

# NewTek LC-11™

INSTALLATION AND INSTRUCTIONS



Revised - June 30, 2008

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This warranty covers only the hardware portion of the LiveControl product delivered (“Product”) and extends to the original purchaser only.

The “Product” for purposes of this Limited Hardware Warranty consists of LiveControl only, and does not include any other third party hardware, device, or computer which a dealer, distributor, or other third party may have the Product installed or sold with, and no such third party hardware, device or computer is covered in any way by this warranty.

NewTek warrants that for a period of 1 year from the date of your original purchase of our Product it shall be free from defects in material and workmanship. If a defect is determined to be covered by this warranty as determined by NewTek, NewTek will correct it, and may do so using new or remanufactured components.

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**To Obtain Warranty Service.** To obtain free repair under this warranty, contact NewTek Technical Support for confirmation, receive a Returned Materials Authorization (RMA), and deliver the product along with proof of ownership (such as the original invoice, or a photocopy)

to NewTek. You will be responsible for any costs associated with the delivery to and from our service center.

**Other Legal Disclosures.** THE ABOVE WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED AND IN NO EVENT SHALL ANY WARRANTY EXTEND BEYOND ONE (1) YEAR FROM DATE OF PURCHASE.

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NewTek's LC-11™ adds to the growing line of high-quality control surfaces available for NewTek's TriCaster™ live production systems. It provides agile and convenient control for your productions in a durable and reliable form. This chapter reviews system requirements, and explains how to connect your LC-11 to your live production suite.

## 2.1 SYSTEM REQUIREMENTS

Your NewTek® LC-11 requires (as a minimum):



1. A NewTek TriCaster system running TriCaster 2.0 or higher software,

or ...



2. A NewTek VT[5] system (version 5.2 or higher)

## 2.2 INSTALLING

You're going to love this – all set? Connect the supplied cable between your LC-11 and a free USB port on your TriCaster or VT system. That's it, you're completely done! There's no need to install drivers, slog through a long complex set of steps, or sacrifice the traditional chicken!

### 2.2.1 UPDATES

As time goes along, software updates may be issued for your NewTek system to provide various enhancements and improvements. To get the most out of your system, make it a practice to periodically check for updates.

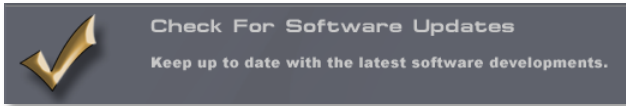


Figure 1 – TriCaster Update



TriCaster users can check for updates by clicking the **Close [x]** button in the upper-right corner of the TriCaster desktop and selecting **Admin**, then (after a few moments) clicking the large **Check for Software Updates** button (Figure 1). (The system must be online, of course.)



VT system owners can visit the “**my downloads**” page in the **Customer Care> Registration** area of the **NewTek website** ([www.newtek.com](http://www.newtek.com)) for updates when performing an installation from the original media, and from time to time thereafter.

### 3 LC-11 CONTROLS



The LC-11™ external control surface hosts a bevy of convenient and important buttons and controls. This chapter explains each button and control in turn. It discloses their functions and their relationship to various components of your NewTek live production suite.



Figure 2 - TriCaster Studio Switcher

In large measure, LC-11 physically replicates the Switcher and related controls of your NewTek live production system.

(This is no great surprise, since the virtual controls in the interface were cleverly designed to mimic the appearance and behavior of familiar live production equipment!)

LC-11's controls primarily fall into three groups, each corresponding to specific software modules. The various buttons, knobs, etc., provide tactile control over their virtual counterparts. (In addition, the upper-right corner boasts two joysticks, discussed separately.)

