TEAC **TECHNICAL INFORMATION**

No. **0510**

TASCAM CD-RW2000V3, Converter MPU Upgrade

DATE 20th October 2005

ROM of the Converter MPU, U707 on the Converter PCB Assy has been upgraded from Ver 3.01 to Ver 3.02 on the products of S/N 0440001 and up.

Item	P/No.	Description
Converter MPU U707	3S0048510A (Ver3.01)	3S0048510B (Ver3.02)

Problem corrected by V3.02

1. "COPY RPOHIBIT" has been resulted at the first track of recorded CD even "COPY ID" was selected to "FREE" regardless of the input source.
2. LCD shows "NO DISC" when UNFINALIZE was operated against CD-RW media on that exactly 99 tracks have been recorded. Once open and close the Tray has been required to recover the 99 tracks read out.
3. "REC ERROR" has been occurred when a particular CD was tried to Copy from Drive 1.

Note: Drive firmware has been updated from Ver 1.TD to Ver 1.TF to solve the problems however updating the Converter firmware is recommended to be done at the same time for a future provision.

Converter MPU and Drive firmware update procedure

Prepare a "Converter update CD-R" that has "conv0302mot" written on it.
Prepare a "Drive update CD-R" that has "T58V1tf.abf" written on it.

Preparation:

1. Have two blank CD-R data discs available, as well as a system capable of creating data CDs.
2. Visit the **ROM Data Library** in the TASCAM Service HP website to download both firmware data images and write the firmware file on PC to the blank CD-R discs respectively. (Use the "Disc at once" method that complies with ISO9660 Level 1: MS-DOS compatible)

Notice:

Be careful that the power supply to the unit is not interrupted during the update process otherwise firmware data of the Converter MPU or the drive could be damaged and physical replacement of related part becomes unavoidable.

Converter MPU firmware update

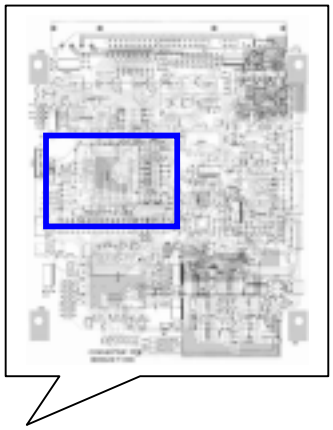
Procedure:

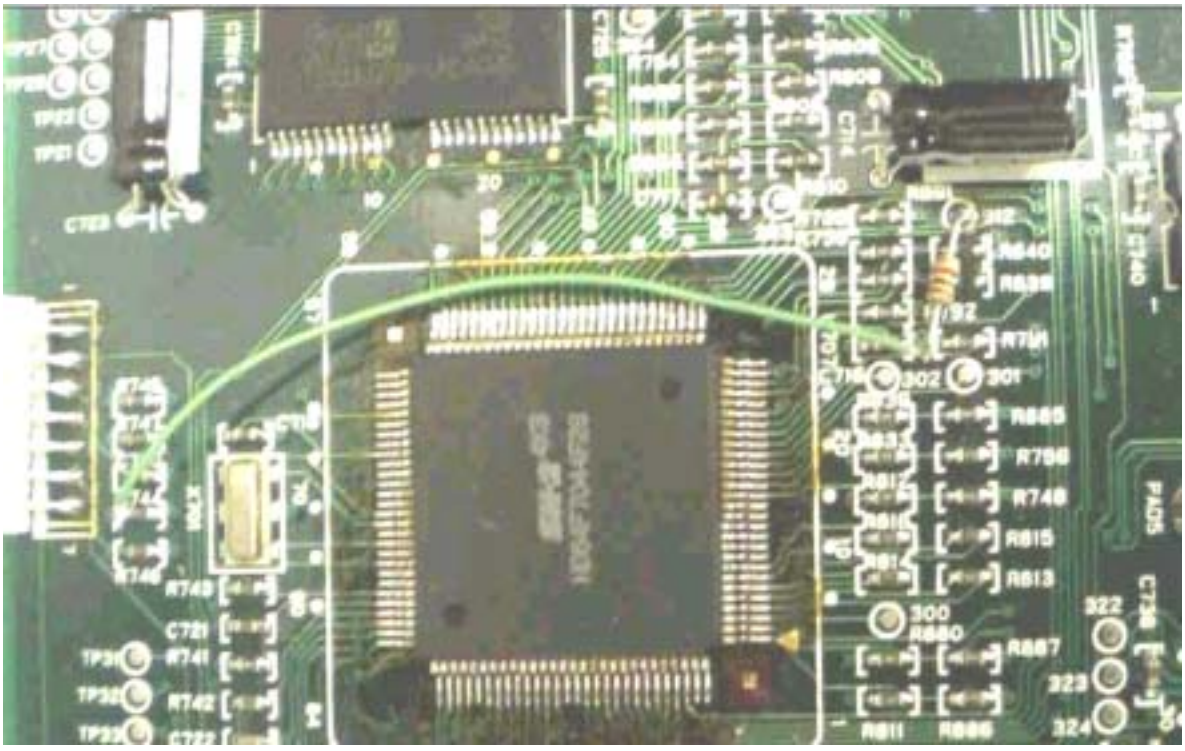
1. Turn on power of the unit while holding **CALL** and **MENU**.
2. Load the "Converter update CD-R" while display shows "RW2000 03.00" that is version of the Front MPU.
3. Confirm "CD" in display blinks. Then press **CALL** to check current version of drive. Existing version is "V1.TA", "V1.TB" (May/2005) and "V1.TD" as of August/2005.

4. Press **MENU** then the display shows current version and new version to be updated as "C03.0X→03.02".
5. Press **ENTER** then update will start.
6. Wait approximately 45 seconds or more to finish the update.
7. Turn off power of the unit.

A temporary work on the Converter PCB Assy to connect an oscilloscope is required to realize a successful completion. This is since the Converter PCB Assy of CD-RW2000V3 does not have necessary hardware to continue to show update sequence further. The waveform becomes Low when the **ENTER** key is pressed and goes to High approximately 45 seconds later upon end up the update as shown below:







The point to observe the waveform is a junction of additional 1kohm resistor and 60 mm wire that is connected across pin 30 (TP312) and pin 77 (R744) of the MPU (U707) as shown above.

Drive firmware update on CD-RW2000V3

1. Turn on power of the unit while holding **CALL** and **MENU**.
2. Load the "Drive update CD-R" while display shows "RW2000 03.00" that is version of the Front MPU.
3. Confirm "CD" in display blinks. Then press **CALL** to check current version of drive.
   Existing version is "V1.TA", "V1.TB" (May/2005) and "V1.TD" as of August/2005.
4. Press **MENU** then the display shows current version and new version to be updated as "D 1.TA→1.TF" for example.
5. Press **ENTER** then update will start.
   "NOW UPDATE" is displayed and "**.**" at the right most corner blinks.
6. "COMPLETE" appears to show end up of the update successfully.
7. Turn off power of the unit.

Drive firmware update on Windows

There is another way to update the drive firmware only by using PC.
Visit the **ROM Data Library** in the TASCAM Service HP website to download firmware data image of "CDW58DA_1TF.exe" into PC.

1. While PC is powered off, connect the CD-W58DA to PC and reboot.
   No need to consider Primary/Secondary and Master/Slave.
2. Double-click on "CDW58DA_1TF.exe" to run.
3. Follow the messages that will appear.