

## SET-UP guide

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Prepared and edited by:  
 STUDER (a division of STUDER REVOX AG)  
 Technical Documentation  
 Althardstrasse 30  
 CH - 8105 Regensdorf - Zürich





We reserve the right to make alterations.

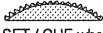
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 Order no. 10.27.1992 (Ed. 0194)


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1 Software Tree

SET-UP

move cursor:    

change parameter: 

store settings: 

quit / cancel:  + 

	<u>SEARCH</u>	<u>BRANCH</u>	<u>No.</u>
Menu tree	SET: AUDIO INPUT	DIGITAL INPUT	S002
		2CH AES INPUT	S018
		SDIF INPUT	S001
		MADI INPUT	S041
	SET: AUDIO OUTPUT	2CH AES OUTPUT	S019
		ADV OUTPUT DELAY	S003
	SET: CROSSFADE TIME	CROSSFADE TIME	S004
	SET: DECK	LIBR WIND SPEED	S005
		MAX WIND SPEED	S006
	SET: DISPLAY	LEADING ZEROES	S011
RUN TIME FORMAT		S012	
STOP TIME FORMAT		S013	
SET: EXT CLOCK REF	EXT CLOCK REF	S017	
SET: LEVELS	CUE CLIP LEVEL	S021	
	INPUT CLIP LEVEL	S022	
	OUTPUT PEAK LEVEL	S023	
SET: LOCATOR	ROLLBACK TIME	S024	
SET: RT GENERATOR	MODE	S055	
	RT GEN ADDRESS	S028	
SET: SYNCHRONIZER	INT MOVE PULSES	S029	
	EXT MOVE PULSES	S030	
	PARK OFFSET	S031	

**FUNCTIONS**

**move cursor:**

**change settings:**

**set values:** displayed **statically**

**quit / cancel:** +

**Menu tree**

	<i>SEARCH</i>	<i>BRANCH</i>	<i>No.</i>	
<b>FCT: AUDIO</b>		ADV OUTPUT	F001	USER 3
		AUDIO INPUT	F002	
<b>FCT: AUX TRACKS</b>		CUE1 REPRO	F010	
		CUE2 REPRO	F011	
		ERASE HEAD	F012	
<b>FCT: CLOCK REFERENCE</b>		CLOCK REFERENCE	F013	
<b>FCT: DECK</b>		LIBRARY WIND	F020	USER 4
		TAPE	F021	
		TAPE GUARD	F029	
		TAPE GUARD MODE	F030	
<b>FCT: DISPLAY</b>		CODE	F032	
		TIME	F034	
		FRAMES / MS	F035	
<b>FCT: LOCATOR</b>		LOC START	F037	
		ROLLBACK	F045	
<b>FCT: RECORD</b>		READY RECORD	F048	
		RECORD KEY	F049	
		REFRESH	F050	
		REC INDICATION	F051	
<b>FCT: REMOTE</b>		PARALLEL AUDIO IF	F052	
		REMOTE MODE	F054	
<b>FCT: SAMPLING RATE</b>		SAMPLING RATE	F056	
<b>FCT: SYNCHRONIZER</b>		REFERENCE	F060	
		AOR	F062	
		SYNCHRONIZER	F063	USER 1
		TC LOCK	F064	
		SLOW LOCK	F068	
<b>FCT: TIME CODE</b>		TC INPUT	F065	USER 2
<b>FCT: VARISPEED</b>		VARISPEED DISPLAY	F071	

## 2 System Set-up

---

### Jumpers on Clock Board 1.862.660.xx

---

JP 1 plugged-in:	Normal operating mode (18.432 MHz oscillator activ)
JP 1 removed:	Test mode
JP 3 plugged-in:	Input impedance for <b>video</b> = 75 Ohm
JP 3 removed:	Input impedance for <b>video</b> = 1 kOhm
JP 8 plugged-in:	Input impedance for <b>sector clock</b> = 75 Ohm
JP 8 removed:	Input impedance for <b>sector clock</b> = 1 kOhm
JP 9 plugged-in:	Input impedance for <b>word clock</b> = 75 Ohm
JP 9 removed:	Input impedance for <b>word clock</b> = 1 kOhm
JP 10 plugged-in:	Input impedance for <b>square wave</b> = 75 Ohm
JP 10 removed:	Input impedance for <b>square wave</b> = 1 kOhm
JP 11 plugged-in:	<b>Syncpulse</b> from video negativ (most common)
JP 11 removed:	<b>Syncpulse</b> from video positiv

### Clock Board MKII 1.862.667.20

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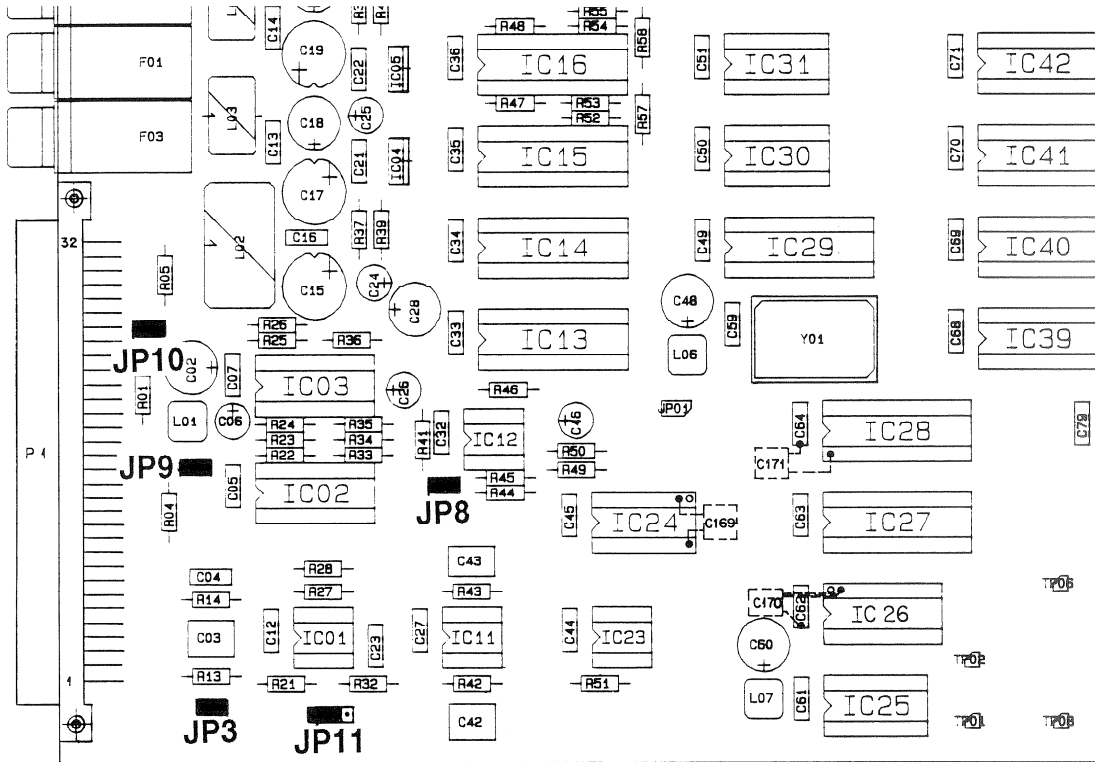
This re-designed Clock Board is compatible with software version 3.0 and up. The same jumpers as on the previous version have to be set: impedance for video, sector clock, word clock and square wave, and polarity of video syncpulse.  
All jumper positions and functions are labelled on the board.

### Tape Deck Counter Timer Board 1.820.823.xx

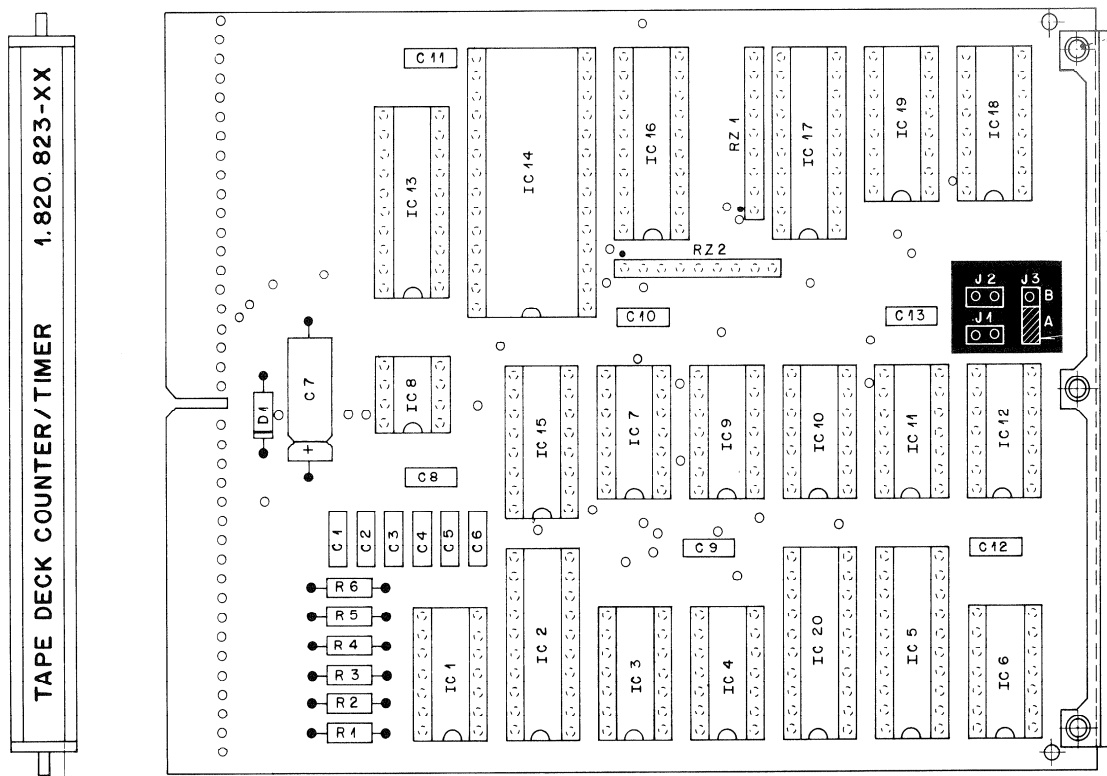
---

Jumper Position	Meaning
J3A	1024 Hz pulse at 30 inch/s
J1+3B	64 Hz pulse at 30 inch/s
J2+J3B	32 Hz pulse at 30 inch/s

Layout Clock Board 1.862.660.xx



Layout Tape Deck Counter Timer Board 1.820.823.xx



### 3 Recordings

#### 3.1 Recording Modes

##### 3.1.1 NEW Record

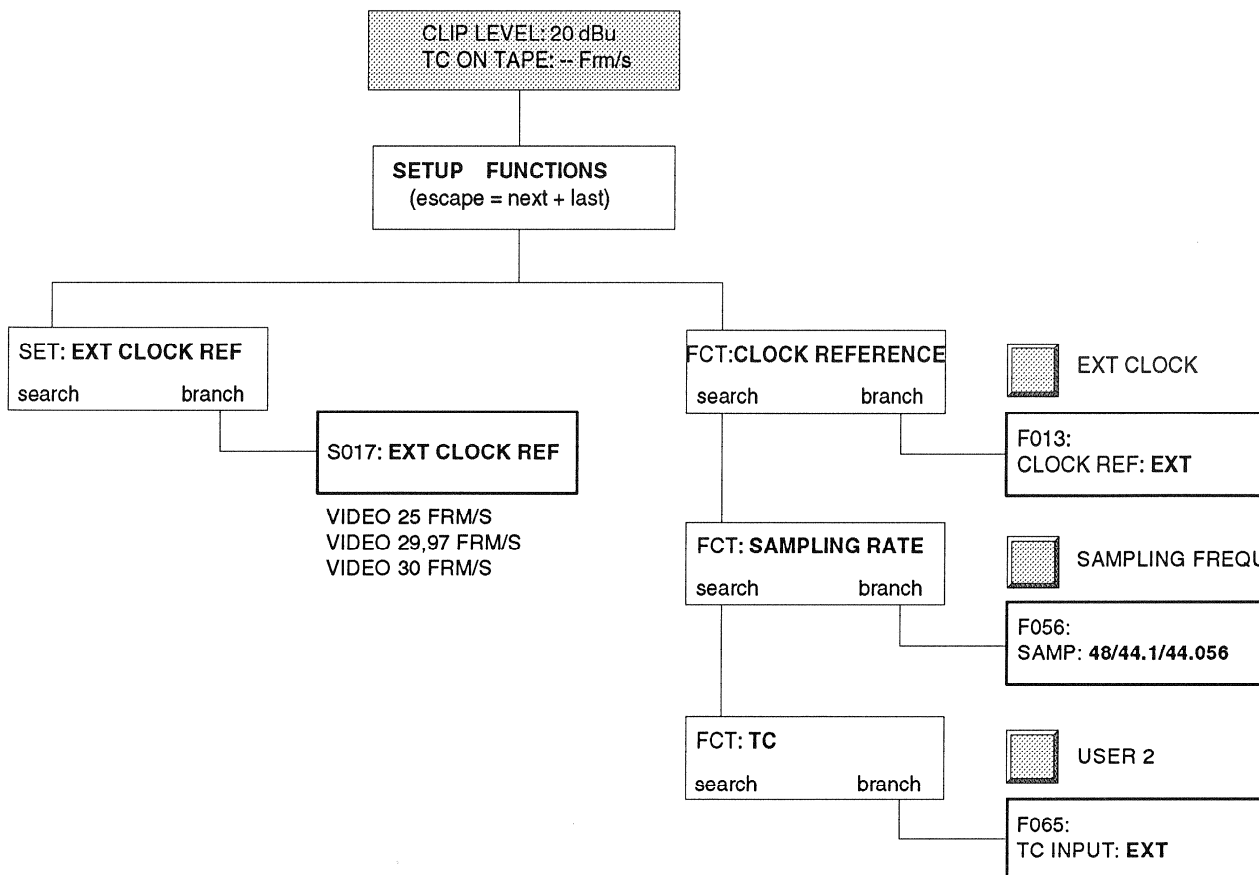
New tapes must first be formatted i.e. REFERENCE TRACK (RT) must be recorded. It is recommended to format the whole tape in one continuous pass.

