Film-Tech

The information contained in this Adobe Acrobat pdf file is provided at your own risk and good judgment.

These manuals are designed to facilitate the exchange of information related to cinema projection and film handling, with no warranties nor obligations from the authors, for qualified field service engineers.

If you are not a qualified technician, please make no adjustments to anything you may read about in these Adobe manual downloads.

www.film-tech.com

DIGITAL

dts

SOUND

Installing TEAC CD-ROM Drives

We have used only two manufacturers of CD-ROM drives: Toshiba and TEAC. This procedure is to be used when replacing a Toshiba drive with a TEAC drive. The same procedure can be used for either the DTS-6 (2-drive) or DTS-6D (3-drive) player.

Tools Required

Phillips head screwdriver, #2
Nut driver, 5/16"
DTS Setup Disc DS1
DTS Upgrade kit: TEAC CD-ROM drives, ACQUTEC ROM board, ADAPTEC SCSI board, AQRM chip, V1.46 TCR firmware chip, hardware

1. Turn the player's power switch off. Remove the player from the sound rack and open player's top cover.

2. Remove all the drives from the player. Removal of the player's front panel may be required to access the drives. Save all screws and nuts.

3. Remove the SCSI board from the player. **The Future Domain SCSI board must be removed.** Save the #4 mounting screw.

4. Remove U12 "ROM-DOS" chip from D422 timecode board, inside the player. **D422-U12 must be removed.** See page 5.

5. Remove U14 (TCR firmware chip) from D422 board and **install new TCR firmware chip** in its place, see page 5. New firmware chip should be labeled "V1.46". When installing, check orientation of pin 1.

6. Install replacement drives. Be sure the power (4-pin MOLEX) and data (50-pin ribbon) cables are plugged in correctly.

7. Address the drives for their location. Use the "*DTS-6/D Toshiba CD-ROM Jumper Settings*" diagram. Use the drawings to match the back panel of the given drive. Remember, only the last drive should be terminated and all drives must be the same model. Look carefully at each drive, the address locations do not always line up with the panel screening. The first (left) pair of terminals is always position "0".

		DTS-6D	DTS-6	Termination programmed
TEAC 16X	Drive A:	Jumper 2, 4, 6	Jumper 2, 4, 6	on Pin 4, that should be
	Drive B:	Jumper 0, 2, 4, 6	Jumper 0, 2, 6	**removed** to activate.
	Drive C:	Jumper 0, 1, 6		
TEAC 32X	Drive A:	Jumper 2	Jumper 2	Termination programmed
	Drive B:	Jumper 0, 2	Jumper 0, 2, 5	on Pin 5, that should be
	Drive C:	Jumper 0, 1, 5		**added** to activate.

8.   Verify the "AQRM" chip is installed in the Acqutec ROM board. **The AQRM chip must be installed correctly.**

9.   Verify the Acqutec ROM and Adaptec SCSI boards are addressed as shown on page 6.

10.   Install the Acqutec ROM and Adaptec SCSI boards. **These boards must be used.** See the "DTS-6D" diagram for board orientation. It will be the same for the DTS-6 or DTS-6D. Use the saved screw from the old SCSI board and a new #4 screw to mount both boards to player's chassis.
NOTE: Bottom metal tab must be cut off for boards to fit correctly into unit.

11.   Connect SCSI cable to Adaptec SCSI board. Check orientation of pin 1.

12.   Apply power to player. Test the player by loading in the DTS DS1 Setup Disc. The player should boot-up and automatically play the disc. Be sure the DIGITAL and CD-ROM L.E.D.s light. *Check each drive.* **All drives must be the same manufacturer.**

