



USB Tally Controller  
For the NewTek TriCaster  
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Revision 2 (July 2015)

Thank you for purchasing the Tally-Lights.com USB Tally Controller for use with the Newtek TriCaster family of switchers. This device is designed to allow the user to control from 4 to 8 Tally Light products provided by Tally-Lights.com utilizing both PROGRAM and PREVIEW modes. If you have any questions about this product or any other products, please contact us at Tally-Lights.com by emailing [support@tally-lights.com](mailto:support@tally-lights.com), or calling (248) 331-6793 during business hours (9:00am-5:00pm EST).

**IMPORTANT:**

The software provided with this USB Tally Controller requires that the newest version of the TriCaster software be installed on the NewTek TriCaster. Each TriCaster Model supports the USB Tally Controller, but only after the proper software version has been installed. If you are unsure if your version of the software supports the USB Tally Controller, please contact NewTek to get the latest version of the software available for your TriCaster.

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# INSTALLATION

## **To connect the USB Tally Controller to the NewTek TriCaster:**

Use the included USB Type 'B' Cable to connect Controller device to any open USB Port on the TriCaster. When connecting the Controller for the first time, the computer will display a message that a new 'HID' Device (Human Input Device) has been detected and is being installed. Once the Controller is successfully communicating with the NewTek TriCaster, the green LED light near the cable connector will illuminate.

**Note:** If you wish to use a longer USB Cable than the one provided, any standard USB Type B cable can be purchased at any store which sells computer cables.

## **To Install the USB Tally Controller Software:**

**Note:** The USB Tally Controller Software requires that Microsoft .NET Framework 3.5 or higher be installed. Most TriCasters have this version installed by default. If the Microsoft .NET framework is not installed on your TriCaster, visit the Microsoft website to download it.

1. On the NewTek TriCaster, exit the TriCaster application so that the Windows Desktop is visible.
2. Insert the included USB thumb drive labeled **TALLY-LIGHTS** into an available USB slot on the NewTek TriCaster. If prompted by the system as to how you would like to proceed, select 'Open Folder to View Files'. Otherwise,

browse to the USB Device using the Windows File Explorer. Next, browse to the folder on the USB thumb drive called '**Tally Install**'.

3. Double-Click on the 'Setup.Exe' file. This will launch the Installation program and display the Welcome Screen (Figure 1). Click **Next** to continue.

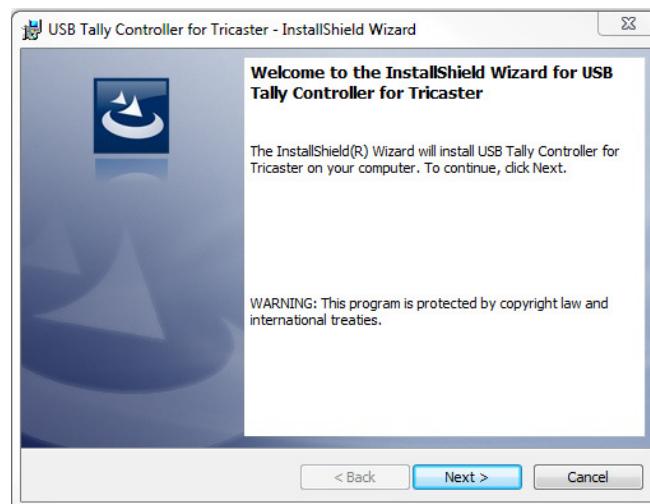


Figure 1. Welcome Screen

4. Agree to the License terms and click **NEXT**.



Figure 2. License Agreement

## 5. Confirm Installation

Once again, press **Install** to Continue.