- 1 Thread the tape and press STOP.
- 2 Select NEW RECORD mode by simultaneously pressing the SET ENABLE and NEW keys at the Display Panel or Autolocator.
- 3 Settings:

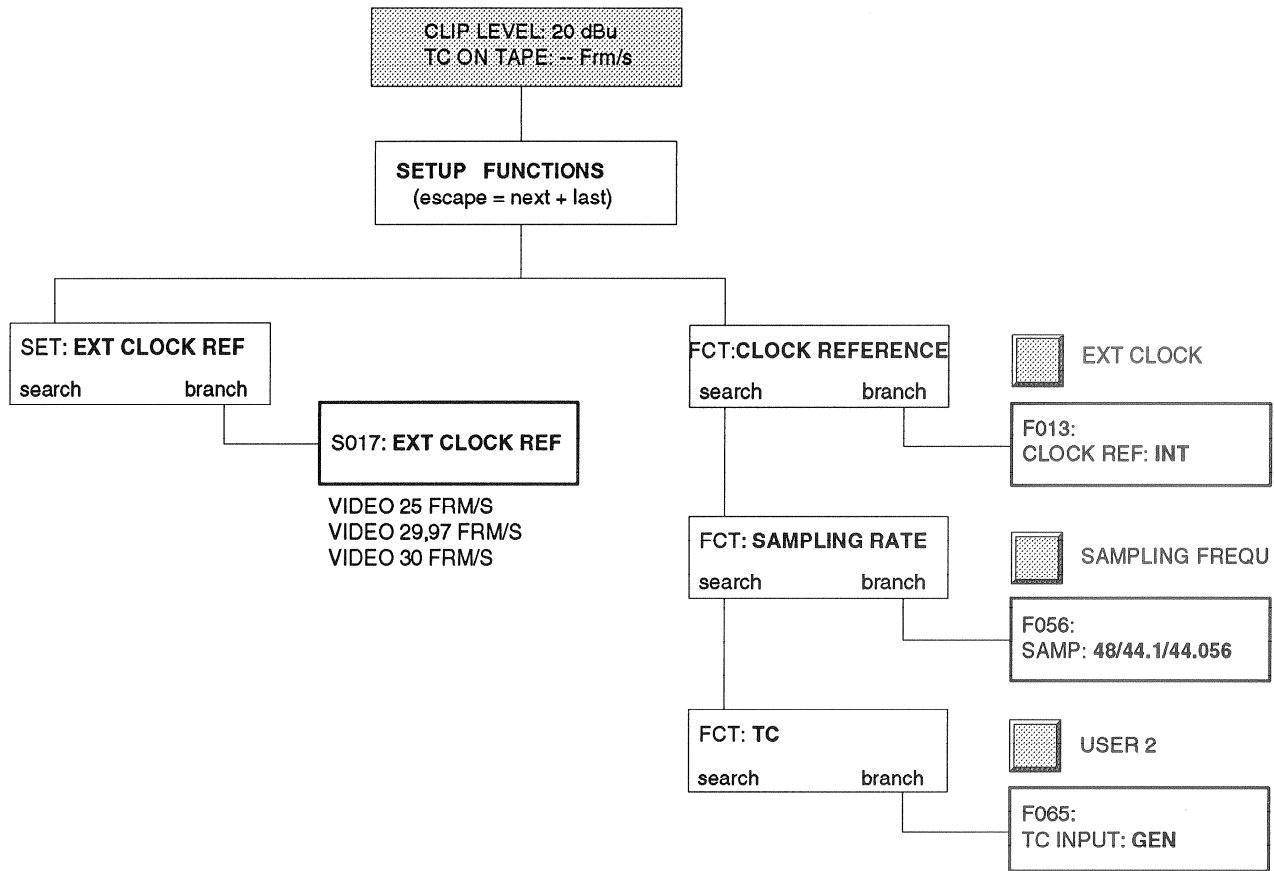
*A: Formatting tapes with synchronous external TC-Generator, locked to ext. video reference.*

Recommended Sampling-and Frame rates:

48 kHz	25 Frames
44.1 kHz	30 Frames
44.056 kHz	29.97 Frames



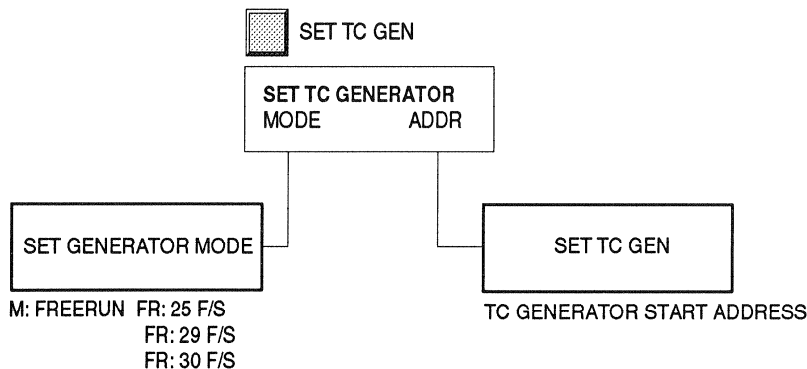
**B: Formatting tapes with synchronous internal TC-Generator, locked to ext. video reference.**



**C: Setting of internal TC-Generator**

Recommended Sampling-and Frame rates:

- 48 kHz      25 Frames
- 44.1 kHz    30 Frames
- 44.056 kHz  29.97 Frames



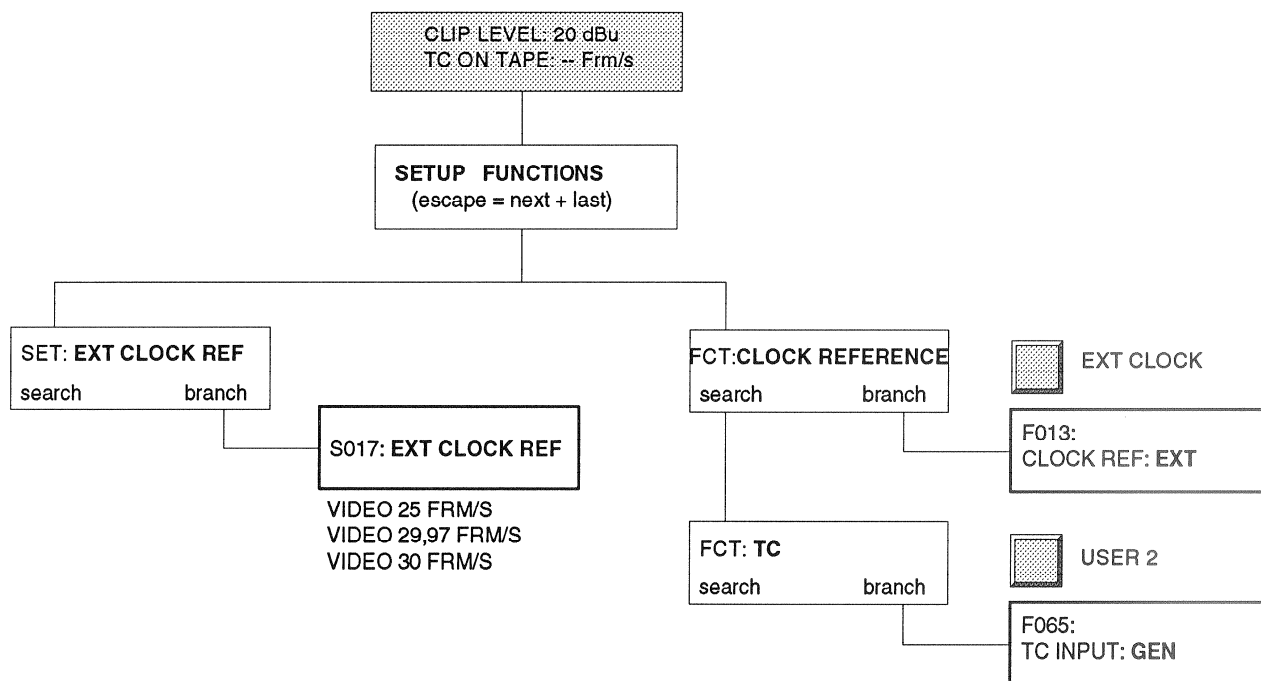
- 4** Set all channels and the TC track **READY**.
- 5** Start recording.

3.1.2 ASSEMBLE Record

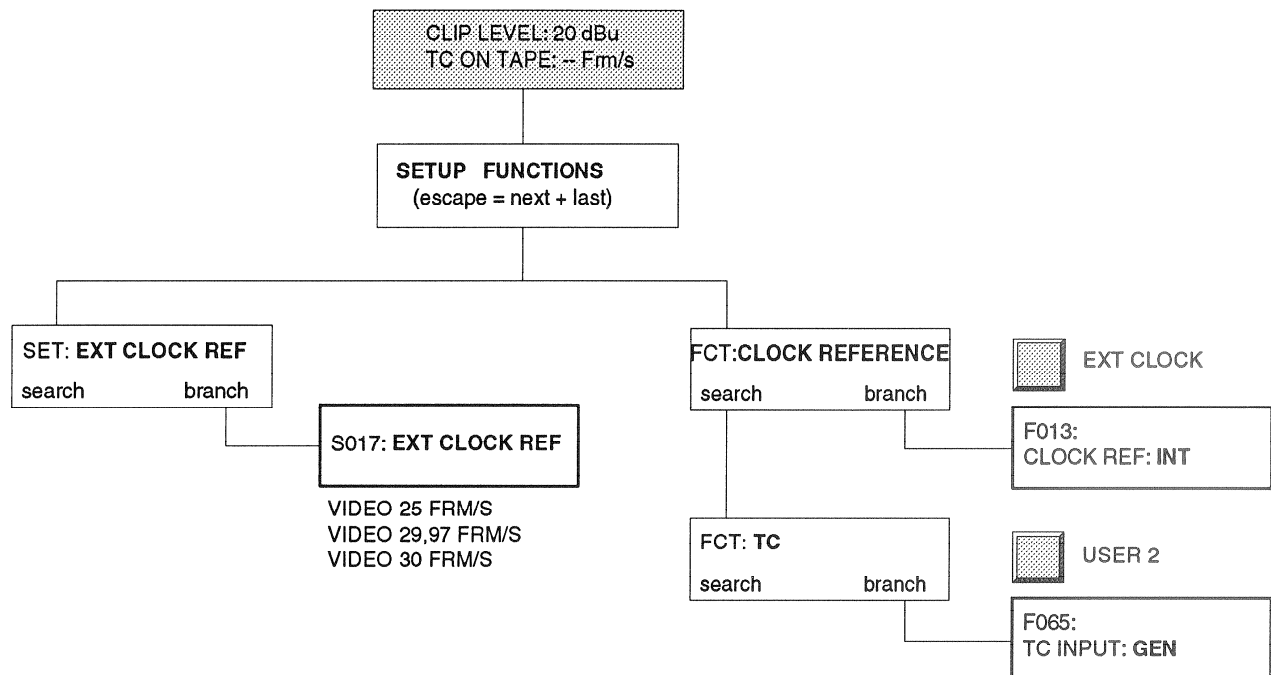
This mode is used to append RT on a partly formatted tape.

- 1 Thread the tape, locate a few seconds before the end of the formatted part and press STOP.
- 2 Select ASSEMBLE RECORD mode by simultaneously pressing the SET ENABLE and ASSEM keys at the Display Panel or Autolocator.
- 3 Settings:

*A: Append RT with external clock*





**B: Append RT with internal clock**

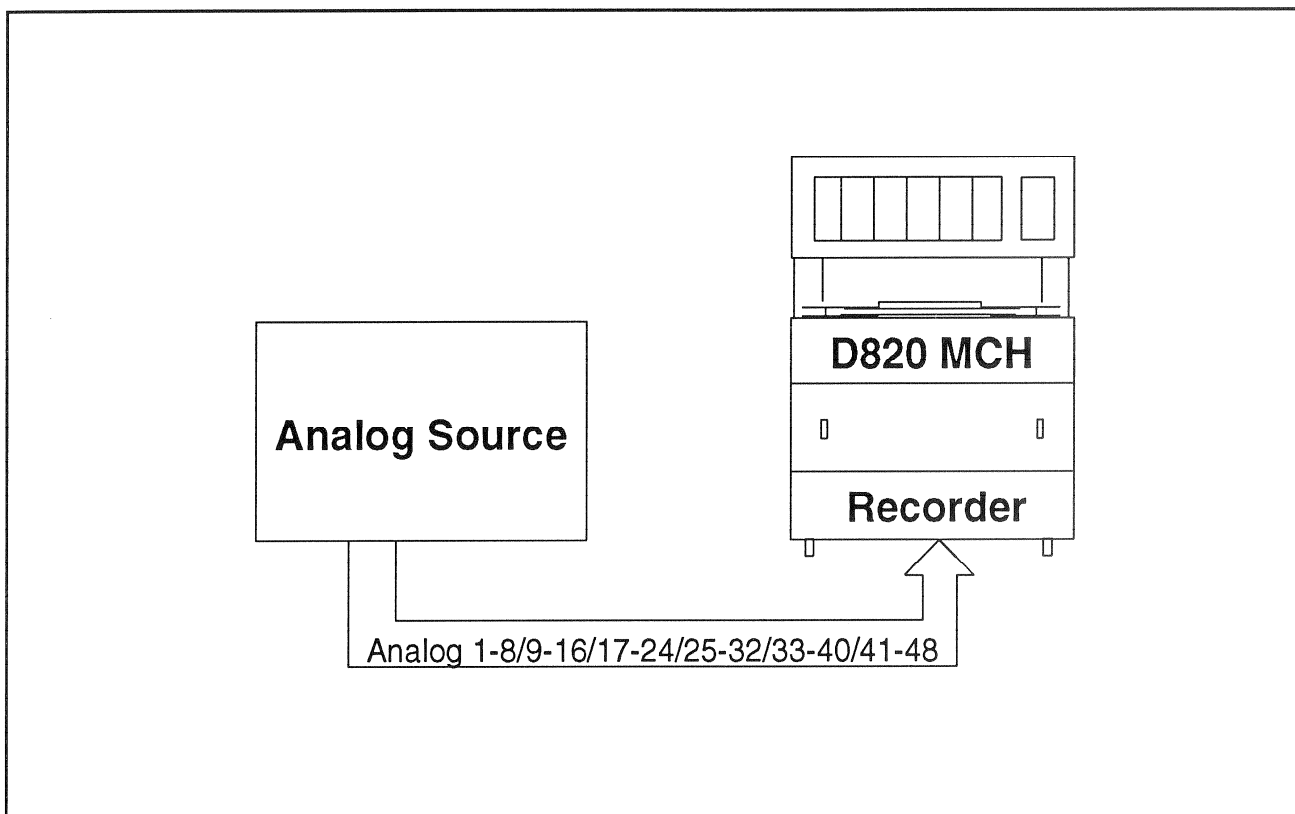
- ④ Set all channels and the TC track **READY**.
- ⑤ Start **recording**.

**3.1.3 INSERT Record**

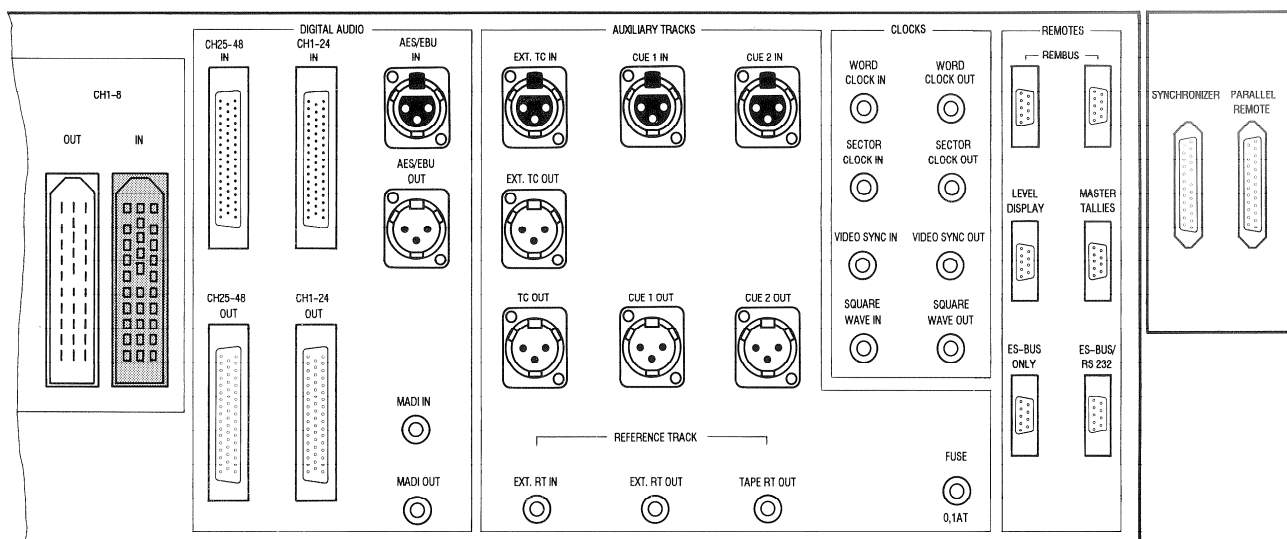
This is the operating mode for formatted tapes. It must be selected to record single tracks or to make an insert on one or all tracks. RT will not be recorded.

- ① Thread the tape and wind for a few seconds to allow the D 820 MCH to learn about the reel ballistics. Then press STOP.
- ② Select INSERT RECORD mode by simultaneously pressing the SET ENABLE and INSERT keys at the Display Panel or Autolocator.
- ③ **Settings for recording:**  
see following sections 3.2 ... 3.7.
- ④ Set desired channels **READY**.
- ⑤ Start **recording**.