13.   Re-install the top cover and re-install the player into the sound rack.

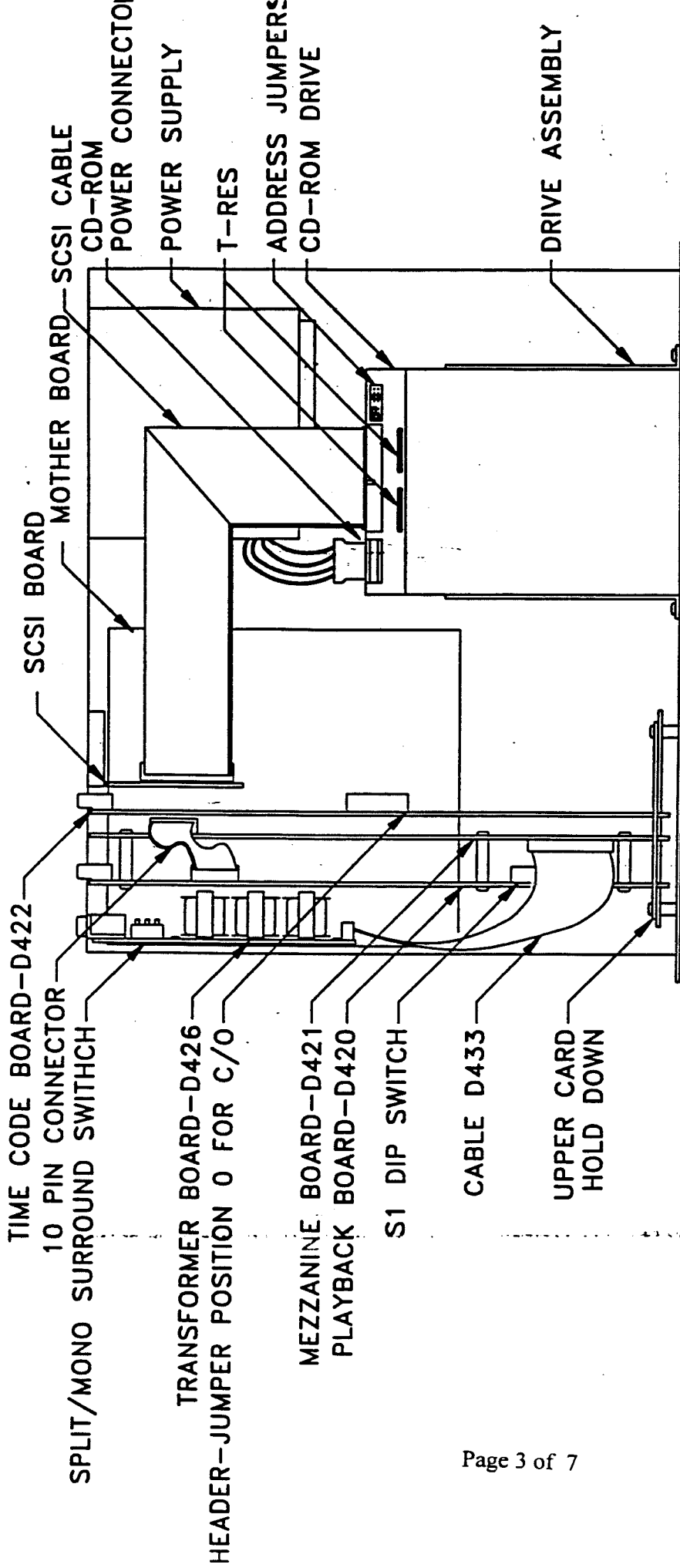Refer questions to DTS Technical Services
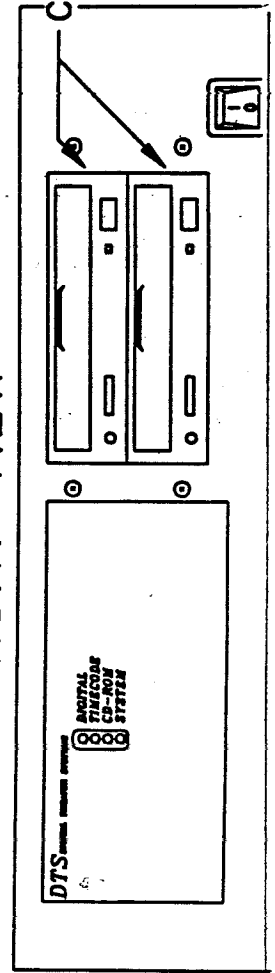Telephone: (800) 959-4109   or   (818) 706-3525
Fax: (818) 706-1868
Email   *cinematech@dtsonline.com*

