without preceding 0's></selectable>
10	Rec: Take Reset Mode	Defines when take numbers are reset. Reset brings take number to <1>.	Never take numbers do not reset
			When scene is changed take resets when scene name is changed
			When daily folder changes takes reset on new day
			Either scene or daily takes reset on either change
11	Rec: Pre-Roll Time	Selects the amount of pre-roll time the 744T will add to the beginning of each file.	0-10 sec. @ 48 kHz 0-5 sec. @ 88.2-96.096 kHz 0-2 sec. @ >96.096-192 kHz
12	Rec: Dither	Selects whether to dither is added to 24 bit digital signals while recording 16 bit files.	Off On (16 bit only)
13	Rec: Timer Start	Sets a specific start time/date for unattended recording. Unit must be powered.	<enter date="" time,=""></enter>
14	Rec: Timer Stop	Set a specific time/date to stop recording. May be used with or without the Rec: Timer Start. May be set before the Timer Start time to temporarily stop recording and then resume recording with Timer Start.	<enter date="" time,=""></enter>
15	Rec: Record Indicator	Sets how the large display looks when the unit enters record.	Normal Numbers Reverse Numbers Flash Numbers
16	Rec: Record Pause	Allows a recording to be stopped then continued without creating a new take or file. Time Code Mode must be set to Off to enable Record Pause.	Disabled Enabled
17	Input: Routing	Allows the user to setup their routing matrix among all available inputs and tracks. There are preset routings and three custom routings available. Pressing the input select key repeatedly will cycle through all preset routings.	$\begin{array}{c} \bullet.1 \rightarrow A \\ \bullet.1 \rightarrow A/2 \rightarrow B \\ \bullet.1 \rightarrow A/1 \rightarrow B \\ \bullet.1 \rightarrow A,B/2 \rightarrow A,B \\ \bullet.1 \rightarrow A/2 \rightarrow B/3 \rightarrow C/4 \rightarrow D \end{array}$
		Primarily accessible from the Input Select Key.	 1,2,3 → A / 1 → B / 2 → C / 3 → D Custom Route 1 Custom Route 2 Custom Route 3
18 19	Input 1: 48V Phantom Input 2: 48V Phantom	Enables or disables 48 V phantom power on inputs 1 and 2.	On - Mic On - Mic On - Mic and Line
20	Mic Inputs: Limiter	Enables or disables the analog input limiter on input 1 and 2 mic preamps.	Disabled Enabled
21 22	Mic Input 1: Low Cut Mic Input 2: Low Cut	Enables the high-pass (low cut) filter to reduce sensitivity to low frequencies.	Disabled Enabled
23 24	Mic Input 1: Low Cut Freq Mic Input 2: Low Cut Freq	Selection of twelve high-pass filter frequency and slope combinations for microphone inputs.	• 40, • 80, • 160, • 240 Hz @ 12 dB/oct • 40, • 80, • 160, • 240 Hz @ 18 dB/oct • 40, • 80, • 160, • 240 Hz @ 24 dB/oct
25 26	Mic Input 1: Gain Range Mic Input 2: Gain Range	Selects the sensitivity of the microphone input. Low sensitivity is used for very loud and/or very hot microphones.	Normal Low Normal, fades to off Low, fades to off
27 28	Input 1, 2: Source Input 3, 4: Source	Forces the inputs to analog or digital mode. Default is auto-select.	Auto-select Analog Digital (S/PDIF/AES) Disabled (Power Save)