#### 3.1 THE SWITCHER SECTION

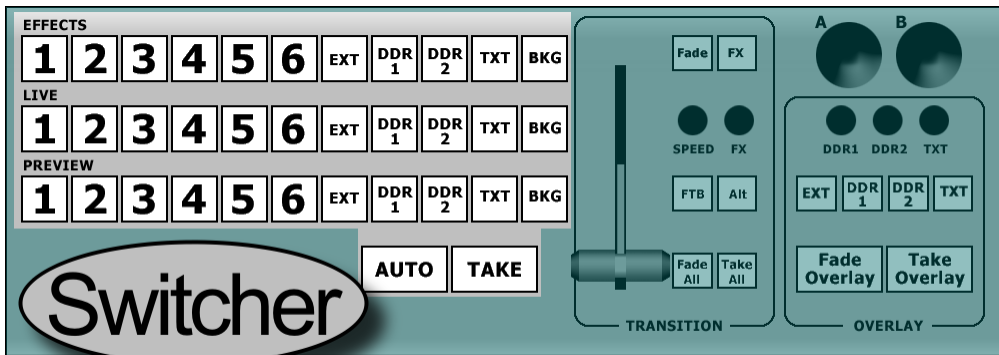


Figure 3 - LC-11 Switcher section

The largest of the three main sections of the LC-11 control surface corresponds to your NewTek live production system's Switcher, as you can see in Figure 3.

### 3.1.1 SELECTING SWITCHER SOURCES



The Switcher panel of most TriCaster models corresponds quite closely to the LC-11. The exception (you knew there'd be one, right?) is the base model, which lacks the upper (Effects) row of selection buttons.

For this reason, the upper row of buttons in LC-11's Switcher section is functional only when connected to PRO, Studio and Broadcast model TriCasters.



The order of source selections on VT[5]'s Switcher is user-configurable. In fact *several* base Switcher skins are provided which are quite different from one another.

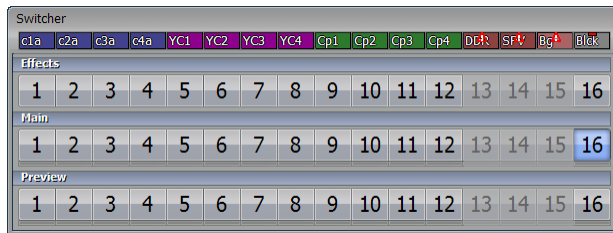


Figure 4 – VT[5] Switcher (default appearance)

Thus the order of video source selection buttons in the Switcher section on your LC-11 will almost certainly be different initially than your VT[5] display.

The hardware buttons always control the first 11 Switcher buttons. To avoid confusion, you may well decide to adjust the sources in the software Switcher to match the button order on the LC-11. (You can even rename these onscreen if you like).

The operation of LC-11's Switcher controls corresponds precisely to the onscreen version. Press a button on the LC-11, and the same entry is selected on its virtual counterpart. The LC-11 button lights up to confirm the change.

Incidentally, VT[5] and TriCaster will return the favor! Selecting a button on its onscreen Switcher - even using keyboard shortcuts -- causes the corresponding button on the LC-11 to light up (if you're a quick typist, in extreme cases of pre-show boredom you can entertain your friends with a tiny but heartfelt light show in this manner.)

### 3.1.2 AUTO AND TAKE

To be pedantic, the **Auto** and **Take** buttons don't really belong in this group. In both VT[5] and TriCaster systems, they are normally found nestled beneath the **T-Bar**. The hardware T-Bar is a bit bigger than its onscreen counterpart however -- so for the LC-11 they have been re-located.

Functionality remains unchanged, of course. **Auto** swaps between the video source that is selected on the **Live** (TriCaster) or **Main** (VT) row and the one from the **Preview** row, using the current Transition. **Take** does the same thing, but performs the swap as a hard cut between the sources.

Although they don't light up, the buttons on the LC-11's Switcher rows do update to reflect the changed source selections.

## 3.2 THE TRANSITION SECTION

The most obvious component of the Transition section is the **T-Bar**, which works just like the one in the software version. LC-11 also provides some other buttons and knobs that do not have exact equivalents in the onscreen display, as discussed next.

