

**QUICK INTERNAL MIXER**

1. Make sure the SHIFT indicator is OFF!
2. Press the MIXDOWN key so its indicator lights.
3. Now press the SHIFT key so the indicator flashes.
4. Press the MIXDOWN key again.
5. Press the REC FUNCTION button for the channel you wish to edit.
6. Choose Input source, Master Level, Channel level or Channel pan with MIXDOWN button.
7. Use the UP and DOWN ARROWS or DATA/LEVEL wheel to edit values.
8. The mixed stereo signal is routed to analog outputs 7 & 8, TDIF outputs 7 & 8 and the SPDIF output.
9. To record the mixed stereo signal to tracks 7 & 8 push SHIFT.
10. Push the REC FUNCTION button for track 7 to arm tracks 7 & 8.
11. Push SHIFT then push MIXDOWN To edit mix parameters in real time.
12. To hear results Push SHIFT then push MIXDOWN. Rewind to beginning and monitor tracks 7 & 8.

**EMULATION MODE**

1. Press SHIFT key so the indicator flashes
2. Press the MENU key until the display briefly shows MAINTN--
3. Press SUB MENU until the display briefly shows DEV TYPE
4. Use the UP and DOWN ARROWS to choose the device you wish to emulate

**SETTING MACHINE ID**

1. Press the SHIFT key so the indicator flashes.
2. Press the MENU key until the display shows SYSTEM
3. Press SUB MENU key until the display shows ID SELxx
4. Use the UP and DOWN ARROWS to change the ID value

**MACHINE OFFSETS**

1. The machine ID must be set to anything but 1(You would only use offsets if the DA-78HR was going to be used as a slave)
2. Press the SHIFT key so the indicator lights
3. Press the AUTO IN/OUT (OFFSET) key
4. Use the UP and DOWN ARROWS to change the value
5. Use the SHIFTED UP and DOWN ARROWS to move the cursor

**ASSIGNING MIDI IDS**

1. Press the SHIFT key so the indicator lights
2. Press the MENU key until the display shows MIDI--
3. Press SUB MENU key until the display shows ID followed by the current ID # (1-127)
4. Use the UP and DOWN ARROWS to change the MIDI ID number.

**INTERNAL PATCHBAY**

1. Press the SHIFT key so the indicator lights
2. Press the MENU key until the display shows AUDIO1--
3. Press SUB MENU key until the display shows IN PATCH
4. Press the REC FUNCTION button of the track you wish to assign an input to
5. Use the UP and DOWN ARROWS to change the input assigned to that track.

**VARI SPEED (PITCH CONTROL)**

1. Push the VARI SPEED button.
2. The VARI SPEED indicator will light and the SHIFT indicator will blink.
3. Use the UP and DOWN ARROWS to change the speed by + or – 6%
4. To exit this edit mode push the SHIFT key.
5. The VARI SPEED indicator will remain solid until you push the
6. VARI SPEED button again to dissable this function.

**MMC ENABLE/DISABLE**

1. Press the SHIFT key so the indicator lights
2. Press the MENU key until the display shows MIDI
3. Press SUB MENU key until the display shows MIDI
4. Use the UP and DOWN ARROWS to turn MMC On or Off
5. WARNING! This will also enable or disable the transmission of MTC

**SHUTTLE MONITORING / SHUTTLE MUTE**

1. Press the SHIFT key so the indicator lights
2. Press the MENU key until the display shows AUDIO 2--
3. Press SUB MENU key until the display shows SHTL MUT x
4. Use the UP and DOWN ARROWS to toggle between
5. 1 (shuttle mute enabled) or 0 (shuttle mute disabled)

**CHOOSING A SOURCE TO RECORD TIME CODE**

1. Press the SHIFT key so the indicator lights
2. Press the MENU key until the display shows TCG REC
3. Press SUB MENU key until the display shows TC REC SRC
4. Use the UP and DOWN ARROWS to select a source for the time code recording. EXT, TCG or TAPE TC

**SYNCHRONIZING OTHER EQUIPMENT TO THE DA-78HR USING SMPTE**

The easiest way to do this is to simply derive SMPTE from the ABS time encoded on the tape. Using this method saves the time required to stripe SMPTE on tape and allows the flexibility of changing frame rates as needed.