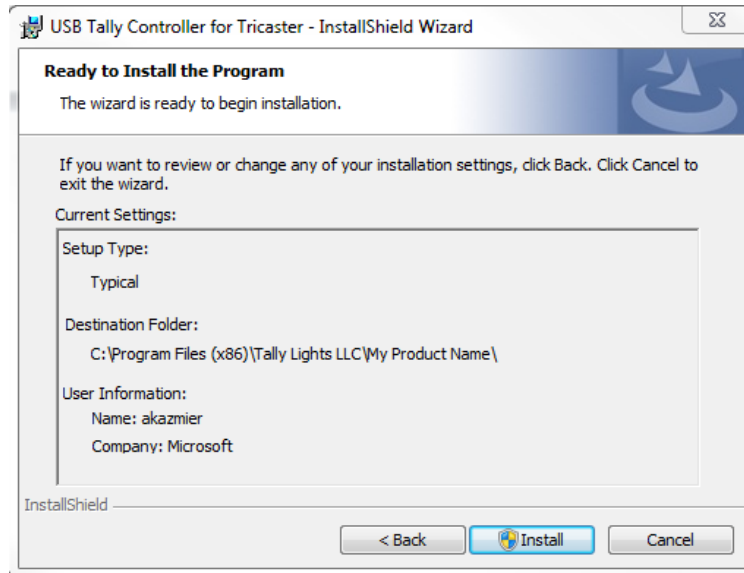


Figure 3. Confirm Installation.

**Note:** Depending on the Security of the computer, Windows may pop up the following warning message regarding the security risk on installing this software. *“Do you want to allow the following program from an unknown publisher to be installed on this computer?”* Select **‘Yes’** to continue.

## 6. Installation Complete.

Click the ‘Close’ button to complete the installation of the software.

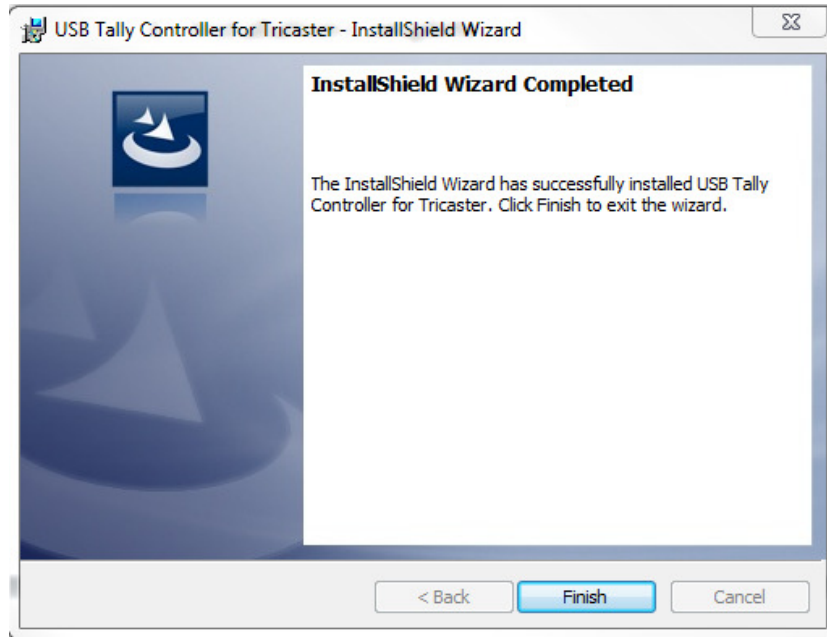


Figure 4. Installation Complete.

This installation process creates the folder:  
“C:\TriCaster\Plugins\Tally\TallyLights\_LLC”

The Install Program then places 5 files into this folder:

**USB\_Communications.DLL** – Library file used by the program for USB communication

**USB\_TallyController.exe** – Program called by the NewTek TriCaster program to illuminate the correct Tally Lights.

**USB\_TallyController\_Debug.exe** – Debug program which can be used to create a debug.txt file which contains a log of all calls from the TriCaster program to the USB Tally Controller software, and a log of any errors or warnings which may be causing the software to not work properly.