#	Setup Name	Setup Description	Setup Options
29	Input 1,2: Linking, MS	Selects whether the input 1 & 2 levels are controlled independently or grouped as a pair with or without mid-side decoding.	Unlinked Inputs 1 and 2 operate independently Linked 1/2 Inputs are linked, channel 1 pot controls level, channel 2 pot controls pan Linked 1/2 and MS Inputs are linked, channel. 1 pot controls level, channel. 2 pot controls pan and are decoded for MS stereo.
30	Line Input 1,2: Gain Control	When inputs 1 and 2 are in LINE input mode, selects whether the gain setting is controlled by the front panel knobs or by the menu sensitivity settings below.	Use front panel knobs Use sensitivity settings
31 32 33 34	Line Input 1: Gain Line Input 2: Gain Line Input 3: Gain Line Input 4: Gain	Adjusts the input sensitivity in 0.1 dB steps –6 dB and +18 dB.	Meters show a pre-fader level of the input signal of all four inputs on their respective meters to aid in the adjustment.
35 36 37 38	Input 1: Delay Input 2: Delay Input 3: Delay Input 4: Delay	Sets a digital delay for each input. Can be used to compensate for delay in various digital wireless microphone units or digital processors.	0 to 30 milliseconds, 0.1 mS increments 0 mS to 30,000 mS up to 48.048 kHz Fs 0 mS to 15,000 mS up to 96.096 kHz Fs 0 mS to 7,500 mS up to 192 kHz Fs
39	File: Marker Mode	Enables the user to set cue points on the fly while recording by pressing the record key.	Markers disabled No cue marks are set. New Cue Cue markers will be set within one contiguous file. New File A new file is started with each press of the record key, the take counter is increased by one.
40	File: Max Size	Selects the file size where the 744T will close, then start a new file. The 744T will not record a file larger than the selected size. The largest file permissible with the 744T's FAT32 file system is 4 GB	• 4 GB CF (3.6 GB) • 2 GB CF (1.8 GB) • 1 GB CF (950 MB) • 512MB CF (450 MB)
41	File: Folder Options	Allows user to organize files in root and sub- folders. To not use any folders select <none> on every level.</none>	*TOP-LEVEL
42	File: View Files	Enters the file directory tree for the selected drive.	Highlight media descriptor to navigate the menu
43	File: View Take List	Allows user to view the last 200 takes. Takes can be selected and converted to circle takes.	• Circle
44	File: Copy Files	Allows the user to select a file or a range of files to be copied from one storage media to another. Files will only be copied from their current directory to a directory of the same name on the other media. If a file will not fit on the destination media, user is given the option to skip that file and continue with the copy or abort the copy all together. User is advised at the end of the copy process how many files were copied successfully.	Copy all {drive} → {drive} Last 24 hr {drive} → {drive} Last 48 hr {drive} → {drive} Flagged {drive} → {drive} All files, when recorded, automatically have their flag bit set to "on"
45	File: Copy Flag Reset	Selects whether the flag bit is cleared or not on files copied from one media to another.	Disabled Enabled



#	Setup Name	Setup Description	Setup Options
46	Time Code: Frame Rate	Sets the time code frame rate. All common time	• 23.976 – used with high definition video cameras
		code frame rates are available.	• 24 – to sync audio to film where no transfer to NTSC video is expected
			• 25 – to sync sound to PAL video
			• 29.97 – to sync sound to NTSC video shot in non- drop frame mode
			29.97DF - to sync sound to NTSC video shot in drop frame mode
			• 30 – to sync sound to film where transfer to NTSC video is expected
			30DF – to sync sound to film for transfer to NTSC video in drop-frame mode
			• 30+ - Records at 48.048 sampling rate at 30 frames per second but stamps the file at 48kHz, 30 frames per second
47	Time Code: Mode	Sets the mode for the time code generator	Off – time code not active, recorded or output
			Free Run – time code is initialized from the jam menu and then runs continuously regardless of record mode
			Free Run Jam Once – time code is initialized from an external source and updates itself to the external source when reconnected
			Record Run – time code is initially set from the jam value item in the jam menu. Time code generation runs only during recording generating continuous time code from file to file.
			24 Hr Run – time code is initialized from the system clock on startup and enters free run mode. Time code is updated if the time of day clock is adjusted.
			Ext TC – applies external time code to the recorder directly. The internal time code generator has no effect.
			Ext TC/cont – applies external time code to the recorder; internal generator continues to run if time code signal is lost. Useful for time code transmission over RF
			Ext TC-Auto Record – applies external time code to the recorder. Unit enters Record when time code runs and stops when time code stops.
			Ext TC/cont-Auto Record – applies external time code to the recorder; internal generator continues to run if time code signal is lost. Unit enters Record when time code runs and stops when time code stops.
48	Time Code: Hold Off	Sets the duration that a valid time code signal has to be recognized by the 744T before generating a new take while in Ext TC-Auto Record and Ext TC/cont-Auto Record modes.	0.0 to 8.0 seconds adjustable in increments of .1 seconds
49	Time Code: User Bits	Sets the time code user bits generated by the 744T.	Not Used – user bits are not set or output
		mm – month	• mm:dd:yy.tt
		dd – day of week yy – year	• dd:mm:yy.tt
		tt – take number uu – user-defined	• uu:uu:tt:tt – user bits are set to 4 user definable digits with 4 take digits
			• uu:uu:uu:uu
			tt:tt:tt.tt – user bits are set to the take counter for all 8 digits
			mm:dd:yy:uu dd:mm:yy:uu