DTS web site   *http://www.dtsonline.com*

DTS-6 Top View

SCSI BOARD

MOTHER BOARD

SCSI CABLE

CD-ROM
POWER CONNECTOR

POWER SUPPLY

T-RES

ADDRESS JUMPERS

CD-ROM DRIVE

DRIVE ASSEMBLY

TIME CODE BOARD-D422

10 PIN CONNECTOR

SPLIT/MONO SURROUND SWITHCH

TRANSFORMER BOARD-D426

HEADER-JUMPER POSITION 0 FOR C/O

MEZZANINE BOARD-D421

PLAYBACK BOARD-D420

S1 DIP SWITCH

CABLE D433

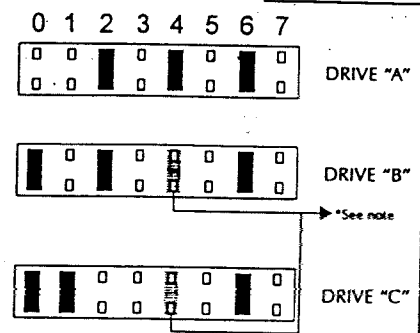UPPER CARD
HOLD DOWN
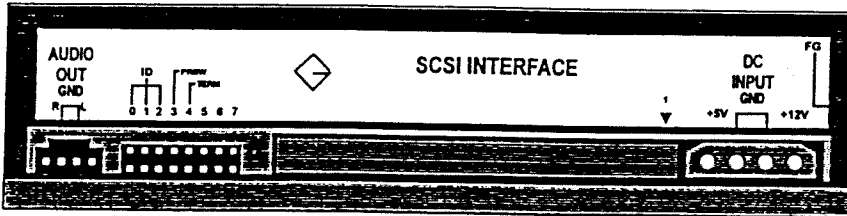
FRONT VIEW

CD-ROM DRIVES

DIGITAL
TIMECODE
CD-ROM
SYSTEM

DTS

DTS-6(D) TEAC CD-ROM Jumper Settings

Revised 7/28/98

16X TEAC

0	1	2	3	4	5	6	7	
		■		■		■		DRIVE "A"

0	1	2	3	4	5	6	7	
■		■				■		DRIVE "B"

*See note

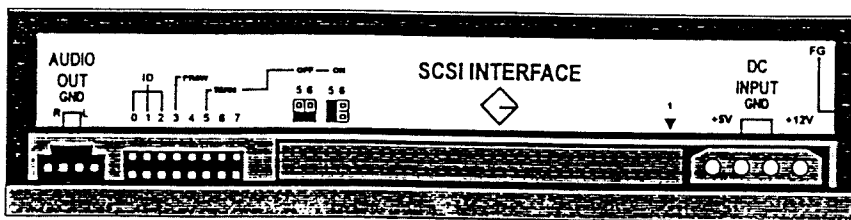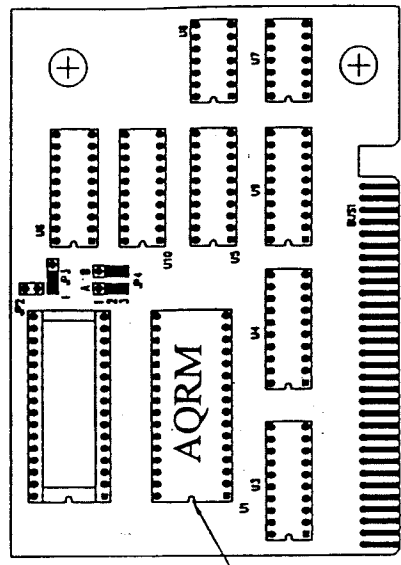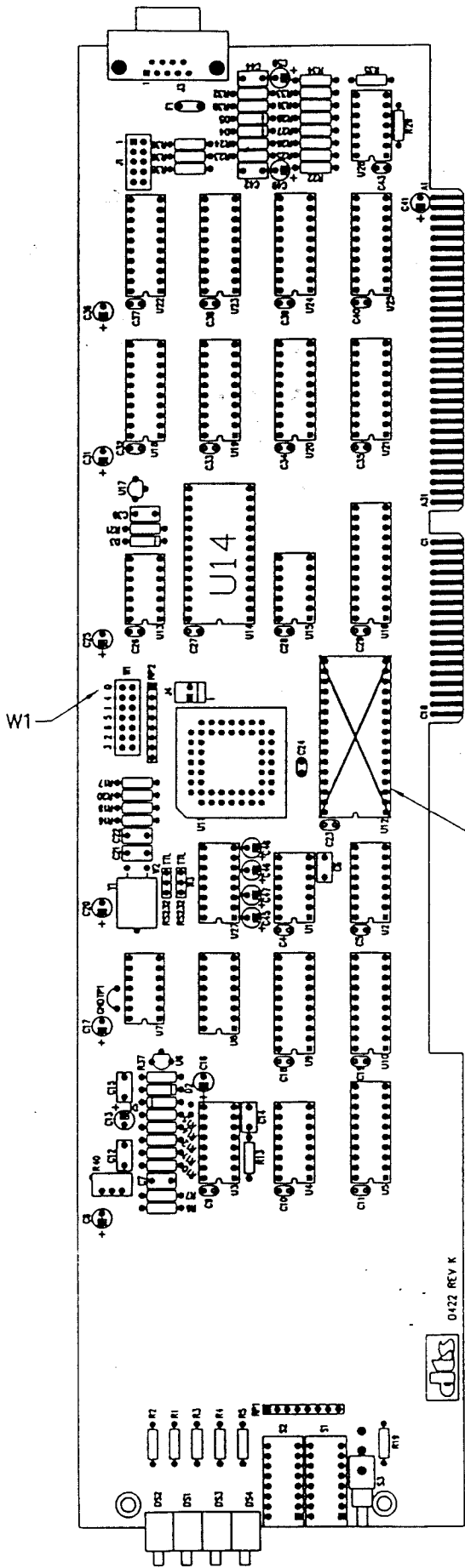| 0	1	2	3	4	5	6	7	
■	■					■		DRIVE "C"