3.2 Recording from analog inputs

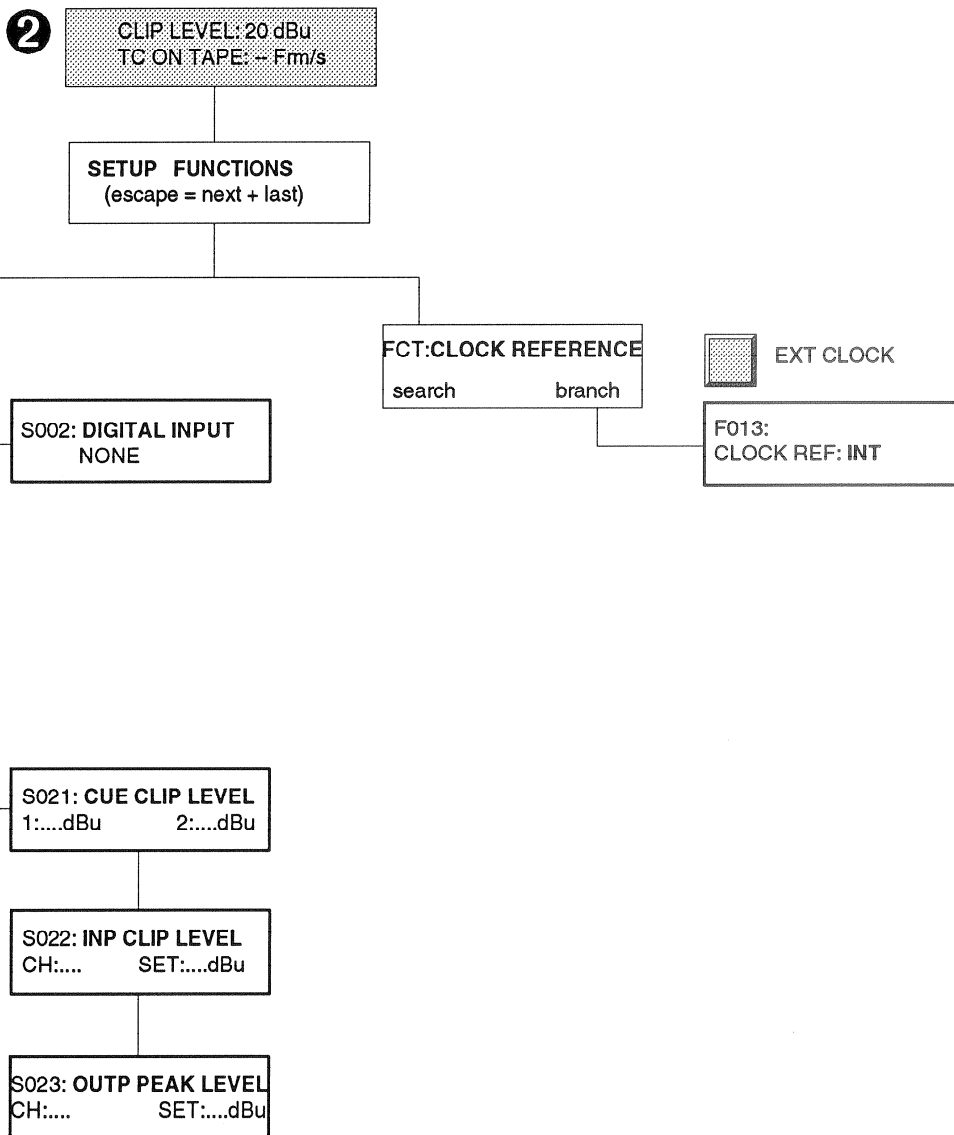


Connector panel D820 MCH



Settings D820 MCH:

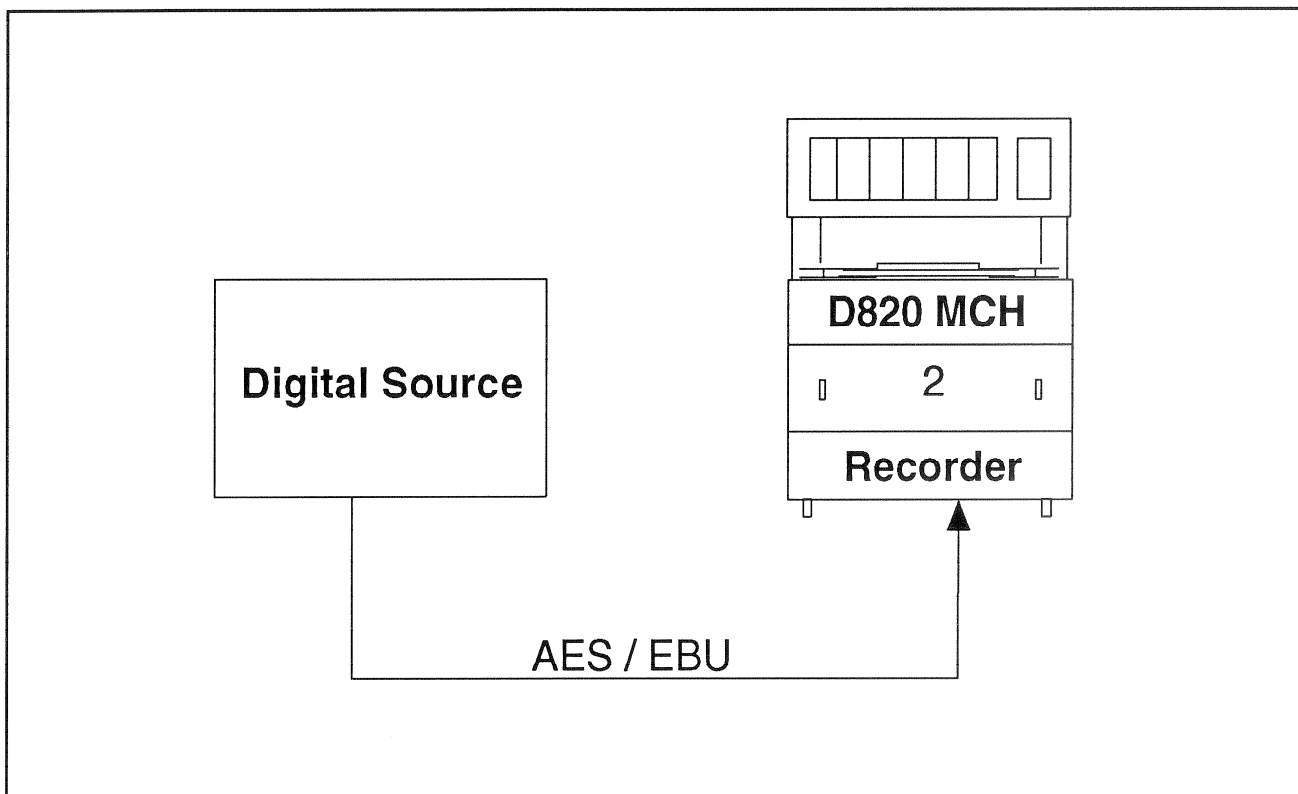
- 1 Press the **SET ENABLE** and **INSERT** keys  
(on Display Panel or Tape Deck Controller)



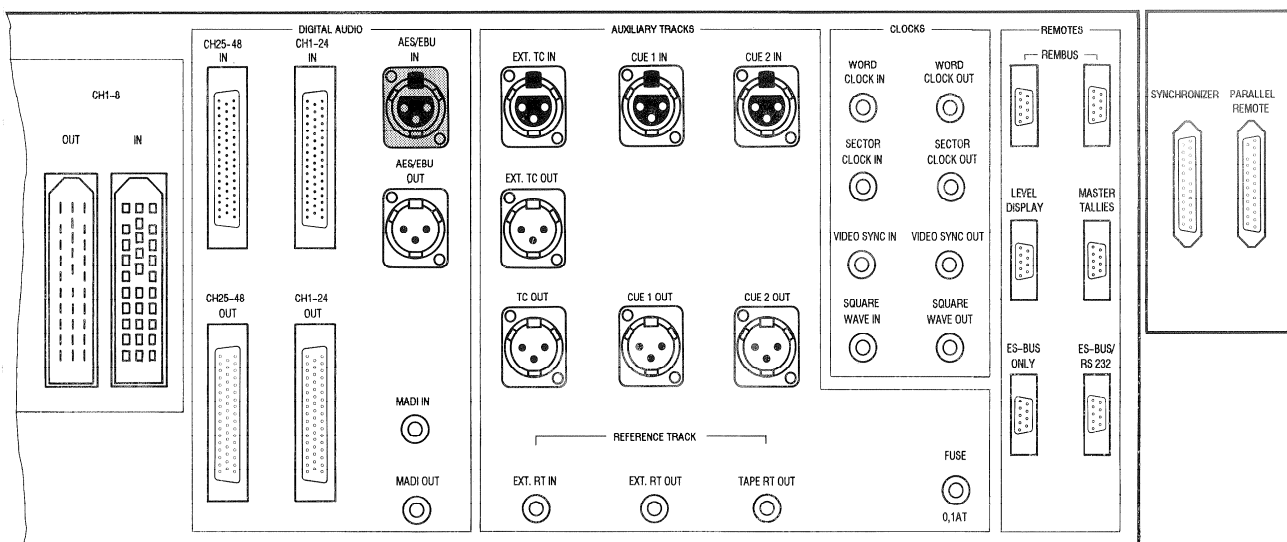
- 3 Press the **LOCK** key on slave D820 MCH

<b>Example:</b>	Desired headroom	<b>10dB</b>
	Studio level	<b>+ 6dBu</b>
<b>Settings:</b>	Input clip level	<b>+16dBu</b>
	Output peak level	<b>+16dBu</b>

3.3 Recording from digital input AES/EBU

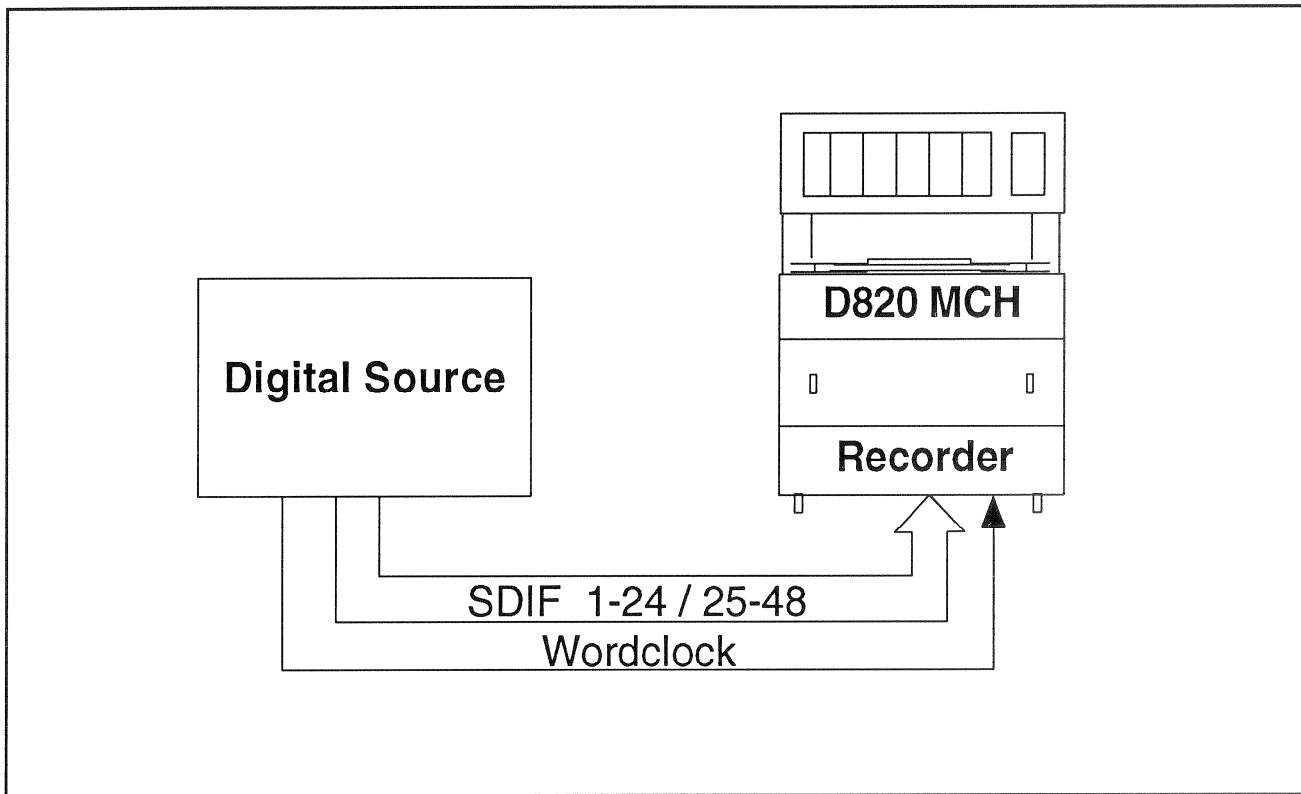


Connector panel D820 MCH

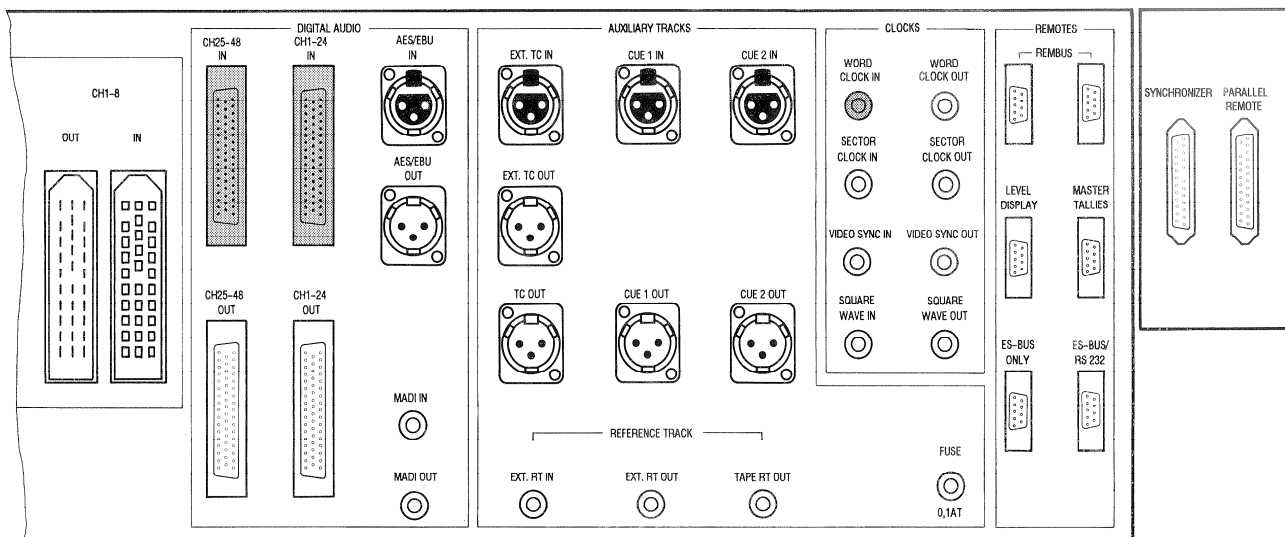




3.4 Recording from digital input SDIF



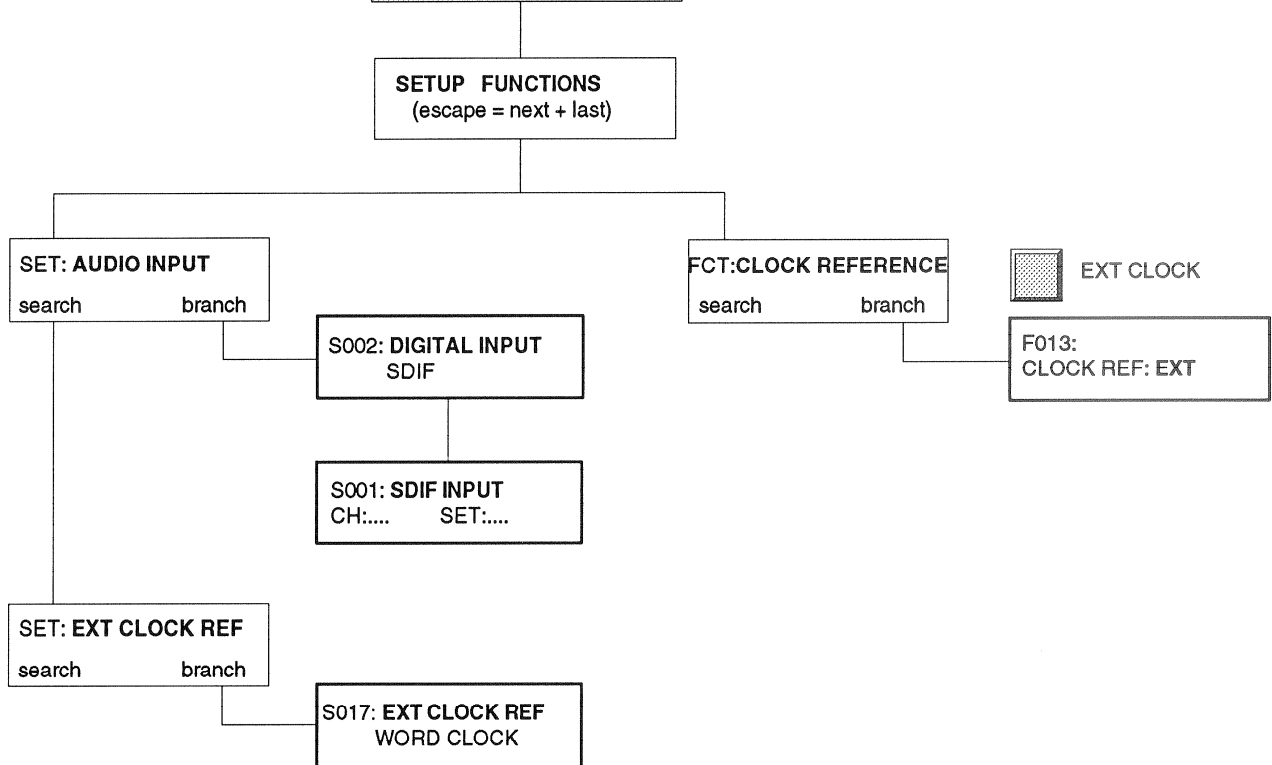
Connector panel D820 MCH:



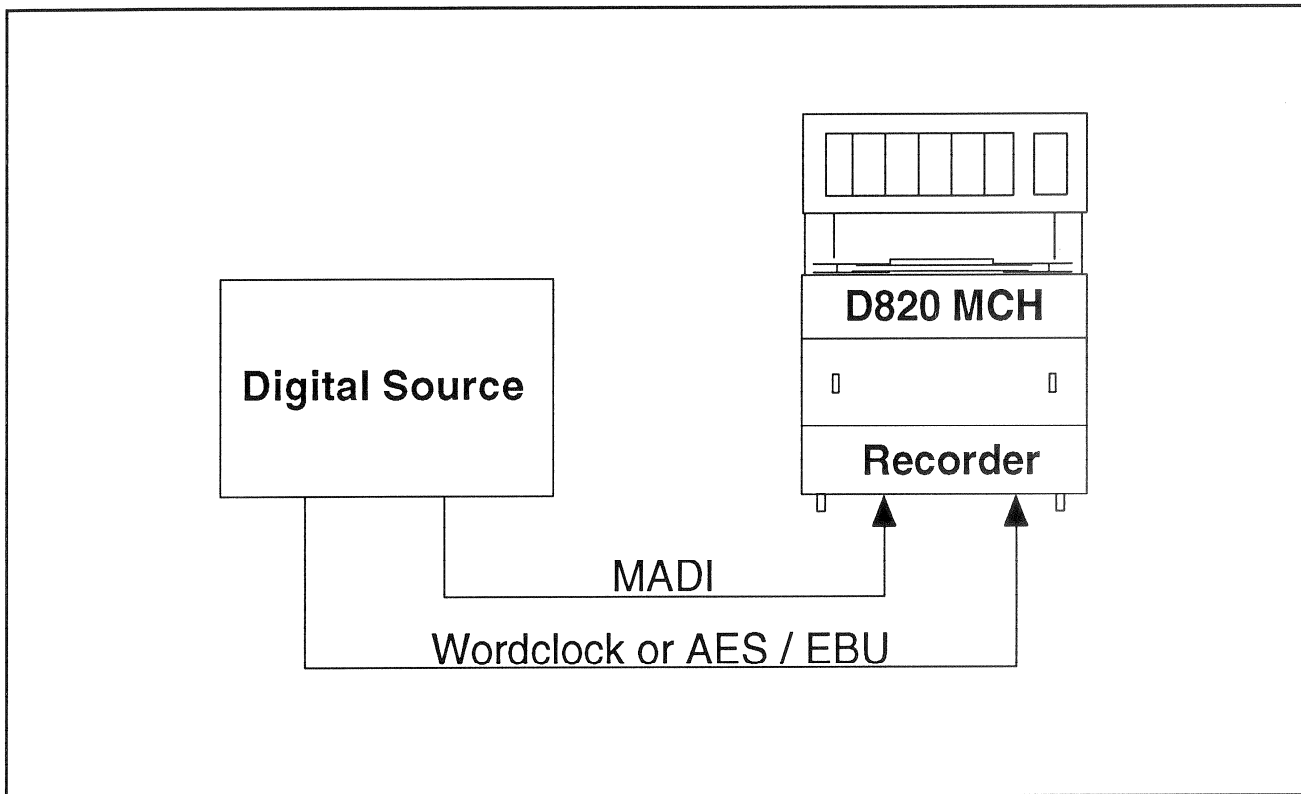
Settings D820 MCH:

- 1 Press the **SET ENABLE** and **INSERT** keys  
(on Display Panel or Tape Deck Controller)

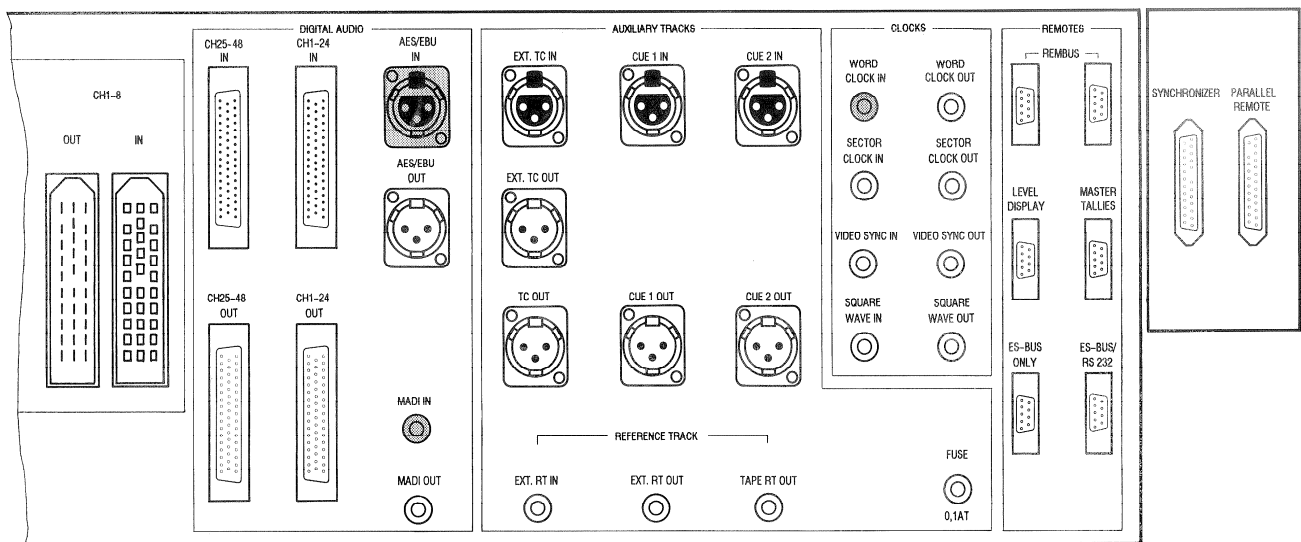
- 2  CLIP LEVEL: 20 dBu  
TC ON TAPE: -- Fm/s



3.5 Recording from digital input MADI\*



Connector panel D820 MCH:

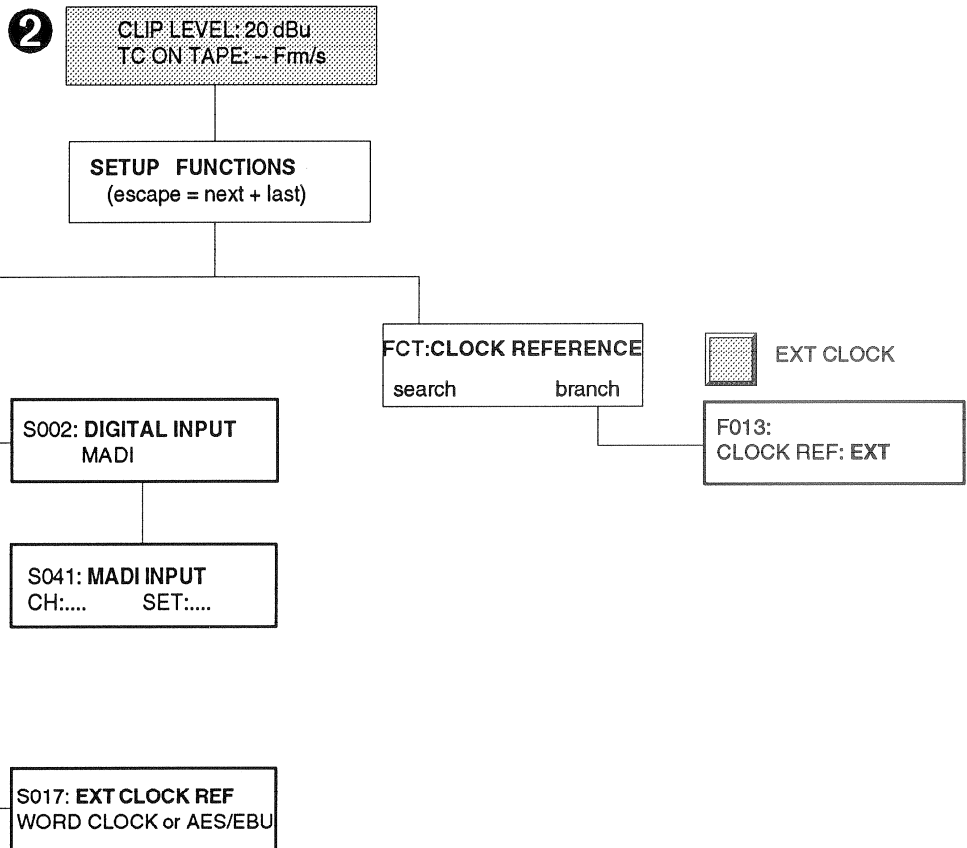


\*optional



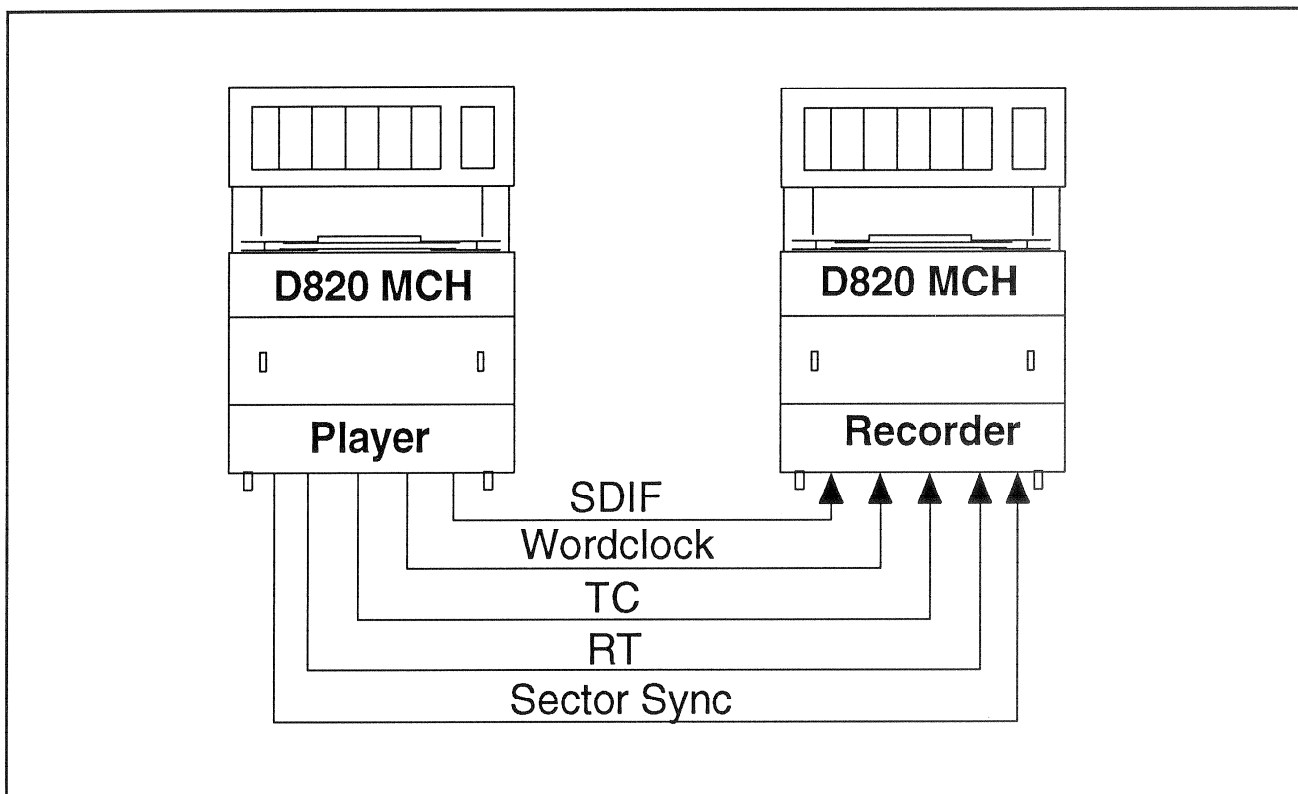
Settings D820 MCH:

- 1 Press the **SET ENABLE** and **INSERT** keys  
(on Display Panel or Tape Deck Controller)

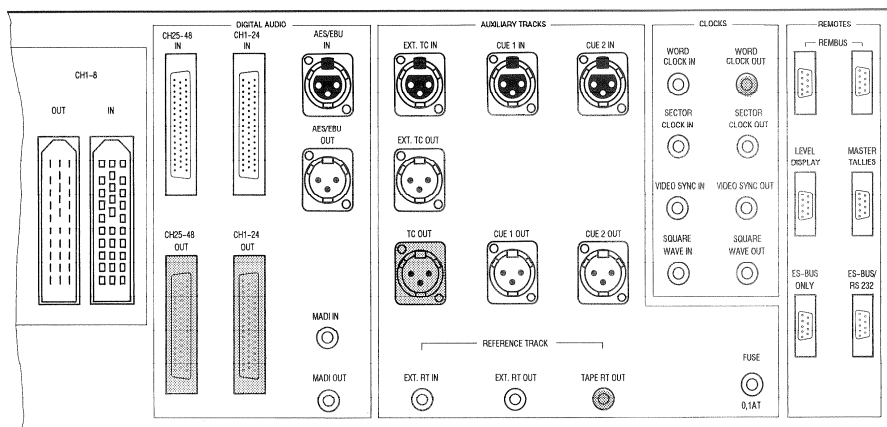


- 3 Press the **LOCK** key on slave D820 MCH

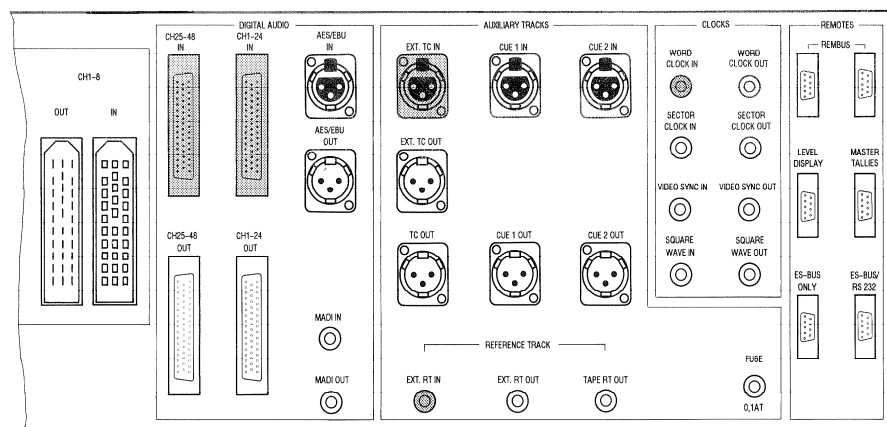
3.6 Prepare a Backup Copy via SDIF



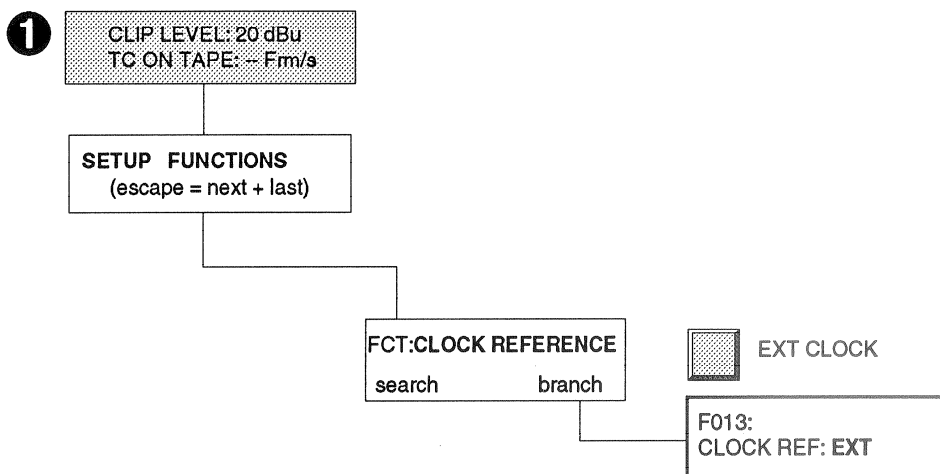
Connector panel  
D820 MCH Player:



Connector panel  
D820 MCH Recorder:



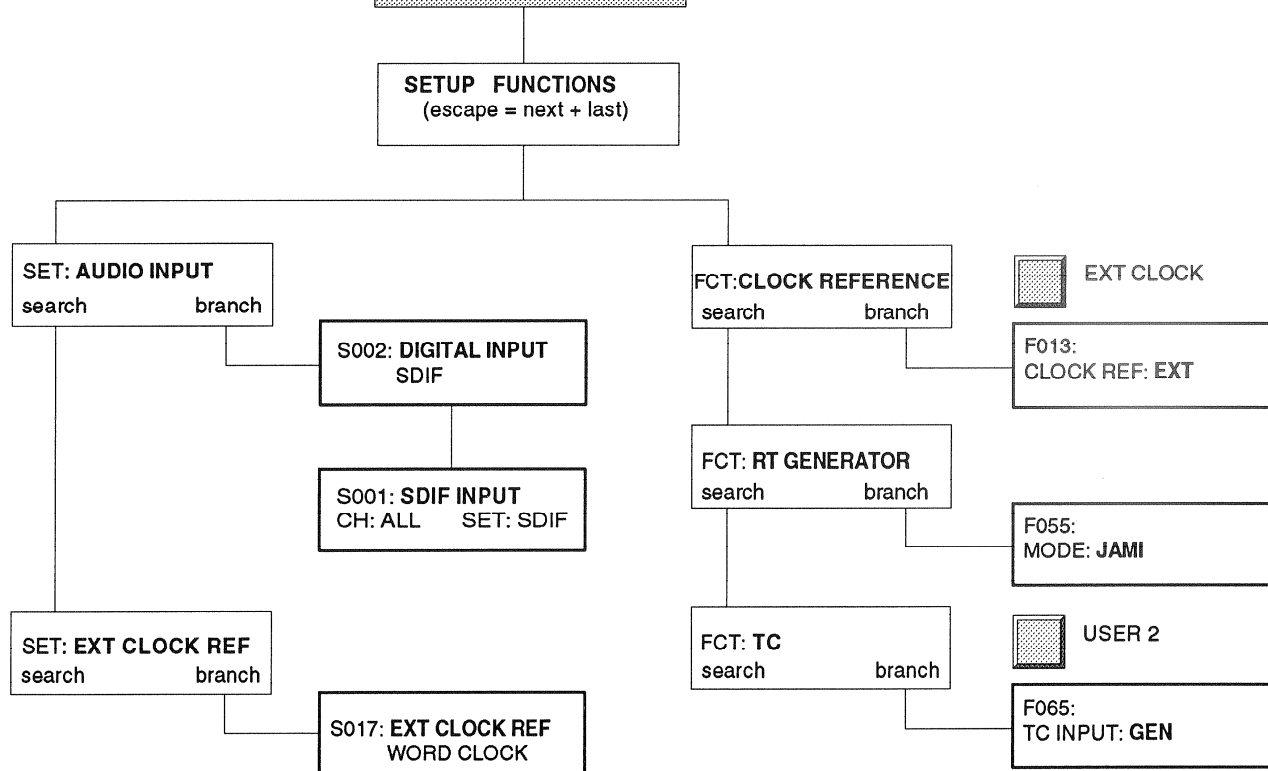
Settings Player:



Settings Recorder:

1 Press the **SET ENABLE** and **NEW** keys  
(on Display Panel or Tape Deck Controller)

2 CLIP LEVEL: 20 dBu  
TC ON TAPE: -- Fm/s

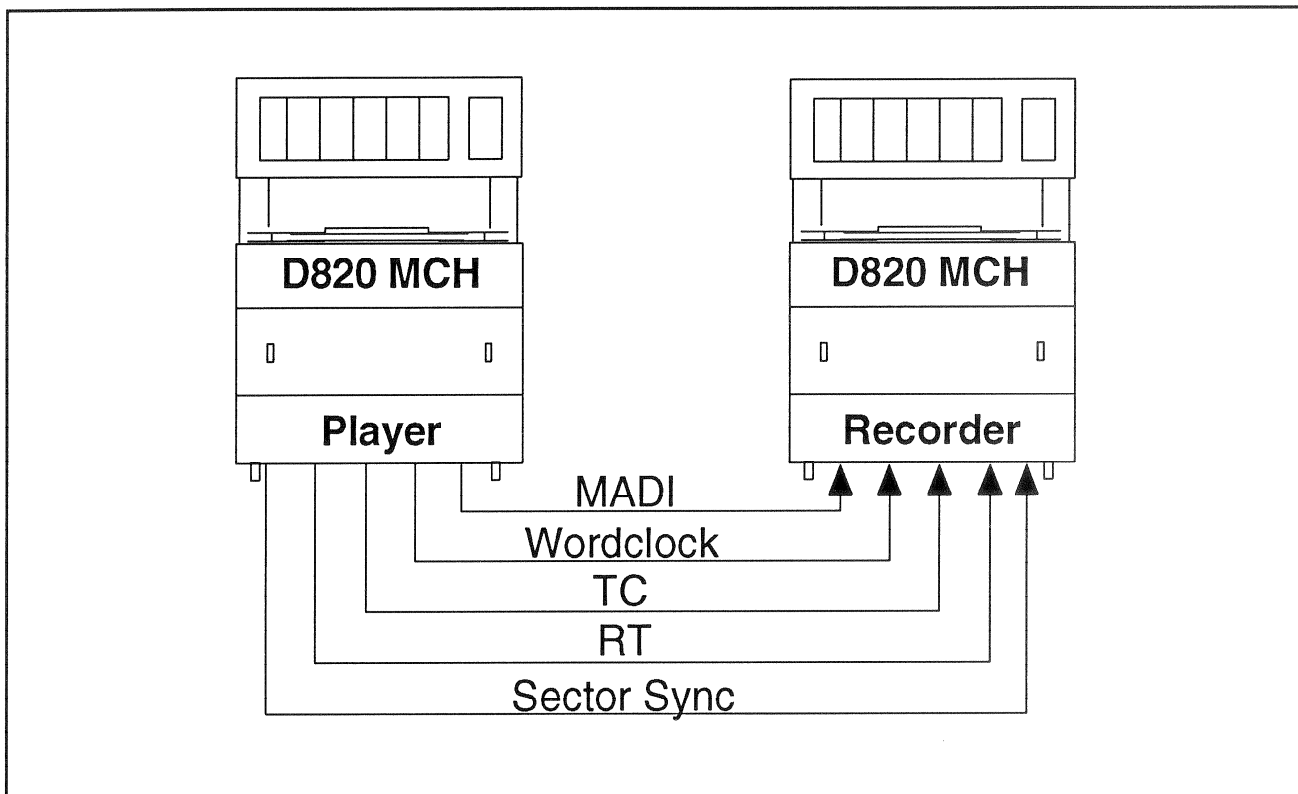


3 SET TC GEN

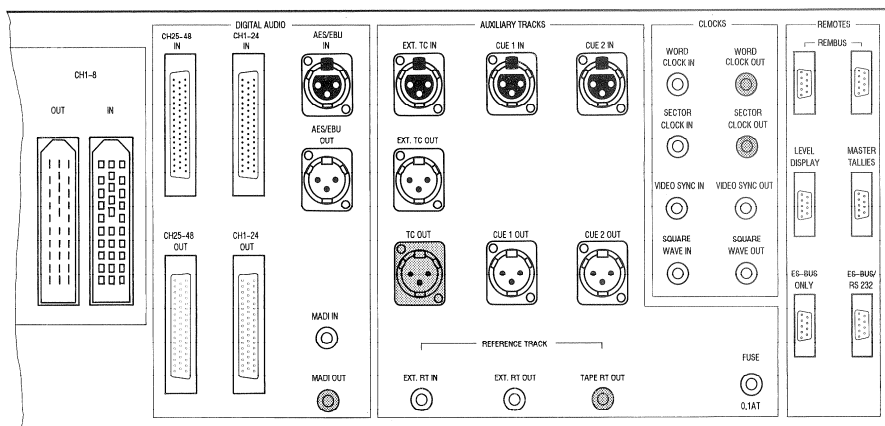
SET TC GENERATOR  
MODE ADDR

SET GENERATOR MODE  
M: JAM IN

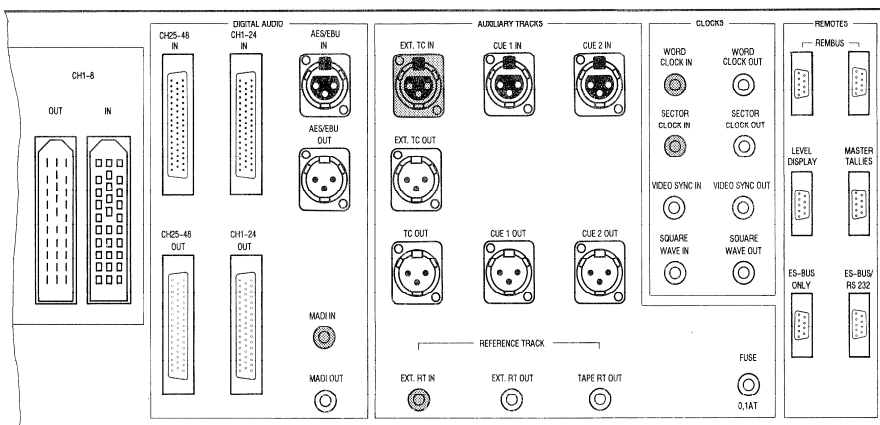
3.7 Prepare a Backup Copy via MADI\*



Connector panel  
D820 MCH Player:

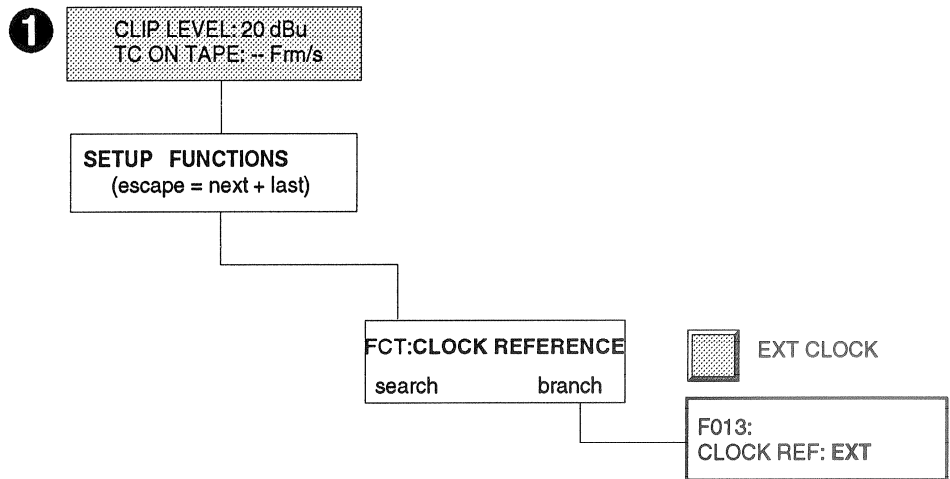


Connector panel  
D820 MCH Recorder:



\*optional

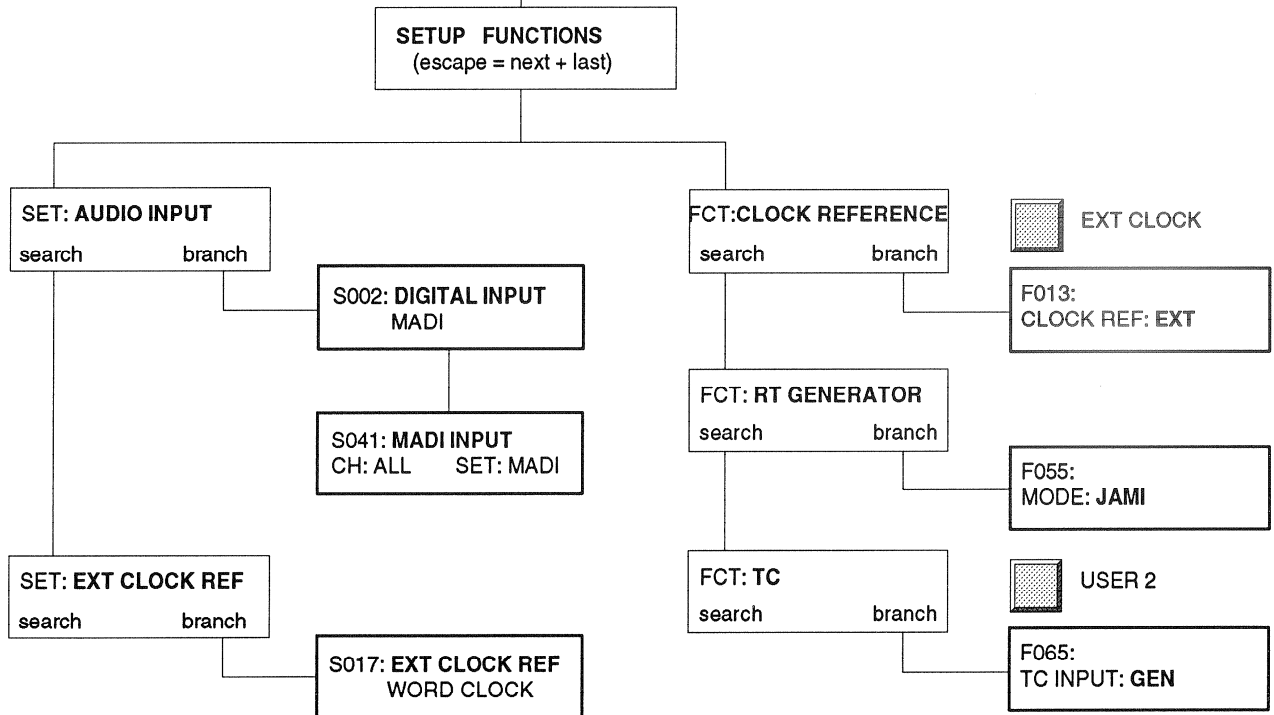
Settings Player:



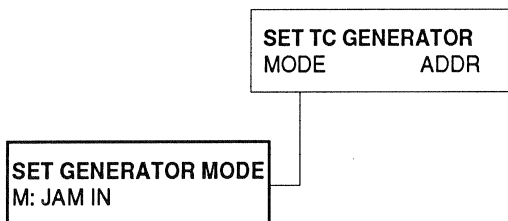
Settings Recorder:

1 Press the **SET ENABLE** and **NEW** keys  
(on Display Panel or Tape Deck Controller)

2 CLIP LEVEL: 20 dBu  
TC ON TAPE: -- Fm/s



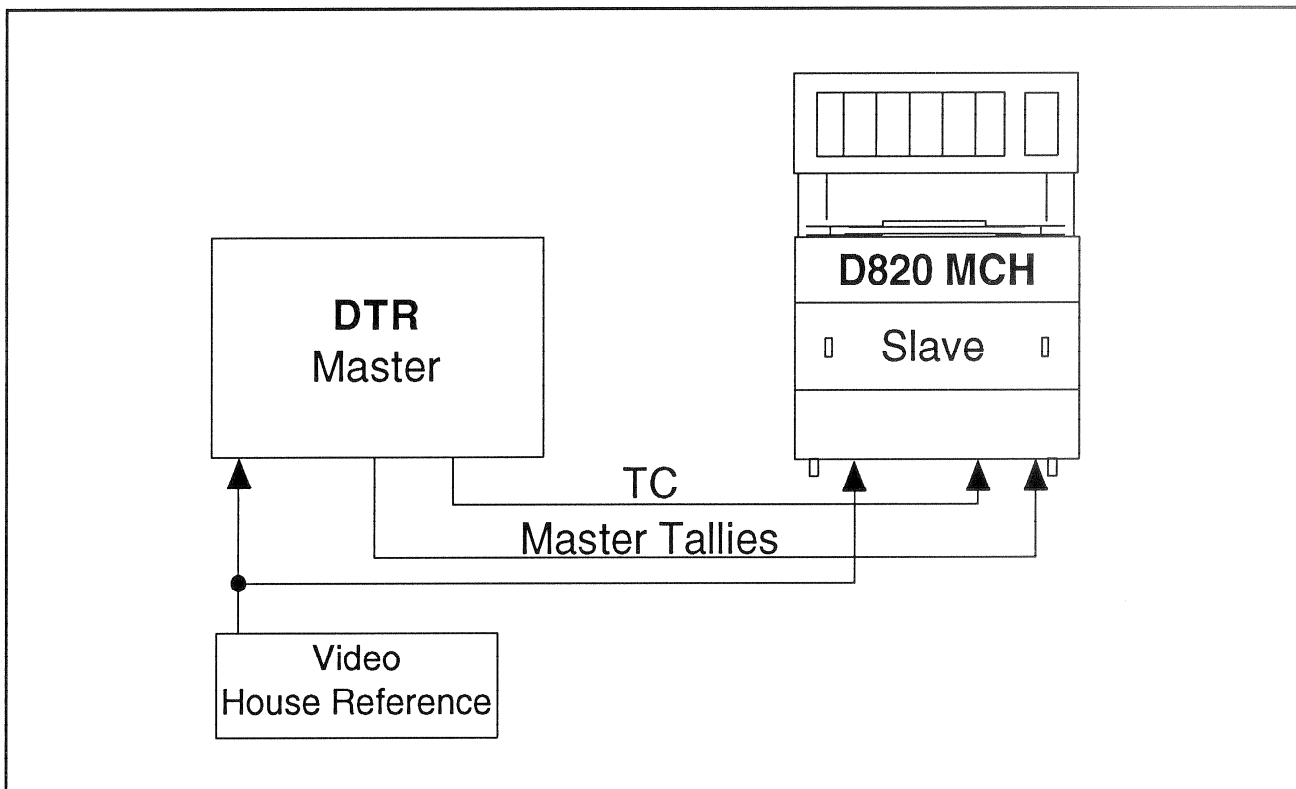
3 SET TC GEN



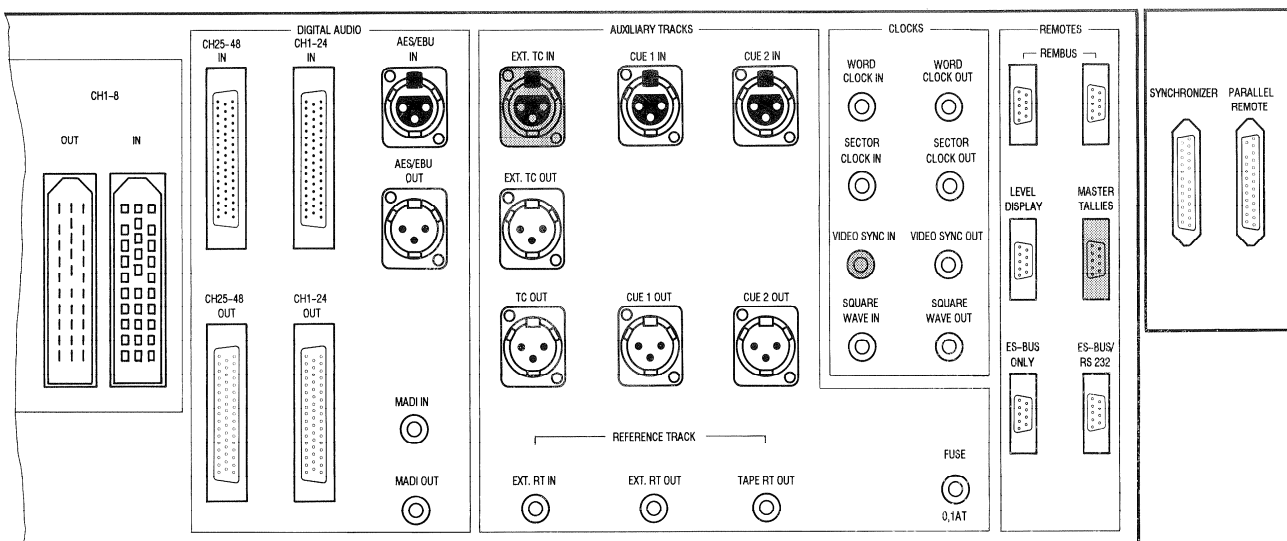
4 Synchronization applications

4.1 DTR - DTR, video sync

Master: any digital tape recorder (DTR)  
 Slave: D820 MCH  
 Sync Source: video



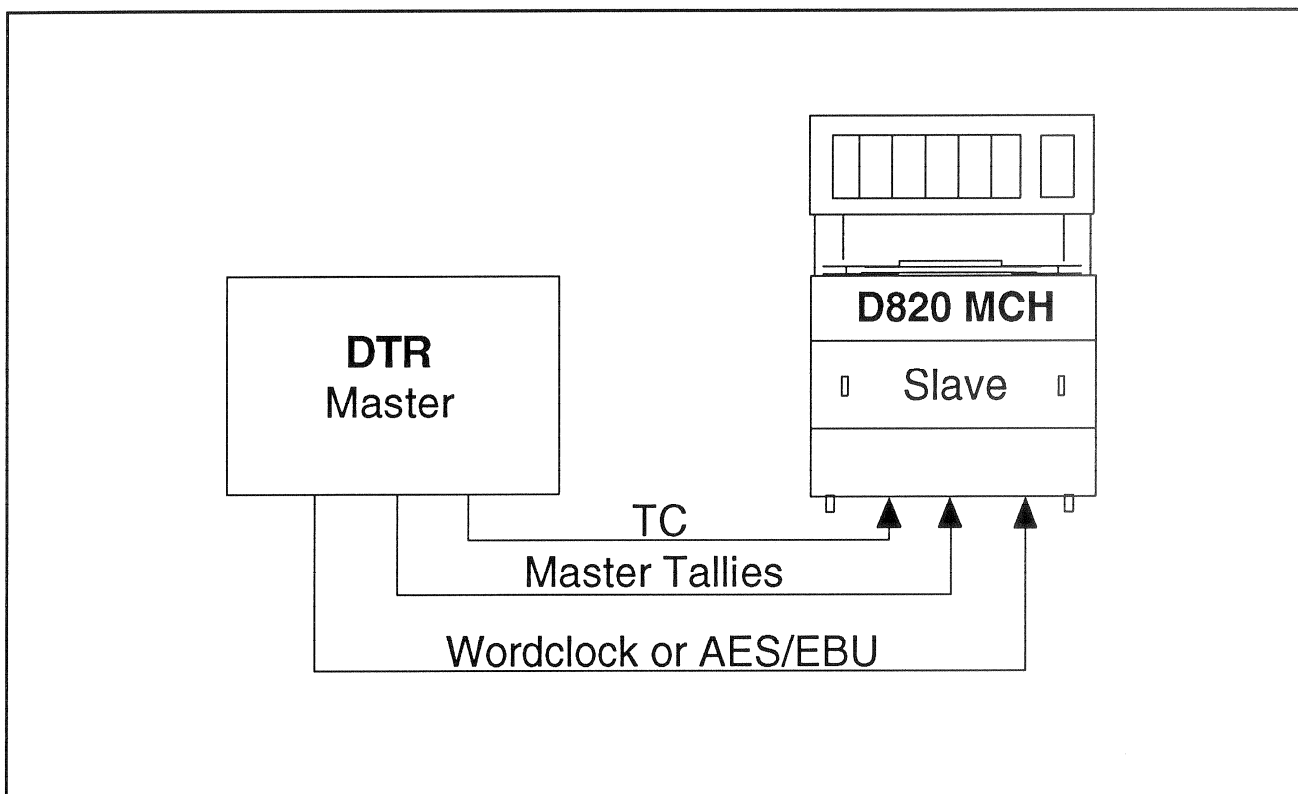
Connector panel D820 MCH:



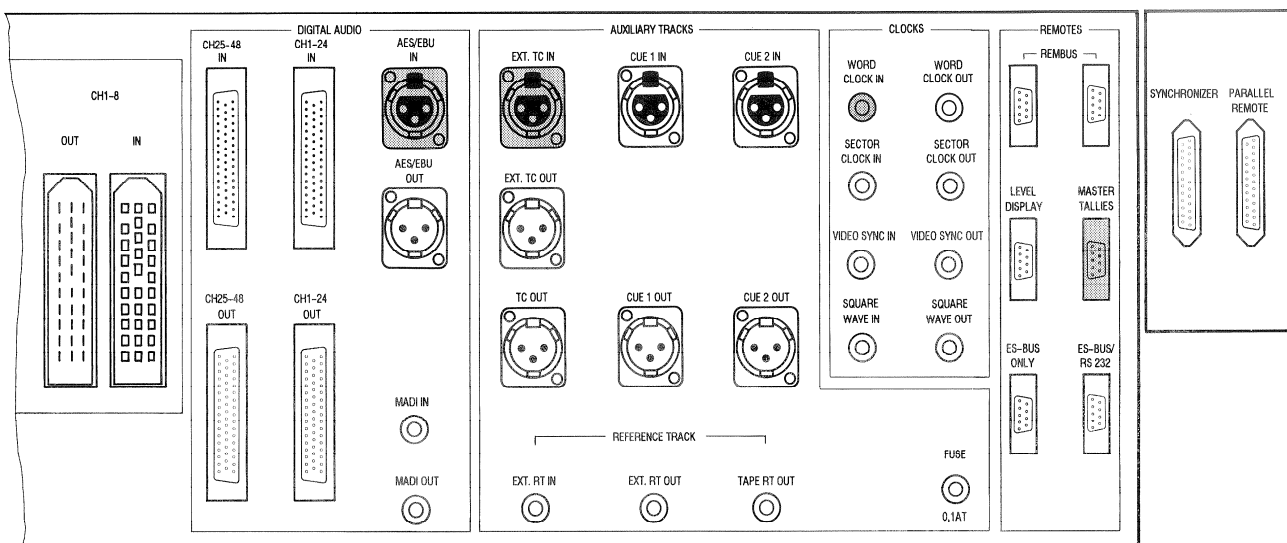


4.2 DTR - DTR, wordclock or AES/EBU sync

Master: any digital tape recorder (DTR)  
 Slave: D820 MCH  
 Sync Source: wordclock or AES/EBU



Connector panel D820 MCH Slave:

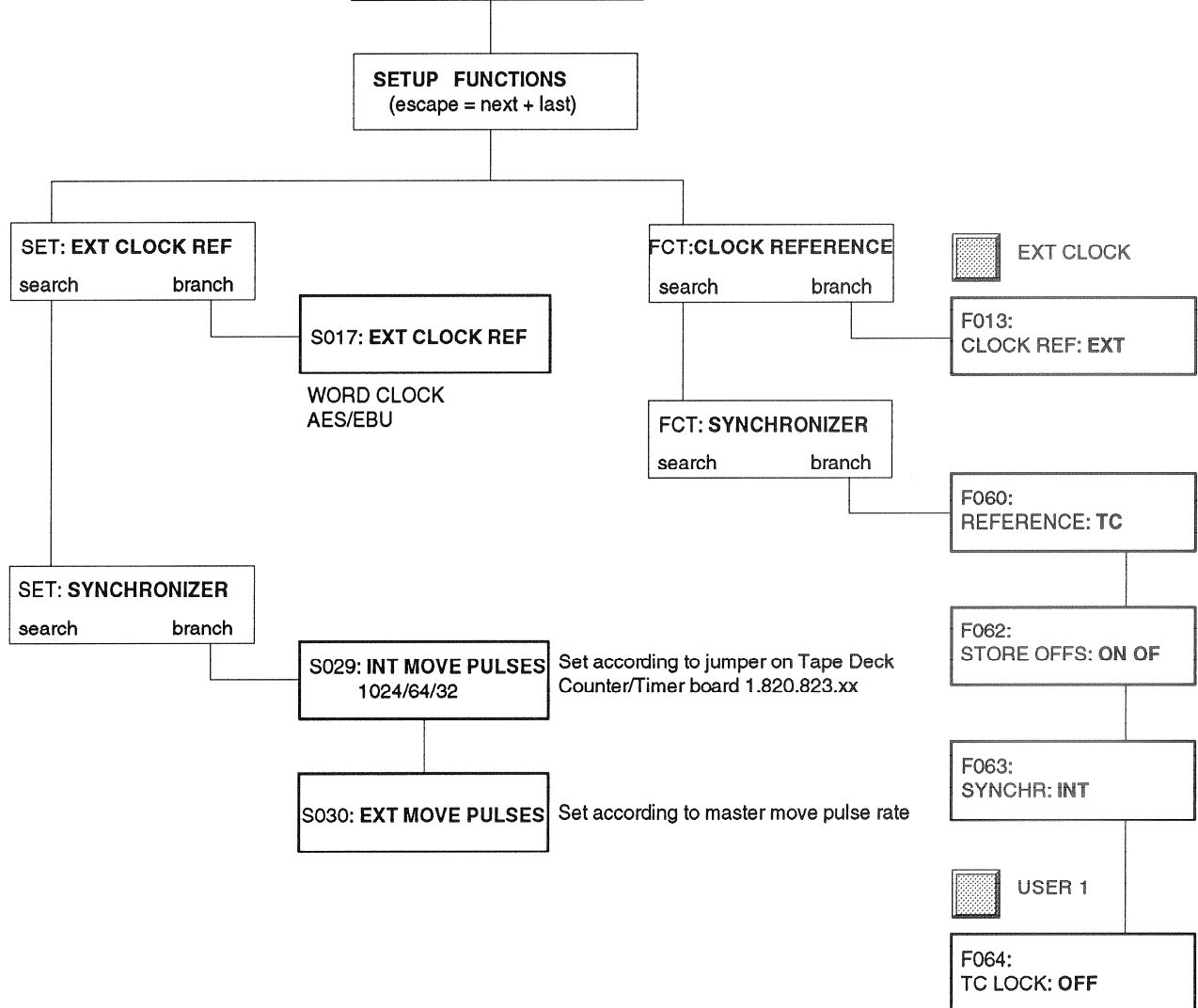




Settings D820 MCH:

- 1 Press the **SET ENABLE** and **INSERT** keys  
(on Display Panel or Tape Deck Controller)

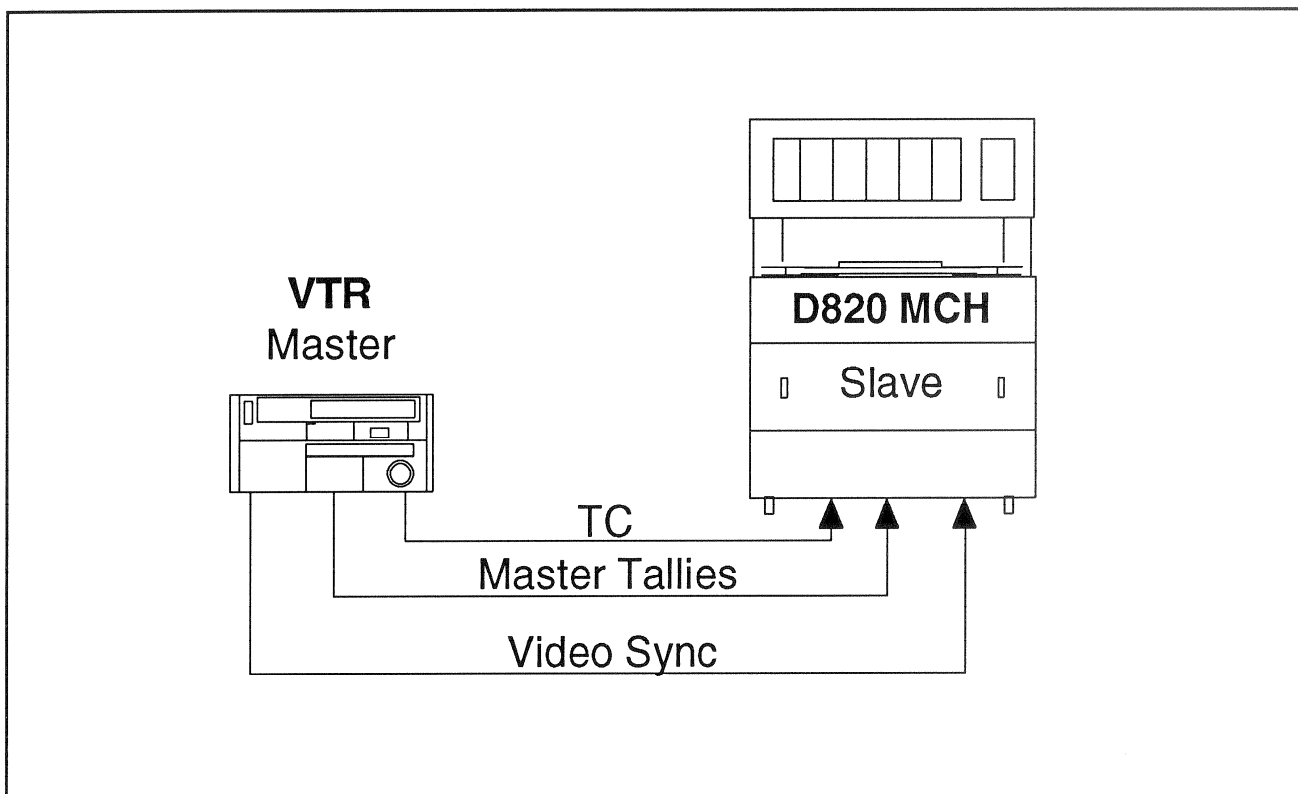
2 **CLIP LEVEL: 20 dBu**  
**TC ON TAPE: -- Fm/s**