#	Setup Name	Setup Description	Setup Op	tions
50	Time Code: Jam Menu	Allows the user to jam or edit the internal time code generator and user bits. (Also accessible by press-	Jam RX TC – jams the interr received external code	nal generator to
		ing HDD and Menu keys simultaneously).	Jam Zeros – resets the inter	nal generator to zero
			Jam Value – sets the internal set in edit value	I generator to the value
			Edit Value – allows to user to number to initialize the time or	
			Edit U-Bit – allows the user numbers	to edit allowed user bit
51	Time Code: Display Mode	Sets the numbers of the large numerical display.	Big A-time Big time code	
52 53	Output 1 Left: Source Output 1 Right: Source	Selects the signal source for the Master Output Bus (TA3 outputs, tape outputs, and digital 1 outputs.	• Input 2 • Input 3 • Input 4 • Track A • Track B • Track C • Track D • Input 1+2 • Input 3+4	nput 2+4 nput 1+2+3 nput 1+2+3+4 nput 1+2+3+4 Track A+B Track A+C Track B+D Track A+B+C Track B+D Track A+B+C Track A+B+C
54	Output 1 L,R: Attenuation	Selects the attenuation level of signal sent to the Master Output Bus.	Selectable from 0 to -40 dBFS	
55 56	Output 2 Left: Source Output 2 Right: Source	Selects the signal source for output bus 2 sent to digital output bus 2.	• Input 2 • Input 3 • Input 4 • Irack A • Track B • Track C • Track D • Input 1+2 • Input 3+4	nput 2+4 nput 1+2+3 nput 1+2+3+4 nput 1+2+3+4 Track A+B Track C+D Track A+C Track B+D Track A+B+C Track B+C+D Track A+B+C
57	Output 2 L,R: Attenuation	Selects the attenuation level of the signal output to bus 2.	Selectable from 0 to -40 dBF	3
58	Digital Output: Mode	Selects whether or not the consumer SPDIF bit is applied or not in the AES3id output.	Consumer Professional	
59	Play: AutoPlay Mode	Allows user to play file(s) consecutively from selected directory, one time through or continuously. Great for playing an MP3 collection during down time!	DisabledPlay allRepeat oneRepeat all	
60	Time/Date: 12/24 Hr	Selects between 12 hour and 24 hour time.	• 12 hr • 24 hr	
61	Time/Date: Date Format	Selects the date syntax of the recorder.	• mm/dd/yy • dd/mm/yy	
62	Time/Date: Set	Sets the internal date and time of the 744T.	<time, date=""></time,>	
		Resetting the time re-jams the internal time code generator to the set time. Setting the internal clock during a production day will require time code devices to be re-jammed.	Clock is not set until <done> i</done>	s selected