**USB\_TallyController\_Test.exe** – Test program used to verify tally light performance.

**USB Tally Controller Manual.pdf**

**To Uninstall the USB Tally Controller software:**

1. From the Windows Control Panel, select the 'Programs' Category and then the 'Programs and Features' item.
2. Select the Item labeled 'USB Tally Lights' and click the 'Uninstall' button.

This will remove the USB Tally Lights application from the computer and it will delete any of the registry settings created. If a Debug.txt file was created, this will not be automatically deleted from the computer and must be manually deleted. (See the TESTING chapter of this manual for an explanation of the Debug.txt file.)



## GENERAL USE

The USB Tally Light Controller is designed to be used effortlessly with the NewTek TriCaster family of products. After the initial installation, the TriCaster software will handle all communication with the USB Tally Controller.

The USB Tally Controller supports both PROGRAM and PREVIEW modes when used in conjunction with the Tally Lights supplied by Tally-Lights.com. When a source is placed in PROGRAM mode, the USB controller will light the 6 red LED's facing the talent and the single red LED facing the camera operator also red. If a source is placed in PREVIEW mode, the 6 red LED's facing the talent will not be illuminated, but the green LED facing the camera operator will be illuminated.



# TESTING

To ensure that your USB Tally Controller is running properly, two testing programs have been provided. A simple test program can be run that allows you to click a button on the screen to turn the Tally Lights on/off in both PROGRAM and PREVIEW mode.

## To run the Test program ensuring the computer is communicating with the USB Tally Controller:

From the windows desktop, navigate to the folder:

“C:\TriCaster\Plugins\Tally\TallyLights\_LLC”

Then double click on the USB\_TallyController\_Test.exe. This will bring up the screen shown below (Figure 5).

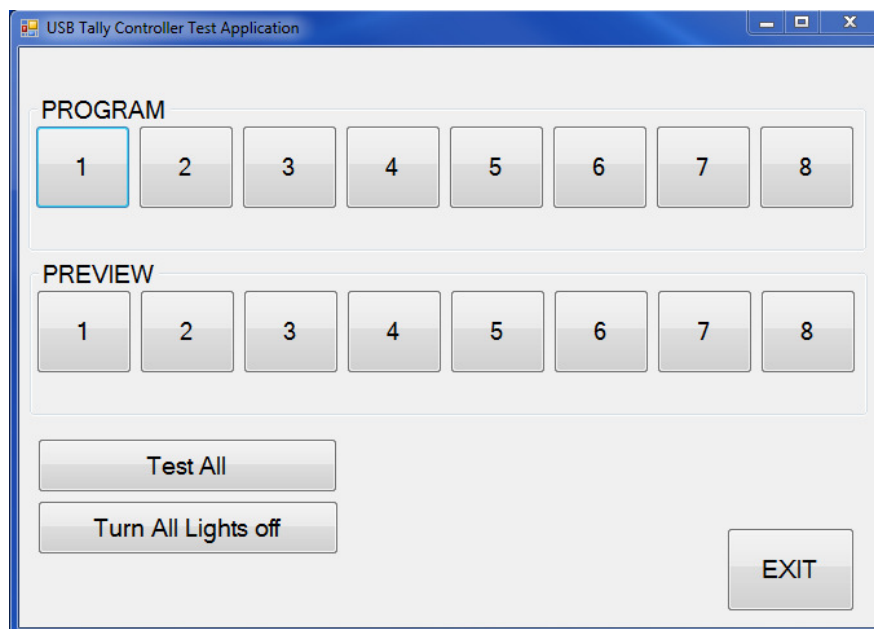


Figure 5. Test Application

Click any button to illuminate the corresponding Tally Light in program or preview mode. To test all lights, click the **Test All** button which will cycle through all lights.

## To place the Tally Software in DEBUG mode:

**IMPORTANT:** Placing the program in debug mode requires making a change in the Registry on the computer. Always backup the registry before making any changes. If you have any questions or concerns about this process, please contact tech support at Tally-Lights.com. Contact information can be found on the last page of this manual.