**TO SET THE DA-78HR TO OUTPUT SMPTE FROM ABS:**

Press the SHIFT key so the indicator lights.

1. Press the MENU key until the display shows TC.
2. Press the SUB MENU key until the display shows TAPETC.
3. After a moment the display will change to show the currently selected TC source: ABS or TC Track. Use the UP and DOWN ARROWS to select ABS.
4. If you are synchronizing a sequencer to the DA-78HR you need to connect a cable from the TC OUT jack on the DA-78HR to your MIDI interfaces SMPTE TC INPUT jack. Make sure your sequencer is set to read SMPTE time code in “SLAVE MODE.” Your sequencer must also have the proper frame rate and start time to match the location you want to be working with on the tape.

**TO SET THE SMPTE FRAME RATE ON THE DA-78HR:**

1. Press the MENU key until the display reads SYSTEM
2. Press the SUB MENU key until the display briefly reads TIME MODE, The display will now read TMD xxx
3. Use the UP and DOWN ARROWS to choose TC (Time code)
4. Press the MENU key until the display briefly reads TC.
5. It will then briefly read FRM MODE (Frame mode) and finally settle on SYS .xxxx.
6. Use the UP and DOWN ARROWS to choose the appropriate SMPTE frame rate

**SYSTEM = Basic system parameters and functions**

SYSTEM	Value	Description
Machine ID Select	1 thru 15	ID when unit is connected in a chain of DTRS machines
Timecode	ABS, TC	Referencing timecode source
Clock Mode	Auto, Individual	Clock Source for slave unit
Peak Hold	0.1 thru 9 or continuous	Meter peak hold time
Release Time	Fast, Slow or Medium	Meter release time
Save	Off	Saves current settings to tape
Load	Off	Loads settings from tape

**AUDIO 1 = Parameters affecting audio functions**

AUDIO 1	Value	Description
Digital In	TDIF, SPDIF	Digital Input Section
Input Patch	All analog, alldigital	Input selection
	individual tracks analog,	Input selection
	individual tracks digital	Input selection
TDIF	24, 20, 16	Select input word length
Dither	Off, rectangular, triangle	Dither noise shape settings
Record Mute	All Off, All On or Individual Tracks	Recording silence

**AUDIO 2 = Additional audio features**

AUDIO 2	Value	Description
Crossfade	10 thru 200 MS	Crossfade times for punch in/out
Output Patching	Normal or as set	Output patchbay
Output Word Length	16 or 24 bit	Output word length
Shuttle Monitor	0 = Off, 1 = On	Mutes audio when shuttle is engaged
Oscillator	Off, 440, 1k	Sine oscillator

**TIMECODE = Timecode parameters (generator, display, etc.)**

TIMECODE	Value	Description
Tape TC	TC Track, converted, ABS	Tape timecode mode
Frame Mode	SYS, EXT or TAPE: 29df, 30nd, 29nd, 25, 24, 30df	Select frame mode, showing input timecode Check the frame rate of striped timecode
Timecode Display	Off tape, External, Difference	Showing input timecode
Input Timecode Time	Analog, Digital	Incoming timecode reference
Output Timecode Time	Analog, Digital	Outgoing timecode reference
Output Timecode Source	Tape TC, Regenerated, Reshaped	Timecode output
Fast LTC	5 Frames, LEAP, OFF	Fast linear timecode output

**TIMECODE CHASE = Parameters affecting timecode chase**

TIMECODE CHASE	Value	Description
Individual Recording	0 = Off, 1 = On	Function enabled, individual recording possible chasing TC
Rechase Mode	Rechase, Free	Rechasing timecode
Rechase Window	1 sec. or 2 sec.	Width of rechase window
Error Bypass	10 Frames or 30 Frames	Ignore incoming TC errors
Park Position Test	Off, On	Performs park position test
ParkPosition	0 seconds 0 frames to 1 second 29 frames	Automatic park position setting