#	Setup Name	Setup Description	Setup Options
64	LCD: Gain Display	Sets the Main LCD Display to show the gain values of inputs 1 and 2 always or to show Bit Depth and Sample Rate and Gain of input 1 and 2 only when attenuated.	Bit Depth, SR & Gain Gain Only
65	LCD: Scrolling Direction	Defines the direction in which the Multi-Function Rotary Switch will navigate throughout the 744T.	Normal Reverse
66	Meter: Ballistics	Selects among five different meter ballistics settings	• VU only • Peak+VU • Peak only • Peak-hold + VU • Peak-hold only
67	Meter: Peak Threshold	User-set level in dBFS where track peak LED's illuminate. 0 LED doubles as track peak indicator.	0 to -20 dBFS (1 dB increments)
68	Meter: Stealth Mode	Enables LEDs to toggle on and off with the LCD backlight key.	• Off • On
69	HP: Rotary Switch Function	Selects the functionality of the Rotary Switch's button when in record and playback.	Disabled: push makes no change to the headphone matrix.
			Selects Favorite Mode: in record and playback modes, push will change the headphone source immediately to the favorite selected in HP: Favorite Mode.
			Headphones to C/D Meters: momentarily shows headphone level on tracks C & D LED meters.
			Playback/Monitor Drive Select Selects the media source for file playback and record monitoring
70	HP: Monitor Modes	Select the sequence of the modes that appear in the Headphone Source Display on the LCD.	Up to 20 source selections can be entered in any order. See headphone monitor section in guide for adjustment and Favorite Mode below for list of headphone selections.
71	HP: Favorite Mode	Selects the audio source monitored when the Rotary Switch is pressed during recording or playback.	Inputs 1,2
72	HP: Playback Mode	Selects the audio source sent to headphones upon playback.	No change Same as options listed above
73	HP: Warning Bell Level	Set the output level of the multi-function warning bell.	off, -60 to -12 dBFS in 1 dB steps
74	HP: Rec/Stop Bell	Alerts the user with one beep at the start of recording and two beeps when the recording is stopped	Disabled Enabled
75	Tone: Level	Set the output level of the reference tone	-40 to 0 dBFS in 1 dB steps

#	Setup Name	Setup Description	Setup Options
76	Tone: Frequency	Allows the user to set the frequency of the reference tone oscillator	100-10,000 Hz in 10 Hz steps
77	Tone: Mode	Select the destination of the reference tone or to disables it completely	disabled to record tracks only to outputs only to record tracks and outputs
78	Tone: Record Lock	Sets the Tone key to be either available or locked while in Record Mode.	Enabled While Recording Locked While Recording
79	Drive: Speed Tests	Performs a write/read speed test on the internal hard drive, CompactFlash, and external drives. Data transfer speed is measured in KB/s.	Caution: Drive test will disable processing and mute outputs for duration of test. Outputs will not return until test is exited.
80	INHDD: Space	Shows the drive file system, total size, and space remaining on the internal hard drive.	
81	INHDD: Erase	Formats the internal hard drive. Caution, while various PC utilities are able to recover files from a re-formatted drive, once formatted old audio data is not accessible by the 744T.	Empty Trash Empty False Takes Empty both
82	INHDD: Empty Trash	Allows user to delete files previously sent to the trash as well as false takes.	
83	CF: Space	Shows the drive file system, total size, and space remaining on connected CompactFlash medium.	
84	CF: Erase	Formats installed CompactFlash medium Caution, while various PC utilities are able to recover files from re-formatted drives, once formatted, old audio data is not accessible by the 744T.	
85	CF: Empty Trash	Allows user to delete files previously sent to the trash as well as false takes.	Empty Trash Empty False Takes Empty both
86	EXHDD: Space	Shows the drive file system, total size, and space remaining on connected external medium.	
87	EXHDD: Erase	Formats attached FireWire storage volume Caution, while various PC utilities are able to recover files from re-formatted drives, once format- ted, old audio data is not accessible by the 744T.	
88	EXHDD: Empty Trash	Allows user to delete files previously sent to the trash as well as false takes.	Empty Trash Empty False Takes Empty both
89	Balance Cal	Calibrates the center position of the input 2 pot when used as the balance control for MS recording.	Place balance control to center and press to select.
90	Power: Ext Low Batt Volt	Sets the warning voltage of the low battery alert with an external power source. Internal battery warning threshold is factory set.	10.0-18.0 VDC, 0.1 V steps
91	Power: Ext Power Function	Controls the behavior of the unit when power is applied to the external DC jack. Pin-3 (+) of the external DC input must be wired in order for the External Power Functions to operate.	Do Nothing Power On Unit Power On and Start Record Power On/Off unit Power On/Off unit and Record