1. Open the registry editor on the computer. From the Windows Desktop, select Start, click 'Run', type in **regedt32**, and press 'ENTER'.
2. Navigate the treeview to:

HKEY\_LOCAL\_MACHINE\SOFTWARE\NewTek\XD\Plugins\Tally

3. Double click on the 'TallyLights\_LLC' item.
4. Modify the Value data to add '\_Debug' to the program name.

C:\TriCaster\Plugins\Tally\TallyLights\_LLC\USB\_TallyController\_Debug.exe

5. Click the 'OK' button and then exit out of the registry editor.

This will place the Tally Software into Debug Mode. A Debug.txt file will be created in the C:\TriCaster\Plugins\Tally\TallyLights\_LLC folder as you are using the NewTek TriCaster software. This Debug file logs all communication between the TriCaster software and the USB Tally Controller.

To take the software out of Debug mode, follow the steps above, but remove the '\_Debug' from the program name in step 4 so that the Value Data reads:

C:\TriCaster\Plugins\Tally\TallyLights\_LLC\USB\_TallyController.exe

If you have any questions or concerns about placing the program in debug mode or with interpreting the 'debug.txt' file, please contact Tally-Lights using the contact Information at the end of this manual.

# FREQUENTLY ASKED QUESTIONS

***I received an error during installation stating I do not have the correct Microsoft .NET framework installed. What do I do?***

Either use the Windows Update program or download the framework directly from the Microsoft website. The proper framework version is .NET Framework 3.5.

***I have installed the USB Tally Controller software, but my Tally Lights don't light up when I use the TriCaster. How do I resolve this?***

First, check that the green power light is illuminated on the USB Tally Controller when it is connected to the NewTek TriCaster. If the power light is not lit, then USB device is not being recognized by the computer. Try plugging the USB cable into a different USB port or contact Tally-Lights for more help.

Second, ensure that the latest version of the NewTek TriCaster software is installed on your TriCaster. If you have questions regarding your current version, contact NewTek to ensure your software is up to date. Contact information for NewTek can be found at: <http://newtek.com/contact-us.html>.

If the latest version of the software is installed, then proceed to the 'TESTING' section of this manual to determine if your computer is properly communicating with the USB Tally Controller.

***Can I use my USB Tally Controller to communicate with my Camera Control Units (CCU) ?***

The USB Tally Controller is designed to primarily have tally lights connected directly to the controller. But, if you wish to connect it to a CCU, please contact Tally-Lights to determine the best solution for this. Most CCU's operate based on a 'contact closure' circuit which means that there cannot be active voltage

applied to the circuit. But, since the USB Tally Controller outputs voltage, you cannot connect the USB Tally Controller (TLC-V) directly to a CCU.

**IMPORTANT:** Never connect the USB Tally Controller directly to a CCU unless you are sure that it can accept voltage. Doing so may leave your CCU inoperable!

If you wish to use the USB Tally Controller interfaced to a CCU which requires a 'contact closure' circuit, Tally-Lights.com offers a conversion device which you plug into the USB Tally Controller and it will convert the circuit from voltage to closure. Alternatively, there is a USB Tally Controller (TLC-C) which is designed to communicate solely with CCU's. Please Contact Tally-Lights.com for questions regarding this conversion device.

***I have further questions about my USB Tally Controller. How do I contact you?***

All contact information can be found on the last page of this manual. We would be happy to assist you in any way we can. Or, if you are in need of a custom Tally Light solution, we would be happy to work with you to customize our product to fit your specific needs.

## CONTACT INFORMATION

If you have any questions or concerns regarding the USB Tally Controller for the NewTek TriCaster, please contact us at your convenience.

Email: [support@tally-lights.com](mailto:support@tally-lights.com)

Phone: (248) 331-6793 (8:00am – 5:00pm EST)

<http://tally-lights.com>