



APPLICATION NOTE

July 12, 2007

TDC-100 VER 3.3 FIRMWARE

[Also applies to Ver 3.2]

This application note describes version 3.3 firmware for the Lance Design TDC-100 disk controller. These are preliminary installation and operation notes. A version 3.3 manual is available for download from www.lancedesign.com.

Purpose of Ver 3.3

The firmware change is a revision of version 3.0. It is the same as Ver 3.2 with a minor fix for a Profile idiosyncrasy.

There are four changes:

- 1) Improvement in clip status operation. With previous versions it was possible for the TDC-100 to read incorrect clip status after manually loading a clip with some ddrs. If there were a large number of clips on the server, this would cause the 'CUR CLIP' status light to take a long time to properly reflect the status of a newly-loaded clip, because the TDC would have to poll the entire clip list. This has been corrected in version 3.3.
- 2) Change in register recall operation as it affects channels which are playing at the time the register is recalled. Previously if you recalled a register while one or more channels were playing (either looping or normal playback), the loop or outcue action would be corrupted. With version 3.2, so long as the new register you're recalling does not have an inpoint(s) for the machine(s) which are playing, they will not be affected. If the new register does have an inpoint, the loop or playback will be aborted, and the machine(s) cued to the new intime, as before. PRESERVE LOOP still operates as it always has – it will protect a looping playback regardless of what is in the new register, and requires an explicit STOP command to end the loop. The change in version 3.3 allows you to maintain loops without using PRESERVE LOOP, so long as the new registers don't have intimes for the looping channels.
- 3) Pbus Recall and Learn commands can now access all 300 registers. Previously this was restricted to 000-099, which was all that most switchers could access. New GVG switcher software will allow access to all 300, and this change is in anticipation of that.
- 4) A minor fix for a slight error message bug which would occur when the user would try to clear all registers with the registers locked. This now results in a normal 'Registers Locked' error message.

Installation

The firmware is changed by replacing three EPROM chips on the main board in the rack-mount frame. There are no changes to the control panel.

One of the chips is labeled U25. This goes in the main processor memory location, also labeled U25.

The other two chips are labeled U4/U12. They have the same contents, and should replace the chips at locations U4 and U12. Either chip may be used in either location.

As always, when replacing EPROMS, try to work in a static-free environment, and be sure to orient the chips properly (notch in chip matches notch in silkscreen). Make sure all leads go into the sockets.

Once the firmware is installed, and the cover is re-installed, recable the unit and power it up. You should see 'TDC-100 Frame Ver 3.3' displayed on the bottom line of the display, for a few seconds. You should then briefly see the message 'Memory Test OK', then the usual display.

If you're upgrading from version 3.0, there are no menu or setup changes required. All configuration will remain unchanged.

If you're upgrading from a version prior to version 3.0, you should go through all the menu items and reset the configuration. The menu items changed with version 3.0, and **you must go through ALL menu items and reset them to your preferences.**

If you're upgrading from a version prior to version 3.0, you might want to download the version 3.0 application notes and/or manual from the website, as there are significant operational changes with version 3.0.

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