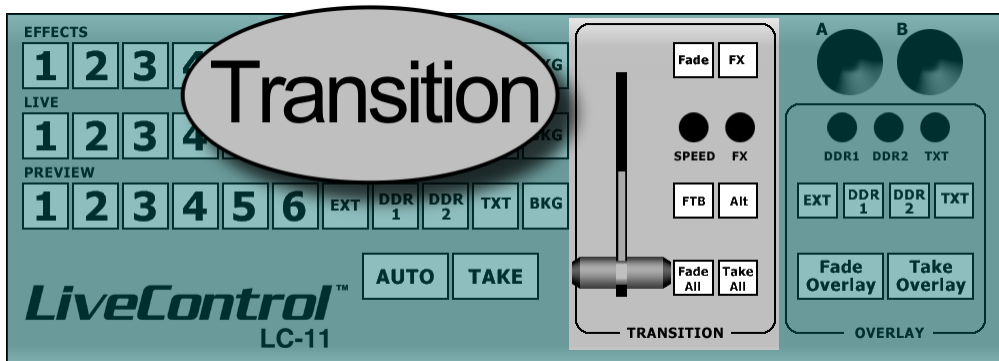


Figure 5 - Transition section

### 3.2.1 FADE AND FX

Pressing the **Fade** button selects the standard CrossFade transition (found in the first well of each Transition bank of both VT[5] and TriCaster systems). Note that pressing Fade only *selects* the

CrossFade – it does not *perform* the transition between video sources (you still need press **Auto** to do that).

The **FX** button re-selects the last transition selected other than a CrossFade, cueing it up for the next **Auto** between sources.

---

### 3.2.2 SPEED AND FX

Just beneath the Fade and FX buttons are two knobs labeled **SPEED** and **FX**. These knobs each have two distinct functions – one associated with rotation and the other accessed by pressing the knob (just like a button). The knobs have rotational detents to provide confidence while making adjustments.

Rotating the **SPEED** button modifies the duration of the Transition effect. Pressing it cycles through the standard **Slow**, **Medium** and **Fast** preset speeds.

Twirling the **FX** knob changes the selected Transition effect, cycling back and forth through the representative thumbnail icons loaded in the onscreen **Transition Bank**.

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### 3.2.3 FTB AND ALT

**FTB** stand for “Fade to Black”. Unlike the two buttons discussed earlier, FTB is an action button; pressing it *does* perform a transition, in this case a computer-generated black background.

There is an exception, however. VT[5], and both TriCaster Studio and Broadcast -- *when operating in the optional 6-camera mode* -- are special cases. These models do not feature a dedicated Black generator. Instead, **FTB** uses the background you design in the system’s internal **Color Background** tab (VT - **BG Generator**).

**ALT** is provided for future expansion, with no functions assigned to it at this time.

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### 3.2.4 FADE ALL & TAKE ALL

**Fade All** and **Take All** perform much like the standard **Auto** and **Take** respectively (see Section 3.1.2), with one additional aspect – they simultaneously perform either a **Fade Overlay** or **Take Overlay**, timed to match the established transition speed.

The total effect then, is to swap the **Next/Main** video source with the **Preview** one, at the same time either removing or displaying the assigned **Overlay** (called **Downstream Key** in VT[5]),

depending on its display status at the moment. (This is, of course, very useful for introducing a new scene with an identifying lower third graphic, for example.)

### 3.3 THE OVERLAY SECTION

LC-11's Overlay section contains two joysticks, three knobs, and two rows of buttons. (Strictly speaking, the joysticks and knobs perform functions that don't always involve overlays. Even so, they are often used in that context so this is as good a place to put them as any.)