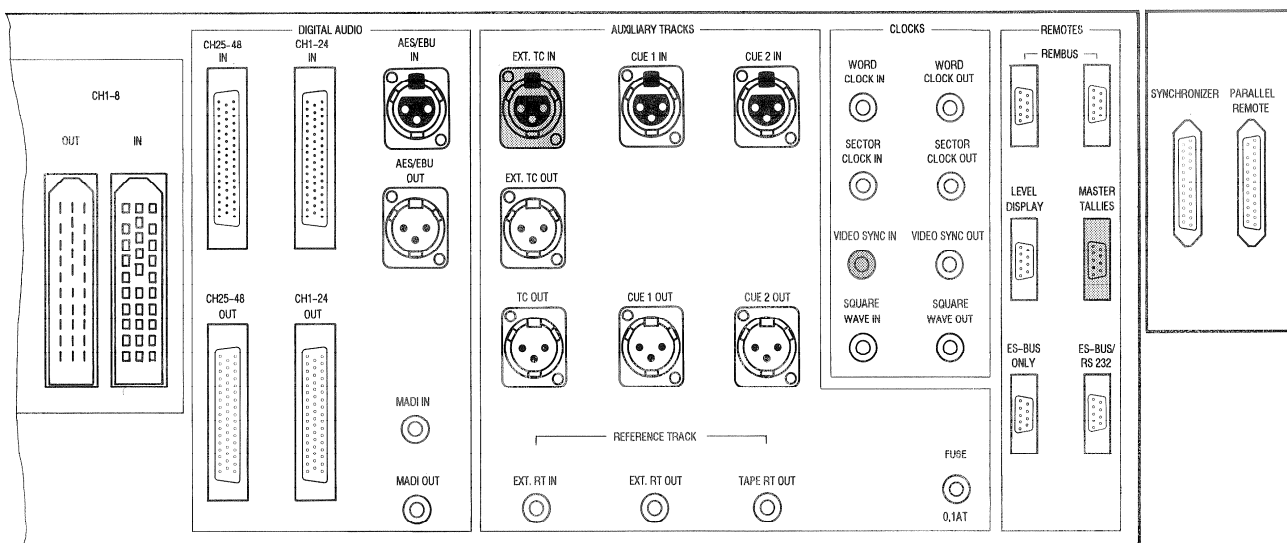
- 3 Press the **LOCK** key on slave D820 MCH

4.3 VTR - DTR, video sync

Master: video tape recorder (VTR)  
 Slave: D820 MCH  
 Sync Source: video



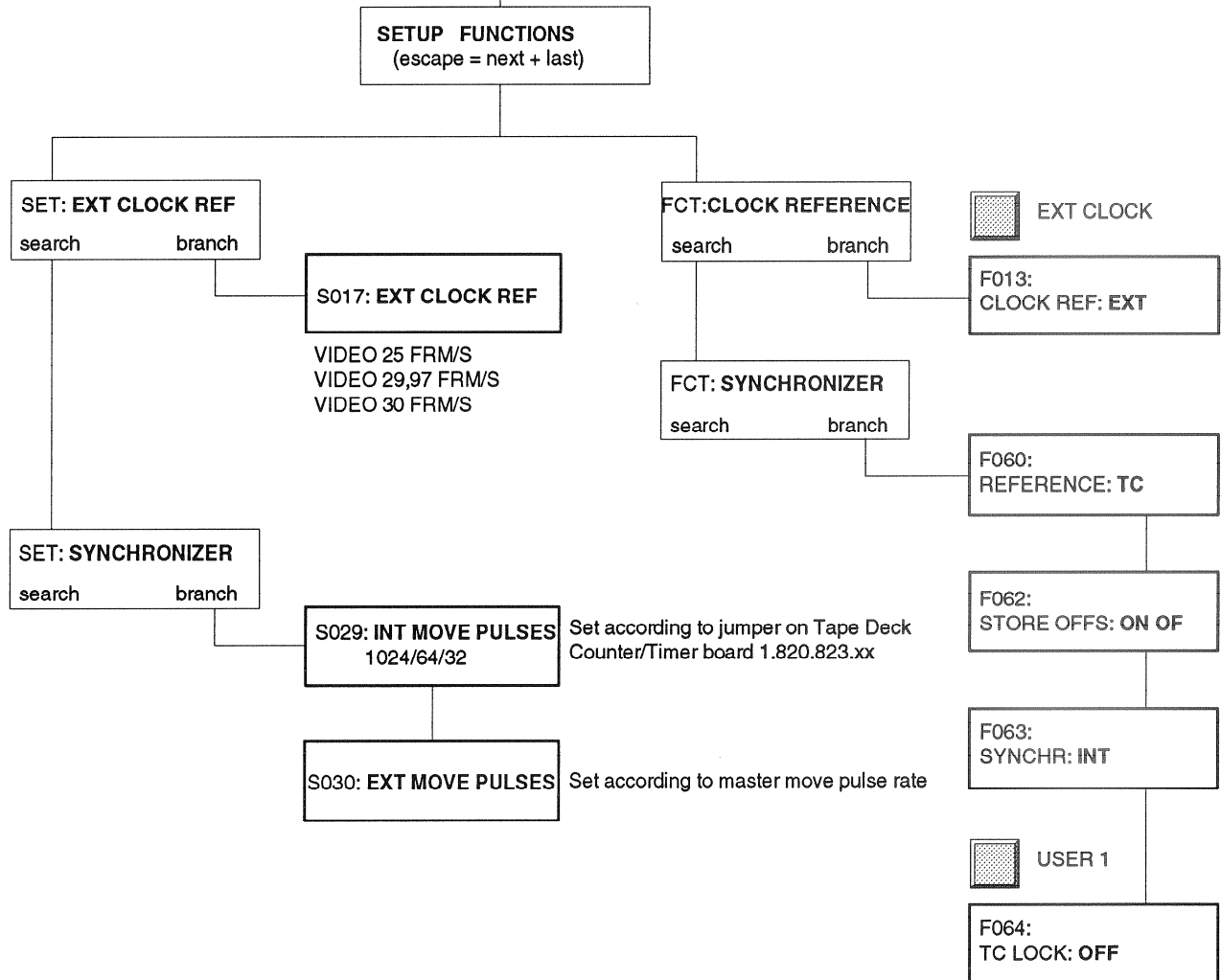
Connector panel D820 MCH:



Settings D820 MCH:

- 1 Press the **SET ENABLE** and **INSERT** keys  
(on Display Panel or Tape Deck Controller)

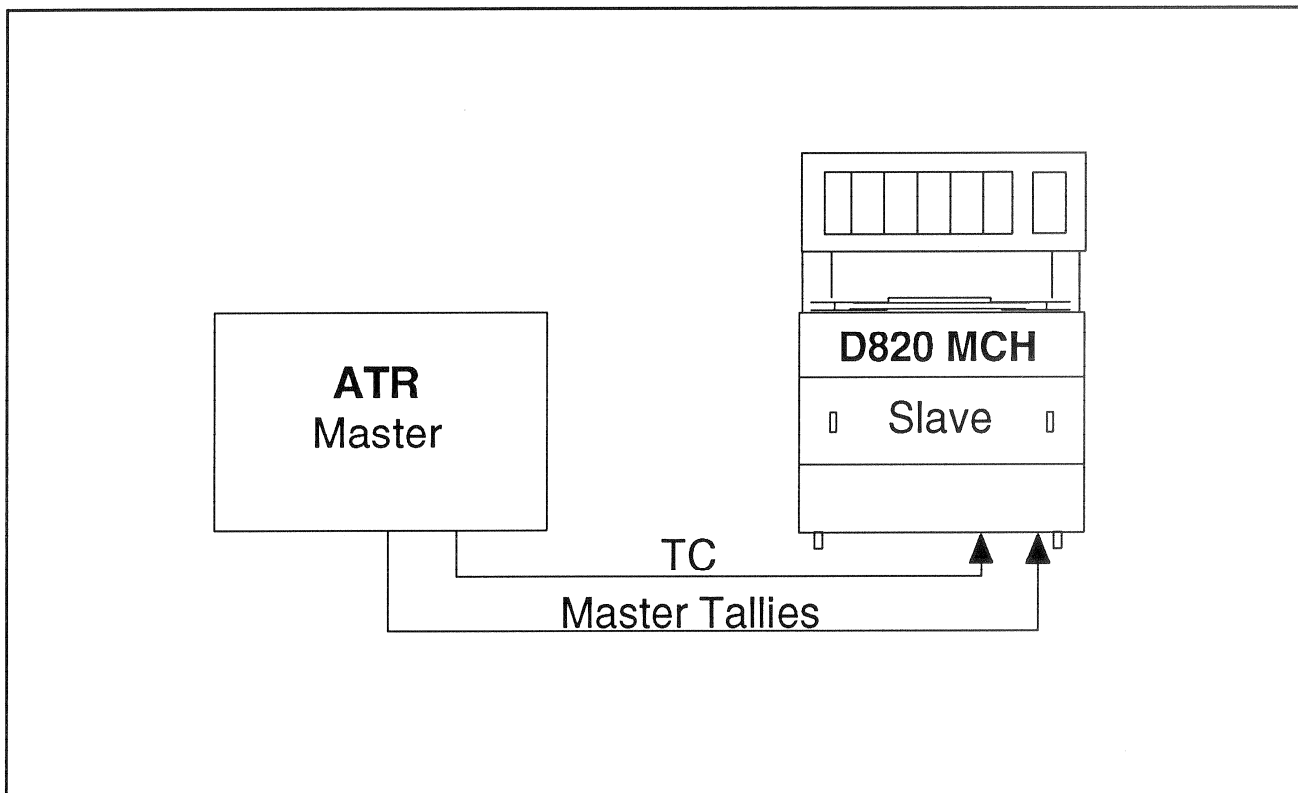
- 2  CLIP LEVEL: 20 dBu  
TC ON TAPE: -- Fm/s



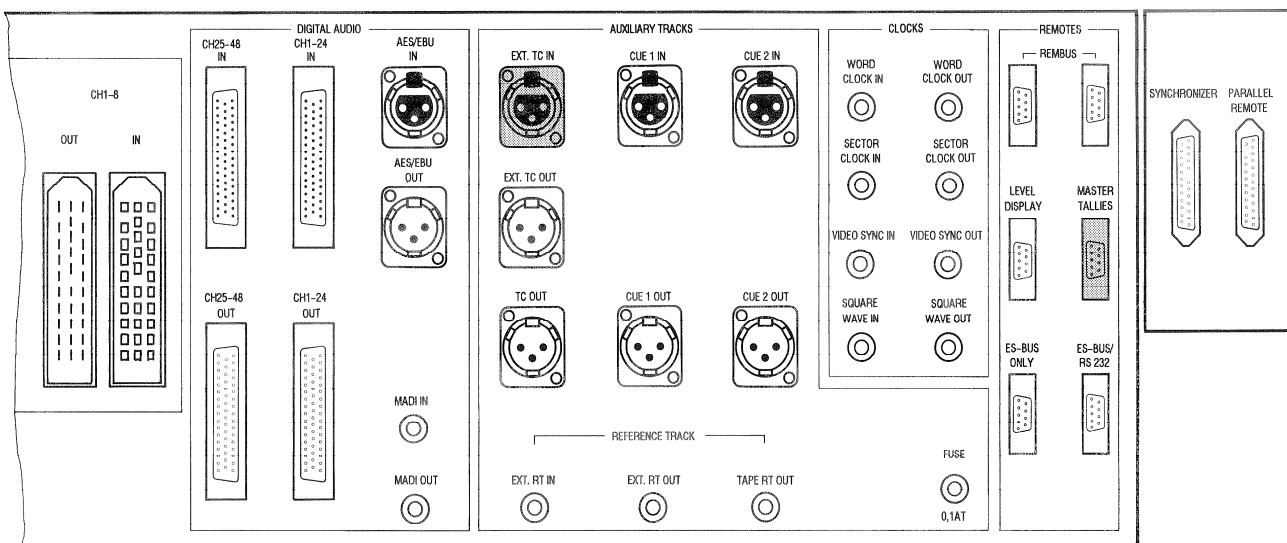
- 3 Press the **LOCK** key on slave D820 MCH

4.4 ATR - DTR, TC sync

Master: analog tape recorder (ATR); **not recommended.** (see 4.6)  
 Slave: D820 MCH  
 Sync Source: TC



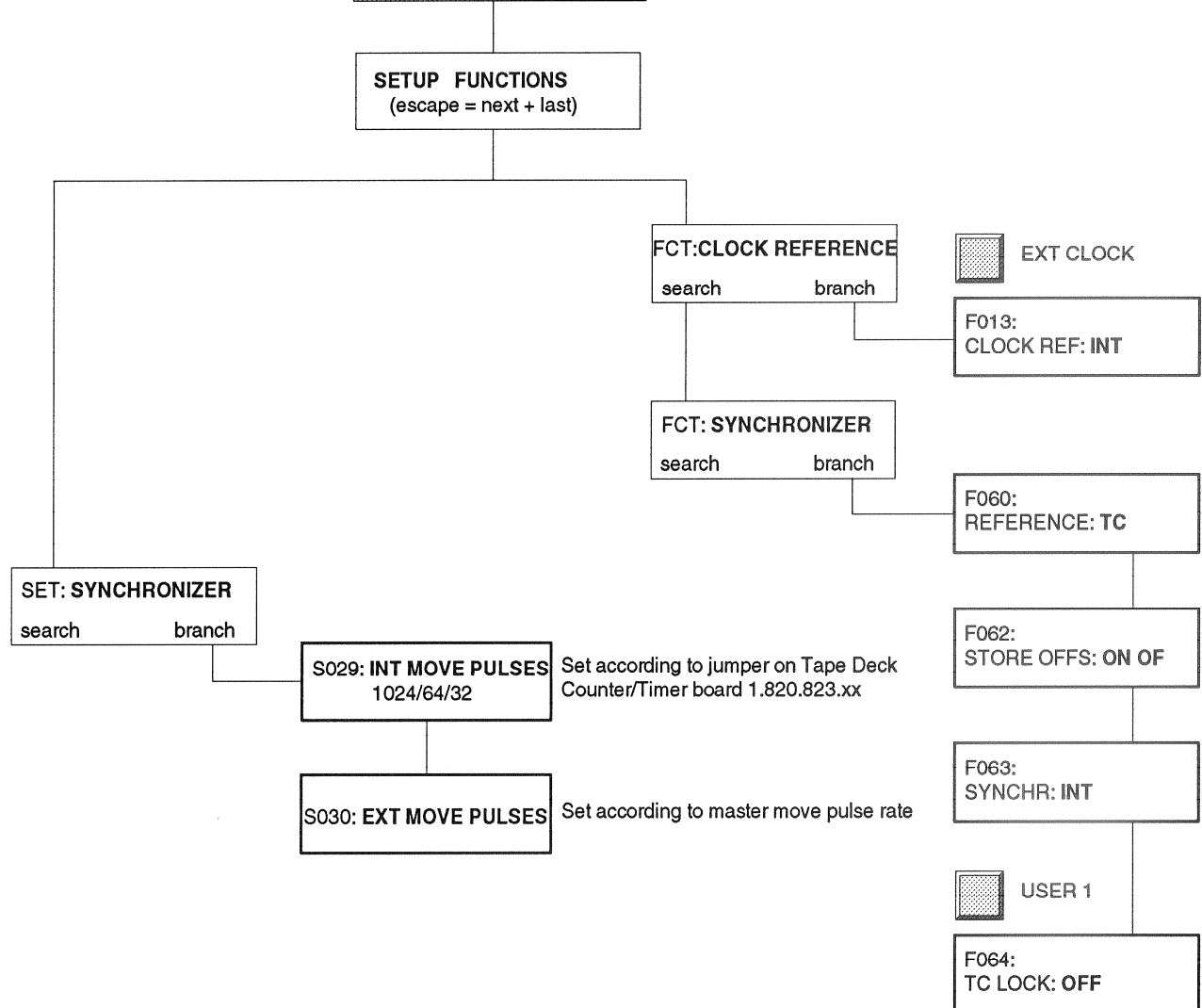
Connector panel D820 MCH:



Settings D820 MCH:

- 1 Press the **SET ENABLE** and **INSERT** keys  
(on Display Panel or Tape Deck Controller)

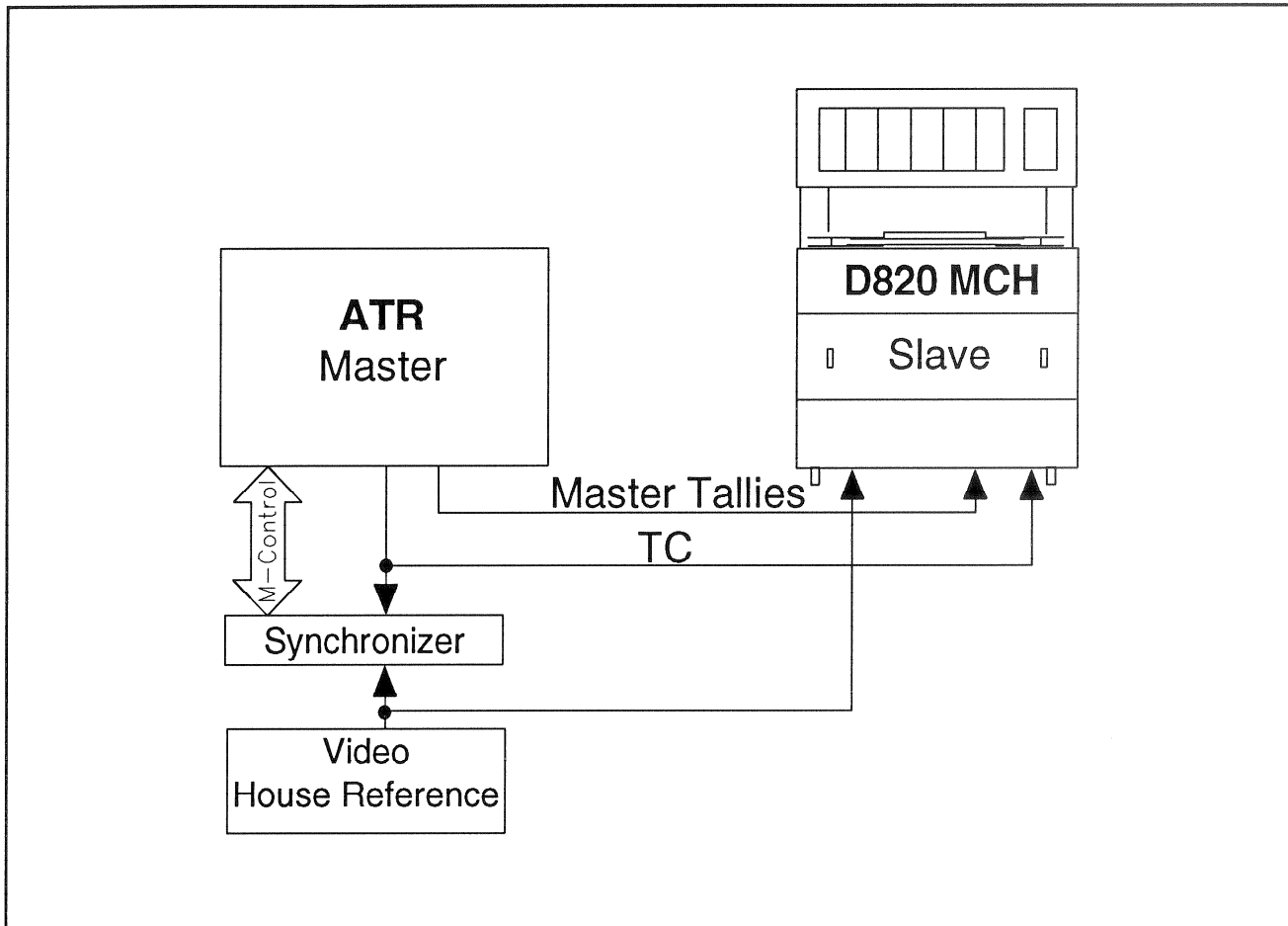
- 2 **CLIP LEVEL: 20 dBu**  
**TC ON TAPE: -- Frm/s**



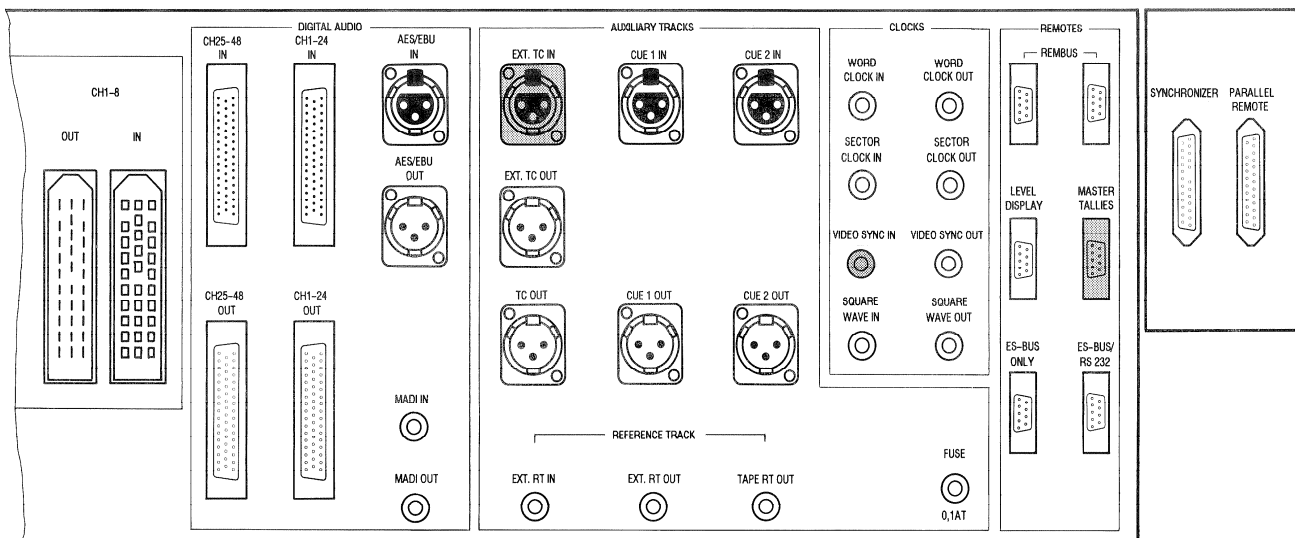
- 3 Press the **LOCK** key on slave D820 MCH

4.5 ATR - DTR, video sync

Master: analog tape recorder (ATR) resolved to video clock  
 Slave: D820 MCH  
 Sync Source: video



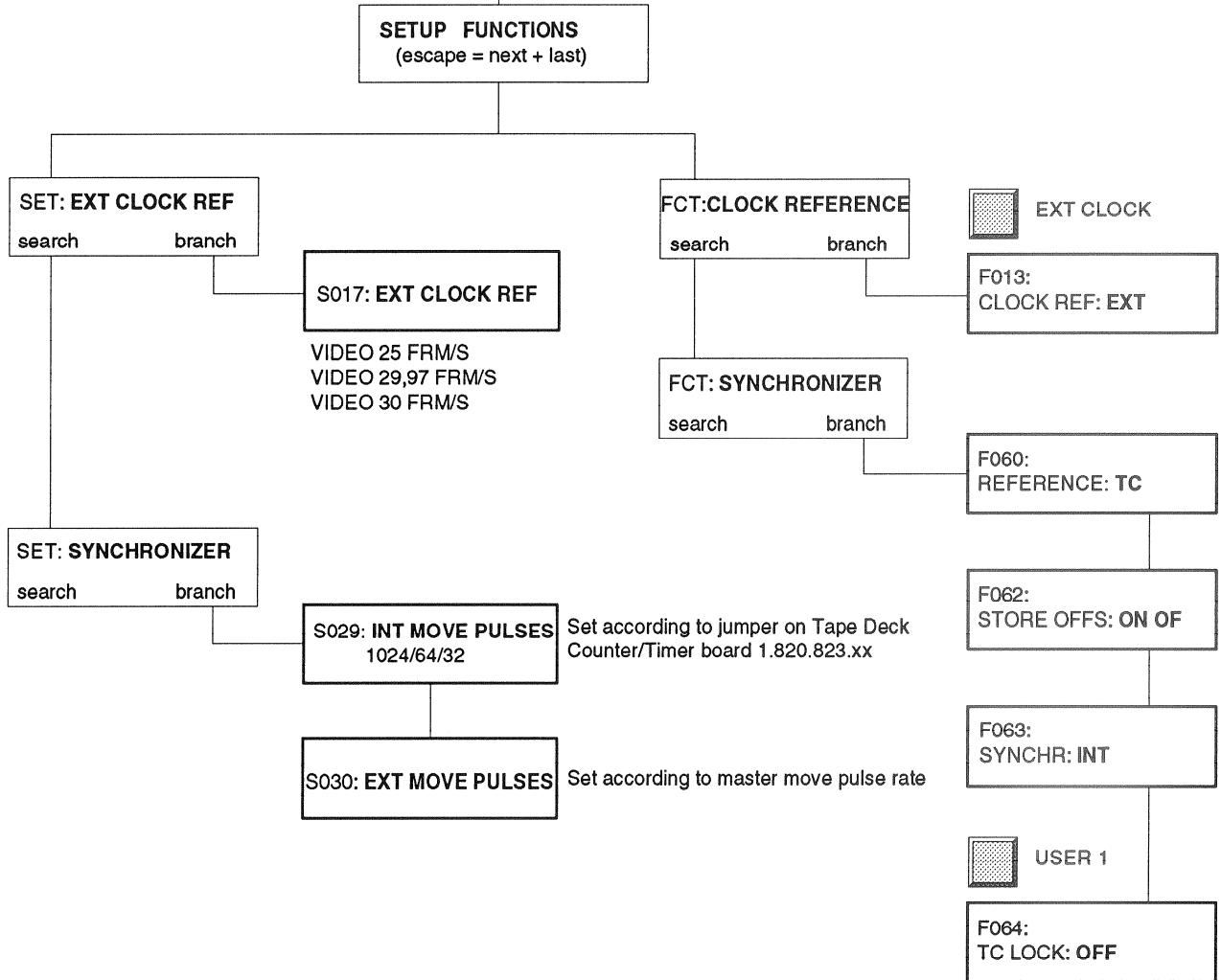
Connector panel D820 MCH:



Settings D820 MCH:

**1** Press the **SET ENABLE** and **INSERT** keys (on Display Panel or Tape Deck Controller)

**2** **CLIP LEVEL: 20 dBu**  
**TC ON TAPE: -- Fm/s**

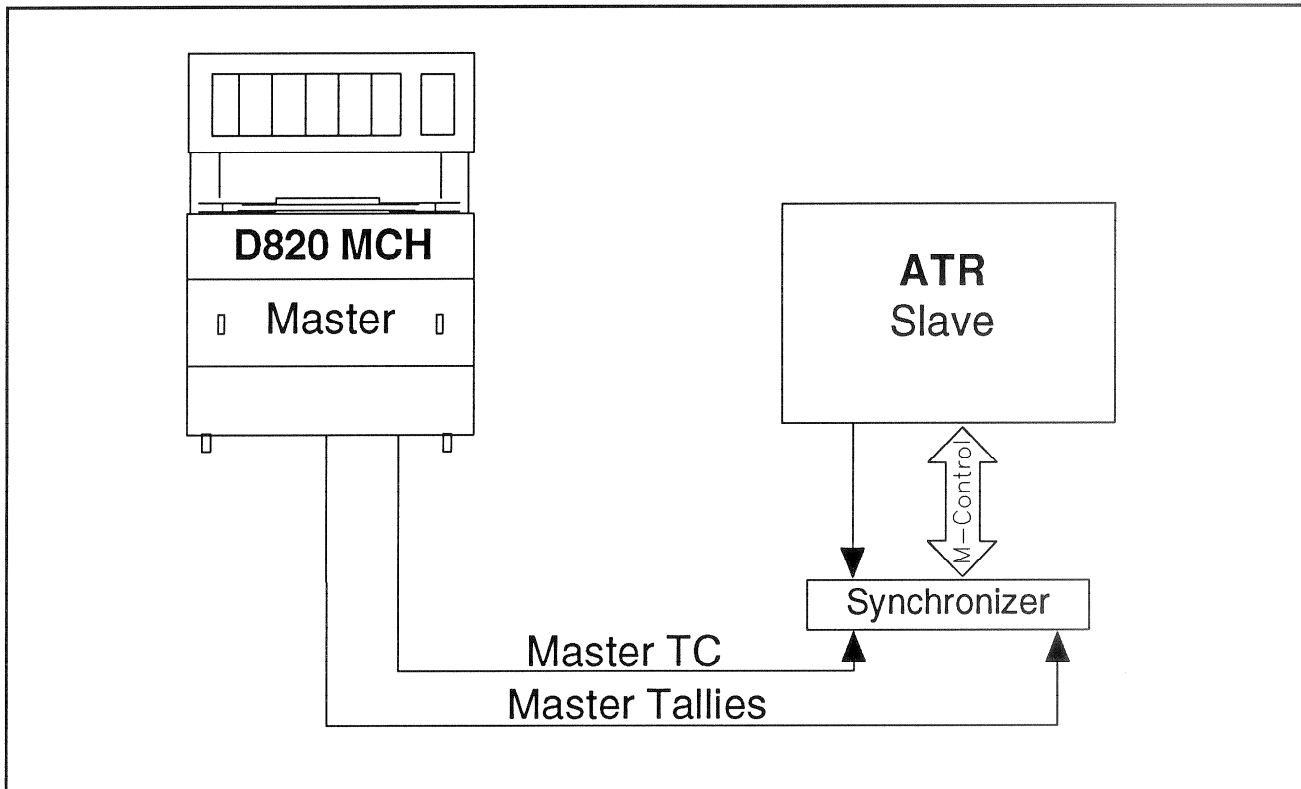


**3** Press the **LOCK** key on slave D820 MCH.

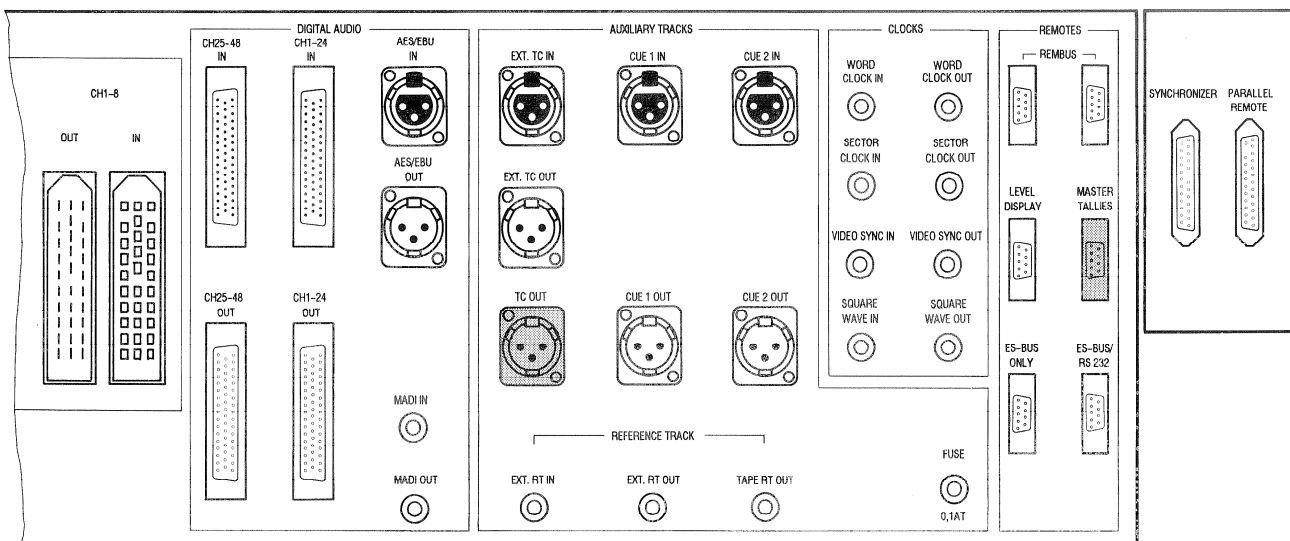
4.6 DTR - ATR, TC sync

The digital tape recorder is recommended as the synchronization master when copying from ATR.

Master: D820 MCH  
 Slave: analog tape recorder (ATR)  
 Sync Source: TC



Connector panel D820 MCH:





Settings D820 MCH:

