INTRODUCTION

Vx76 Software Version 3.6 Overview
Software version 3.6 is now available for the Vx76 Control Consoles. This software supports several new hardware products, including the V276 On Mac console, the Super Node, VX76 DMX Interface board, and the new V676 configuration.

Operating System Upgrade
In order to run software version 3.6, V476 and V676 consoles should be upgraded to the Mac 10.8 (Mountain Lion) operating system. The operating system upgrade is available on the following USB drive:

87.9824.0001 THUMB DRIVE, USB RESTORE, RENTAL, VX76, V3.6.8

A procedure for the OS upgrade is provided on page 10.

Key Caps Update
The command-line keypad layout has been modified to support new features. The following update kit is required on all V476 and V676 consoles for use with version 3.6:

28.9824.0711 VX76 KEYCAP UPDATE KIT FOR V3.6, V676/V476

A procedure for installing the new key caps is provided on page 8.

The TEAM Ecodes that the key cap update applies to are as follows:

- 37565- V476 Console
- 37566- V676 Console
- 37567- Demo, V676 Console
- 37568- Demo, V476 Console

After the new key caps are installed, complete the TEAM inspection: "VX76-010B KEYCAP."

Ordering
The USB drive and Key Cap kit can be ordered from the PRG Dallas office at no charge by emailing: orders@prg.com

A Note About the Vx76 3.6 Software Manual
Since the new V276 On Mac console is considerably different from V476 and V676 consoles (i.e., its front panel does not contain any touchscreen displays or, in some cases, the same hard buttons), the V476 and V676 hardware installation and operation sections have been removed from the Vx76 Software User Manual (02.9814.0001.36) and placed into separate documents. This simplifies the Vx76 Software User Manual and ensures that it is applicable to all types of Vx76 consoles. For installation and general operation instructions for each type of console (V276, V476, V676), refer to its specific Installation & Operation Manual.

Note: Revision A of this technical bulletin adds the procedure for installing the new key caps. (Refer to page 8.)

Note: Revision B of this technical bulletin adds instructions for using a USB Restore Drive and information for the Key Cap TEAM inspection. (Refer to page 10.)
New Features

+ **V276 Display HUD** - To accommodate the V276 On Mac console, a new V276 Display window has been added. The V276 HUD provides convenient access to the command-line and one palette, along with encoder, cue, stack, filter, timing, effect, and stack data. (Refer to “V276 Display” on page 4 for more information.)

+ **DMX Setup Window** - The DMX Setup window has been updated to include the new Super Node, the optional DMX Interface, and V276 outputs (Console 1-16). (Refer to “DMX Setup Window” on page 6 for more information.)

+ **Pairing Window** - The Ethernet & Front Panel window has been separated into two individual windows: “Ethernet” and “Pairing.” The Ethernet window is the same as the Ethernet tab on old Ethernet window. The Pairing window replaces the Front Panel tab of the old Ethernet window. (Refer to “Pairing Window” on page 7 for more information.)

+ **Update Track Options** - All the existing Update cue commands now support the options of “track”, “trackback,” and “track trackback.” When they are added, a Track event is generated instead of Update. The behavior of the Update and Track/Fill commands are the same as before with the exception of the new option of Trackback that only goes backwards.

+ **Command-Line Arrangement** - Several command-line buttons have been moved or changed. The latest configuration can be seen in the Command HUD shown below:
Corrected Issues and Enhancements

+ Fixed issue with recalling 16-bit values from encoder popovers.
+ Fixed several issues with cue data editing, including errors with percent mode, intensity editing, clearing preset references with zero values, and preset data display.
+ Fixed issue with adding 'copy' to labels of palette entries that are moved.
+ Fixed issue with central cue list getting stuck in a particular stack when another cue is selected via the command line.
+ Locations in patch spreadsheet are now tokens, and also support changing case.
+ Made improvements to text patch import: will now read any .txt file, can add fixtures of an existing type, and can edit settings of an existing fixture. (Still cannot add a new fixture type, change fixture type, or delete a fixture.)
+ Fixed several cases where dynamics would not start, related to legacy global cue time issues or effect recall in other submasters.
+ Allow dynamic offset to wrap instead of clamping when going down to zero with the encoder or negative offset controls.
+ Fixed issue with selective import of timecode scripts deleting macros.
+ Now uses channel selection order with loading channels into a set.
+ Fixed issue with extremely long command-line entries.
+ Fixed issue with ALL button in snapshot filter not selecting all submasters.
+ Fixed issue with occasional missing copy cue confirmations.
+ Fixed issue with cue stack copy move - Copy/move will now use the source stack if provided and the destination stack is not explicitly given.
+ Fixed issue with Intensity window showing unpatched channels.
+ Fixed issue with long cue numbers getting cut off in the central cue sheet.
+ Fixed issue with panel server lockup when moving cues.
+ Channel Select window now supports channels up to 4000.
+ Fixed several issues with groups used as sets.
+ Holding Shift when bringing up effect step time keypad now edits individual step time.
+ Update on command line won't bring up filter unless the Update is configured to use the function filter.
+ Patch spreadsheet shows decimal values when in metric mode.
+ Allow deletion of effect step actions without clearing step times (delete twice to clear times also).
+ Fixed issue with selecting cue separators from the front panel cue sheet.
+ Preset store with an empty function filter will do nothing instead of deleting the preset data.
+ Fixed issue with very large ordered groups used as sets ("Attempted access of invalid channel" error messages).
+ Display console ID on System Config display, and fixed several issues with displaying and setting console names in the config windows.
+ Snapshot bullet is now larger on the central cue sheet,
NEW FEATURE DETAILS

V276 Display

To accommodate the V276 On Mac console, a new V276 Display window has been added. The V276 HUD provides convenient access to the command-line and one palette, along with encoder, cue, stack, filter, timing, effect, and stack data.

The V276 HUD is available from the Operation menu.

Guidelines:
- When an encoder function is selected using the buttons on the V276 console front panel (Color, Beam, Image, Frame, Dynamic, or 3D), its parameters will be displayed in the encoder area.
- Command-line entries will be displayed in the command-line area.
- When active, functions such as Online, Primary, Patch, and Macro will be highlighted in yellow.
- One palette can be displayed in the palette area. The palette selection button can be used to select Preset, Color, Beam, Group, etc.
- The Grandmaster indicator bar will be yellow when not at full. (It will be gray when at full.)
The Palette buttons, available on the V276 console front panel, can be used in conjunction with the V276 HUD palette. For example, when the V276 HUD window is open, pressing [1] will select palette entry 1 of the selected page/bank.

When turning the encoder knobs on the V276 console front panel, the adjusted values will be displayed in the V276 HUD.
DMX Setup Window

The DMX Setup window has been updated to include the new Super Node, the optional DMX Interface, and V276 outputs (Console 1-16). The method for defining DMX512 universes is as follows:

Step 1. At Setup menu, select DMX Setup. (DMX Setup window will open.)
Step 2. Select desired DMX Universe.
Step 3. Enable Patch Edit by pressing Patch Edit button at bottom of window.
Step 4. Select “Super Node” from DMX Host menu.
Step 5. Enter Node thumbwheel address in “Thumb” field.
Step 6. Choose “Port” output.
Step 7. If assigning multiple universes, click Next or press [Enter] to edit the next universe. Otherwise, select Disable Edit to disable patch edit and save changes.

Note: If patching sequential Nodes and outputs, pressing the [Return] button on the keyboard will auto increment the patch. If not sequential, repeat Steps 4 through 6.

Guidelines:

+ Selecting Console DMX applies only to V276 panels or V476/V676 consoles with an optional DMX Interface board installed.
+ On a V276 panel, universes mapped to ports 1-4 will be transmitted on the DMX outputs and universes mapped to ports 1-8 will be transmitted on the Ethernet port. Universes mapped to Console ports 9-16 are not available when using a V276 panel.
+ On a DMX Interface Board, universes mapped to ports 1-8 will be transmitted on the DMX outputs and universes mapped to ports 1-16 will be transmitted on the Ethernet port.
**Pairing Window**

The Ethernet & Front Panel window has been separated into two individual windows: "Ethernet" and "Pairing." The Ethernet window is the same as the Ethernet tab on old Ethernet window. The Pairing window replaces the Front Panel tab of the old Ethernet window. This separation is illustrated by the new menu configuration:

![Menu Comparison](image)

**Pairing Window Function**

For proper operation, the software must pair with different pieces of hardware within the console. This process is completed during the console's installation, but may need to be paired again if internal devices are changed.

Pairing console devices can be accomplished as follows:

**Step 1.** At **Setup** menu, select **Pairing**. (Pairing window will open.)

**Step 2.** Click **Pair Devices** button.

**Step 3.** Disconnect external system networking (Ethernet and/or fiber) from back of console and press **Scan** to continue.

**Step 4.** Once all devices have been discovered, click **Pair** to complete the pairing process.

**Note:** Some devices, such as the Vx76 DMX Interface, are optional, and may not be installed on the console.
HARDWARE UPGRADE PROCEDURES

Installing New Key Caps

Eleven (11) new key caps should be installed on all V476 and V676 consoles. These will be located on the command-line keypad as shown in the drawing below. The buttons highlighted in red correspond to the key caps included in the kit.

![Figure 2: Updated Layout for V476/V676 Command-Line Keypad](image)

Parts:

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<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
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<td>VX76 KEYCAP UPDATE KIT FOR V3.6, V676/V476</td>
<td>1 EA</td>
</tr>
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<td>10.9814.0711</td>
<td>Block/ UnBlk</td>
<td>1 EA</td>
</tr>
<tr>
<td>10.9814.0711</td>
<td>Cue/ OutTime</td>
<td>1 EA</td>
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<tr>
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<td>Cue/ Stack</td>
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<td>Query/ Help</td>
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</tr>
<tr>
<td>10.9814.0711</td>
<td>Wait/ Trail</td>
<td>1 EA</td>
</tr>
</tbody>
</table>
To replace a key cap:

Step 1. At console, locate key cap to be changed.
Step 2. Using a small tweaker screwdriver, carefully pry upward to remove key cap (Figure 3).
Step 3. Install new key cap by carefully pressing into place.
Step 4. Complete TEAM inspection. (Refer to TEAM information on page 1.)
**OPERATING SYSTEM UPGRADE**

**Restoring Software from USB Drive**

In order to run software version 3.6, V476 and V676 consoles should be upgraded to the Mac 10.8 (Mountain Lion) operating system. The operating system can be upgraded by doing a restore from the USB thumb drive (87.9824.0001).

The restore process offers three choices for the type of image: V476, V676 Main, and V676 Backup. Since the V676 has two hard drives, we recommend restoring one as the Main and the other as the Backup. That way if the main drive fails, you can switch to the second drive and be up and running quickly.

**CAUTION!** The restore procedure will delete ALL data on the chosen hard drive.

**To restore from USB thumb drive:**

Step 1. Insert USB drive into the console’s USB port. (For best results on a V676R console, plug the drive into a USB connector on the front of the Mac, not into a console USB port.)

Step 2. Reboot the Mac while holding down the Mac keyboard [option] key. On the console built-in keyboards, this key is labeled [Alt].

Step 3. Once the drive picker comes up, select the one labeled “Recovery-10.8.2” and click Continue. (If there is more than one listed, be sure to pick the orange one with a USB icon.)

Step 4. If a language selector comes up, select English and continue.

Step 5. The console will boot into a customized Mac OS X Utilities. Select the PRG Restore icon and click Continue.
Step 6. At PRG Restore screen, do the following:
   a. Select the restore image that you want to restore.
   b. Select the destination hard drive.
   c. Click Start Restore.

Step 7. Once the process is complete, there will be a message saying to restart the Mac. The easiest way to do that is go to the Apple menu and select Restart.

Step 8. The Mac will restart and pause while installing some files. Then it will restart again and boot up into a freshly restored system.

Step 9. Pair the new software with the console hardware. Refer to "Pairing Window" on page 7 for the procedure.