*Please note: TriCaster's **Overlay** feature corresponds to VT[5]'s **Downstream Key** (or simply 'DSK') section. Herein we'll usually use the term **Overlay** for both systems.*

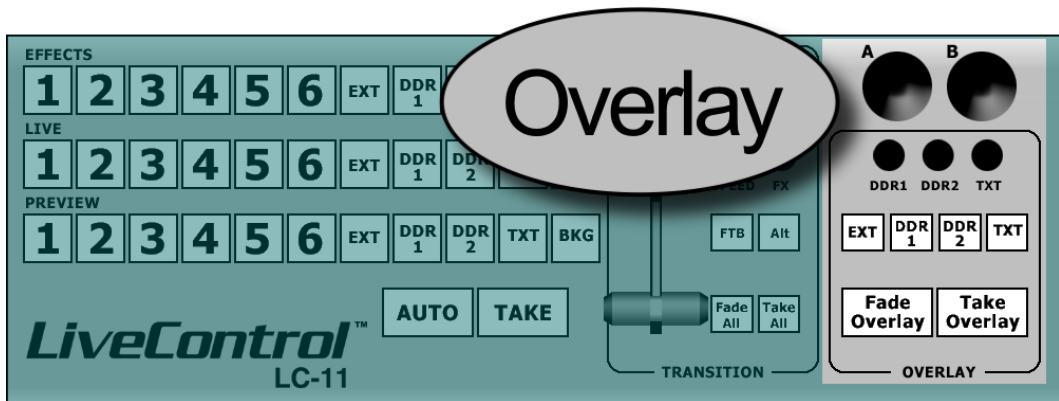


Figure 6 – Overlay Section

#### 3.3.1 DDR1, DDR2 & TXT KNOBS

Twirling the **DDR1** or **DDR2** knobs scrolls through the clips listed in the corresponding DDR module. Rotating the knob labeled **TXT** cycles through the current list of text pages loaded in the **Text** tab (TriCaster) or **Title Templates** module (VT[5]).



Figure 7 - Text Overlay, TriCaster

Pushing a **DDR** button (once) toggles **Play** and **Pause** for that DDR. Pushing twice in quick succession performs a double-click, stopping DDR playback and returning to the start of the clip.

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### 3.3.2 THE JOYSTICKS

There are two joysticks, labeled A and B. The first of these is set aside for future expansion. **Joystick B** acts as a Shuttle control for any\* DDR module selected on the Switcher's **Preview** row. Move it left or right to scan backward or forward in the current clip. The rate of scanning is controlled by the pressure you apply to the joystick.

*\*In VT[5], this feature even supports DDR's apart from DDR1 and 2.*

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### 3.3.3 EXT, DDR1, DDR2 AND TXT BUTTONS

For TriCaster, these four buttons correspond to the four **Overlay** source selection buttons shown in Figure 8.



Figure 8 – TriCaster Overlay source selections

VT[5]'s **Downstream Key** section provides a drop-down menu for source selection, but otherwise, the function of LC-11's **EXT**, **DDR1**, **DDR2** and **TXT** buttons is identical.

*Note: **EXT** refers to external sources such as an iVGA™ connected computer display or LiveText™ title page, whereas **TXT** invokes the current Title Template.*

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### 3.3.4 FADE & TAKE OVERLAY

These last two buttons correspond exactly to their onscreen counterparts, **Fade** and **Take** (TriCaster **Overlay** section; **Fade DSK** and **Take DSK in** VT[5]'s DSK). They toggle the current Overlay imagery on or off over the program stream as either a crossfade or cut respectively.



**A**

ALT Button, 9  
Auto Button, 8

**C**

Control Surface, 6

**D**

DDR1 & DDR2 Buttons, 11

**E**

EXT Button, 11

**F**

Fade Button, 8  
Fade Overlay Button, 12  
FTB Button, 9  
FX Button, 8  
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TXT Button, 11  
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**Content:** Rex Olson, Jarrod Davis, Graham Toms, Gil Triana

**Additional Thanks:** NewTek Technical Support, NewTek Customer Service, NewTek Sales

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