#	Setup Name	Setup Description	Setup Options
92	Power: Power-up Messages	Enables or disables the notifications that appear upon boot up (daily folder prompt, output attenuation notice, and set time and date message). Disabling these messages is useful when using the External Power Functions to power on and start recording.	Disabled Enabled
93	Ext Keyboard: Assign	Enter to setup keyboard shortcuts when using the CL-1 keyboard interface	
94	Ext Keyboard: Language	Select the language of the keyboard attached to the CL-1.	English German French
95	CL-1: Re-program	The CL-1 has its own firmware which is supplied from the 744T. This utility updates the CL-1 firmware.	
96	CL-1: Logic Out Assign	Each logic output pin can be assigned to go high when the unit is in the selected mode. Logic input overrides logic output selection.	Undefined Stop Play Pause Record
97	Info: Button Shortcuts	An informative menu showing the available keyboard shortcuts.	
98	Info: Version	Shows the hardware revision, serial number, and firmware version of the unit.	
99	Update Software	Upgrade tool used to apply new firmware. It will search all connected storage for the firmware file and prompt to update.	

Setup Menu Shortcuts

The setup menu can quickly be navigated by using the Rotary Switch to scroll up and down through the menu. Additionally, shortcuts, or "bread crumbs" can be placed on often-used menu items. A bread crumb is set by holding the play key. A small dot is shown to the left of the setup number. Any number of bread crumbs can be set, but their utility is reduced with too many applied.

press and hold to set or remove a menu crumb; single press navigates to menu item #1



toggles among menu bread crumbs to lower numbered items

with no bread crumbs placed, moves to a previous general menu section



toggle's among menu bread crumbs to higher numbered items

with no bread crumbs placed, moves to the next general menu section

Front Panel Button Shortcuts

To speed navigation the 7-Series has numerous navigation "shortcuts". For combinations, hold down the first identified key and continue to hold while pressing the next keys.

Function	Koy Soguence	Action
	Key Sequence	
Record Tone	REC +	Record and Tone In the menu File: Marker Mode must be set to Markers Disabled. While recording hold the REC key and press the tone button. Tone will be active as long as the tone button is held.
Jam Menu	MENU) + HDD	Menu and HDD Enters the time code jam menu. (702T &744T Only)
Button Lock		Backlight and Tone
Button Esox	* + 0	Press backlight then tone to lock all front panel buttons except for Record, Stop and Play. FF and Rew are available in playback mode. Use backlight and tone again to unlock the panel.
Input Mutes	(NPUT)	Input Hold down and press soft buttons to mute inputs
Input		Stop and Input
Routing	+ (NPUT)	Hold down STOP and press INPUT to cycle through input routing presets. Last preset will open the input routing menu to the custom route selection
Phantom #1	+ (MENU)	Tone and Menu Toggles Input 1 phantom power. Phantom 1 & 2 are linked when Inputs 1 & 2 are linked.
Phantom #2	+ HDD	Tone and HDD Toggles Input 2 phantom power
Low-cut #1	+ MENU	Backlight and Menu Toggles Input 1 high-pass filter. Low-cuts 1 & 2 are linked when Inputs 1 & 2 are linked.
Low-cut #2	* + (HDD)	Backlight and HDD Toggles Input 2 high-pass filter
Connect FireWire	+ (HDD)	Stop and HDD Initiates FireWire connection if previously disconnected via an "eject" command
False Take	+ ((Stop and Rewind Delete last take prompt.
Increase Take	· >>>	Stop and Fast Forward Increments take number to be recorded for next file
Take List	, P	Stop and Play Take list and circle take identifying screen
Toggle Drives	HDD	HDD Hold the HDD button down for 1 second to toggle between viewable drives.
LED Level	+ Rotary Switch	Backlight and Rotary Switch Adjusts level of LED brightness.
Flashlight		Rewind and Play and Stop
Mode	+ + + +	With the power off, hold down these buttons while powering the unit to enter Flashlight mode. This illuminates all LEDs except for three. Press power again to exit.