## TIMECODE RECORD = Timecode generator recording parameters

TIMECODE GENERATOR	Value	Description
TC Recording Source	External, TC Generator, Tape Timecode	Selecting timecode source
TC Recording Enable	0 = Off, 1 = On	Recording timecode using the generator
Start Time	Time value in hour, minutes, seconds, frames	Start time for on-board generator
TC Generator Mode	Reset, Continue	Restart mode for on-board generator
TC Generator	Stop, Run	Stop/Start timecode generator

## MIDI INTERFACE = MIDI functions (ID, MMC, MTC)

MIDI	Value	Description
MIDI	On, Off	Enables or disables MIDI (including MTC)
MIDI ID	All, 1 to 127	Assignes a MIDI ID to DA-78HR
MIDI Timecode (MTC)	On, Off	MTC output
Fast MTC	On, Off	MTC output in fast wind mode
Stop MTC	On, Off	MTC output in stop mode

## MAINTENANCE PARAMETERS = sofeware version, cleaning, back-up, memory, etc.)

MAINTENANCE	Value	Description
Version	System, Front, Servo	System, front panel & servo software (firmware)
Drum Time	Total, Search	Number of hours the drum has been in use
Cleaning	Off	Starts the head and transport cleaning process
Block Error Rate	Off, On	Displays block error rate
Back-up Memory Initialization	Off	Reset DA-78HR to factory default settings
Emulation Device Type	DA-78HR, DA-88, DA-38, DA-98	Emulation of DTRS transports

Welcome to the TASCAM DA-78HR Quick Reference Guide. This is NOT a replacement for the instruction manual, but think of this a quick reminder of the steps involved in executing various functions on the unit once you understand the concepts in the manual. The DA-78HR is a very versatile machine and we highly recommend reading the manual with the unit in front of you so you can get a better understanding of the machine. The DA-78HR has many powerful features that even the most seasoned professional will miss out on unless you read the manual to discover its depth! Enjoy!!

Here is a basic idea of how to get around on the DA-78HR. Most of the editable parameters on the unit are accessed using four keys. When the SHIFT key has been pressed with it's indicator blinking, the REPEAT/MENU key is the gateway to the menus of the DA-78HR. When the MENU key is pressed, one of these groups names are displayed on the screen and the unit enters menu mode. Continually pressing the MENU key will step you through the eight different menus in a circular fashion. You'll notice that there are two dashes (-- ) after the name of each menu. This is telling you that there are sub-menus under this level.

When a menu is displayed, pressing the SUB MENU key brings up the sub-menus associated with that menu. Continually pressing the SUB MENU key cycles through the different sub-menus. The UP and DOWN ARROW keys are used to change the value of the parameters within these menus and sub-menus. Pushing both ARROW keys simultaneously will change the current parameter's value back to the default setting.

Some parameters have multiple values displayed on the screen at one time. For instance a SMPTE start time will look like this 01:23:46:15. There is a blinking cursor behind the hour value. To move the cursor to the right you would hold down SHIFT key and press the UP ARROW key.

Note: As you follow these instructions, in some cases the display may change to a default sub menu after briefly displaying information. Nonetheless, continue to follow the steps as listed to complete the desired function.

### BACKUP MEMORY INITIALIZATION

1. Press the SHIFT key so the indicator light flashes
2. Press the MENU key until the display shows MAINTN—
3. Press the SUB MENU key until the display shows INIT
4. Press the UP ARROW key to change the display to read READY
5. Press the UP ARROW key again to restore factory settings
6. The unit will show DONE and restart.

### CHECKING THE SOFTWARE VERSION

1. There are 3 major components of the DA-78HR's internal software. They are SYSTEM, FRONT PANEL and SERVO. They can each be checked independently
2. Press the SHIFT key so the indicator lights flashes.
3. Press the MENU key until the display shows MAINTN (maintenance).
4. Press the SUB MENU key until the display briefly shows VERSION and then changes to SYS --, FRNT --, or SVO--. Use the UP and DOWN ARROW keys to display the component version you wish to see.

### TO CHECK THE DRUM HOURS

1. Press the SHIFT key so the indicator lights flashes.
2. Press the MENU key until the display shows MAINTN (maintenance).
3. Press the SUB MENU key until the display briefly shows DRUM TIM (drum time).
4. Use the UP and DOWN ARROW keys to choose between D xxxx (total drum time) and D.S. xxxx (drum search time). Xxxx represents the hours your DA-78HR will display.

### FORMATTING A TAPE.

1. Load a blank tape into the DA-78HR. Fast forward the tape to the end and then rewind to the beginning.
2. Press the FORMAT/FS key and the display will show FORMAT.
3. Quickly (within 5 seconds) press the FORMAT/FS key again and the display will show a flashing ( F- -- -- -- )
4. Select a sampling rate using the FORMAT/FS key.
5. Select the recording mode by pressing the HR MODE key. To start formatting hold down the RECORD key and press the PLAY key.

### SETTING AUTO PUNCH IN/OUT POINTS FROM THE FRONT PANEL.

1. Press the AUTO IN/OUT key and the indicator will flash.
2. Press the SHIFT key and the shift indicator will flash
3. Press the LOC 1 (MEMO 1) key.
4. The display will briefly read IN POINT then display the current value of the in-point. 5. Use the UP and DOWN ARROWS to change the value then press LOC 1 key to cursor over to the right to edit the minutes, seconds and frames.
6. Press the LOC 2 (MEMO 2) key to enter your OUT POINT in the same manner.
7. Press the SHIFT key so the indicator light goes out.
8. Arm the track you wish to record on.
9. Press LOC 1 and the DA-78 will park at 5 seconds before your punch in time.
10. Press play and after the 5 second pre-roll the DA-78 will automatically go in and out of record at the times you programmed.

### CHANGING PRE AND POST ROLL TIMES

1. Press the SHIFT key so the indicator light flashes.
2. Press the CLEAR (PRE ROLL) key until you see PR 0005 RH. This tells you that your pre-roll is set to 00 minutes and 05 seconds.
3. Use the UP and DOWN arrows to change the value.
4. Press the CLEAR (PRE ROLL) key until you see PO 0003.
5. Change this value to your desire in the same manner.

### SAVING SETTINGS TO TAPE

1. Press the SHIFT key so the indicator light flashes
2. Press the MENU key until the display shows SYSTEM.
3. Press the SUB MENU key until the display shows SAVE OFF.
4. Press the UP ARROW key and the display will read READY.
5. Press the UP ARROW key again to begin saving.
6. The display will show SAVING and then DONE when the operation is complete.

### RESTORING SETTINGS FROM TAPE

1. Load the tape that contains the settings you wish to restore.
2. Press the SHIFT key so the indicator light flashes.
3. Press the MENU key until the display shows SYSTEM.
4. Press the SUB MENU key until the display shows LOAD OFF
5. Press the UP ARROW key and the display will read READY
6. Press the UP ARROW key again to load settings from ta
7. The DA-78HR will then restart itself as if the power had just been turned on.

### TRACK DELAY

1. Press the SHIFT key so the indicator lights up.
2. Press the RHSL (DELAY) key
3. Press the RHSL (DELAY) key again to toggle between Samples or Milliseconds (Samples are 4 digit values, Milliseconds are 3 digit values)
4. Press the RECORD FUNCTION key of the track you want to delay
5. Use the UP and DOWN ARROW keys to adjust the delay value of the track.
6. Delay value can be set from -200 to +7200 samples (-4 to 150 ms). *Positive values delay the track, negative values advance the track.*
7. The machine will default to editing the delay value all tracks simultaneously if you don't make a selection in 4 seconds. Simply push any individual REC FUNCTION button again to edit an individual track.

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