*If you have a 2 drive unit: REMOVE jumper over "TERM"on drive B, otherwise REMOVE the jumper on drive C.

32X TEAC

0	1	2	3	4	5	6	7	
		■						DRIVE "A"

0	1	2	3	4	5	6	7	
■		■						DRIVE "B"

*See note

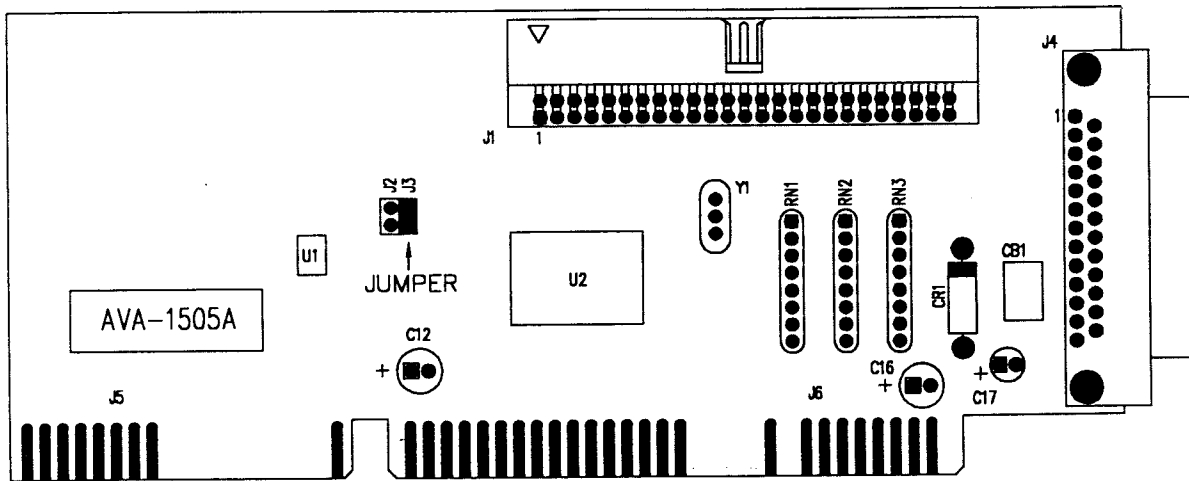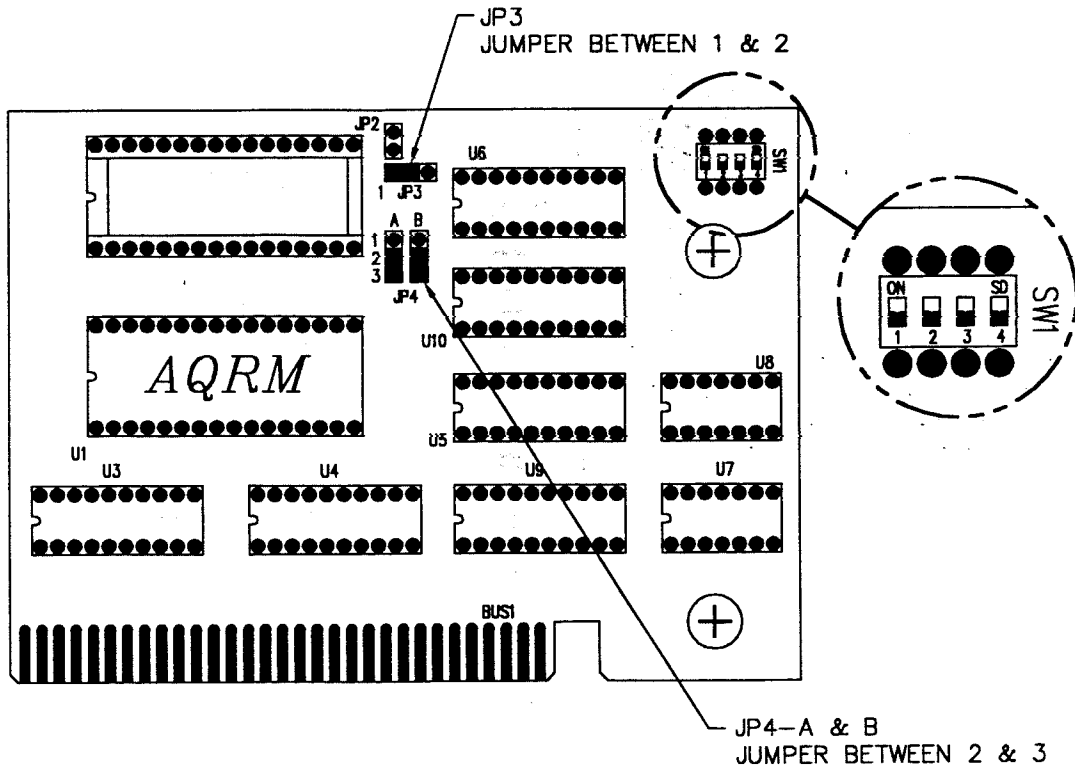| 0	1	2	3	4	5	6	7	
■	■							DRIVE "C"
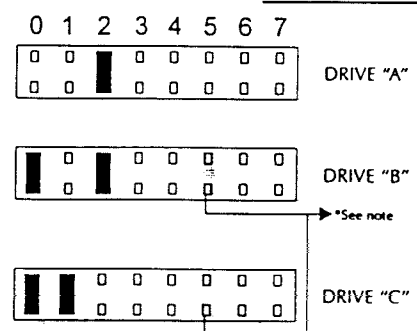
*If you have a 2 drive unit: Place jumper over "TERM"on drive B, otherwise use drive C.

Acqutek Card

"AQRM" chip installed

Remove U12 "ROM-DOS" chip,
if Acqutek card is installed

W1

JP3
JUMPER BETWEEN 1 & 2

JP4—A & B
JUMPER BETWEEN 2 & 3

ACQUTEK ROM CARD

ADAPTEC SCSI CARD

DTS-6D Top View

ACQUTEK ROM CARD

POWER SUPPLY

MOTHERBOARD

SCSI CABLE

6-TRACK ANALOG CONNECTOR

D562

TIMECODE CONNECTOR

DIGITAL OUTPUT CONNECTOR

ADAPTECH SCSI CARD

TIMECODE BOARD D422

PLAYBACK BOARD D536

MOVIE CD-ROM DRIVES (2)

TRAILER DRIVE (1)

POWER SWITCH