# MOTIONROCKET LaunchPad Version 3.5 Installation Manual



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## Installation

## **Physical Installation**

Each version of LaunchPad is compatible with standard 19" racks. The 3G and 12G Pro servers also include supporting slide rails which require a rear rail in the rack to support the slide rails. Do not rely on the front chassis tabs to support the weight of the Pro series.

## Environment

Ensure the mounting location is dry, climate controlled, free of excessive dust, and corrosive vapors. Failure to consider the location of the product will affect lifespan and may void warranty.

## **Physical Connections**

#### Power

Ensure reliable power. It is recommended the system be connected to a UPS battery backup when in use. Use of a surge suppressor is also recommended.

#### **User Interface**

#### Mouse & Keyboard

The user mouse and keyboard will be connected to one of the USB ports on the rear plate. NOTE: Some generations have USB ports intended for mouse and keyboard. These will be labeled or feature a mouse and keyboard icon.

DO NOT install a USB Hub between the system port and mouse & keyboard. This can cause IRQ issues.

If extending the mouse & keyboard, use a separate ACTIVE extender cable for each device.

## Serial Data Interface

The LaunchPad will have ( at a minimum ) QTY 2 RS232 serial ports. These can be used for serial data sources such as scoreboard consoles.

NOTE: They are RS232, therefore you may need converters or extenders depending upon the data source.

NOTE: RS232 has a limited supported cable length of 50ft (15 Meters)

## **Network Interface**

There are two NIC ports. Either can be used for WAN (Internet) Access or internal LAN access. NO NOT disable unused ports.

## **Audio Connections**

You have options when configuring the audio output. These options are listed below. Please be aware, there is only ONE AUDIO OUTPUT. All media played are mixed into a single audio stream. Also be aware, NO UPSTREAM AUDIO will be passed through in most configurations.

#### Unbalanced Output

The system will have a 3.5mm port (Normally Light Green in color). This will provide unbalanced line level output. Most systems have a Balanced Mono converter included.



#### Embedded Audio on SDI Output

Clip audio can be output on the SDI signal. Using the Sound section of Windows Control Panel, set the desired device as "Set as Default Device". The name of the device will be the output device you defined in the SDI Output Section. In the example below, the Output Device is Item 5.



#### Dante Virtual Sound Card (Optional)

Audio can be sent over the network using Dante Virtual Sound Card (VSC). After installation, set the Dante device as "Default Device". For more info visit www.getdante.com.

#### **Video Connections**

You have a few options on how video is output from LaunchPad depending upon the version purchased. Product list based on model year 2024.

Output Option	LaunchPad Mini	LaunchPad PRO 3G	LaunchPad Pro 12G
Graphics Card	Yes	Yes	Yes
NDI	Yes	Yes	Yes
SDI	No	Yes	Yes
- SDI External Key & Fill	NA	Yes	Yes
- SDI Internal Keyer	NA	Yes	Yes
- SDI InLine Mode	NA	Yes	No

#### Graphics Card

The first port on the graphics card is used to drive the User Interface monitor. Secondary outputs can be added to the graphics card.

The secondary device will be detected by Windows as an extended monitort. Please ensure the secondary device is positioned to the RIGHT of the primary UI monitor. Also ensure the TOP of all monitors are aligned.

#### SDI Card

Using the SDI output card allows for different operational modes. Each has different advantages and should be selected based on the needs of the end user.

SDI Mode : Key & Fill

A more traditional CG application. Separate SDI signals are output. The first contains the 'Key' (the Alpha Transparency) rendered as Black&White. The second output contains the 'Fill' (Color values). These two signals are ingested by equipment such as video switchers typically as Downstream Keyers (DSK). Note : Some equipment requires both switcher and source to be frame sync. In this case, connect the bottom pin of the SDI IO card to a ref signal.

```
SDI Mode : Internal Keyer (DSK)
```

In this mode, LaunchPad uses it's own internal keyer. Similar in function to the switcher DSK mentioned above. Live video passes through the LaunchPad with no latency. Graphics are presented in front of the input signal.

Advantage: Low latencyDisadvantage : No native control of live video, so no resizing /DVE effects are possible.Normally paired with a preScaler to handle resizing.

#### SDI Mode : InLine (Switcher) Mode

In this mode, available only in LaunchPad PRO 3G, LaunchPad will take up to 4 sources and allow the user to switch between them. This mode gives flexible options like dynamic resizing, native control of the live video input.

The Disadvantage of this mode is 5-6 frames of buffered video. Buffered video frames are queued to allow for resizing with lowered chance of skipped frames.

#### <u>NDI</u>™

NDI<sup>™</sup> (trademark Vizrt) is a technology that allows live streaming over the network to NDI<sup>™</sup> compatible devices. NDI<sup>™</sup> supports alpha transparency and can be used as a DSK source.

## **Getting Started**

#### Power

Ensure the power switch of the rear power supply is 'ON'.

(In the Pro Series) Open the right hand door and press the black momentary rocker switch.

(In the Mini) press the momentary button on the front panel.

## Starting LaunchPad

Start Launchpad from the desktop Icon

Splash-screen Information

The splash screen will show you several pieces of information:

- Software Version
- Hardware Warranty End Date
- Software Warranty End Date
- Notifications



#### Content Folders

Different environments can be created to handle different roles the venue might require. For example, a "Basketball Mode" where Stats, Data, and content are separate from "Volleyball", or "Concerts", etc . These content folders can be used to aid in organization. All systems start with one content folder, so you may not see this option if you have not created more than one.

## **Settings Menu**

## **Configure SDI Outs**

This screen allows you to enable different outputs of the SDI IO card. Note: This photo is from the 3G Pro, the 12G Pro will not show 'Inline mode' as an option.

Set the desired output, output format, and mode.

In this example, we have Output 1 set to 1920x1080@59fps using InLine Mode.



## **Configure NDI Outs**



## **Configure Playout Zones**

Playout Zones are rectangular areas where content can be played. They can be created to display using any of the available Video Outputs (Graphics Card, SDI, or NDI<sup>™</sup>)



Surface Canvas Name : This is the name that will be presented to the user.

Render on Device : Select from a list of enabled output devices

Surface Canvas Width & Height : Size (In pixels) of the desired window. Example: 1920x1080 or 4000x128.

Options : Show Live Video : Only available in 3G Pro : Allow Live video (in InLine Mode) to be displayed.

Options : Stretch Live Video : If Live Video window does not match source, stretch live. Otherwise, crop.

Option : Stretch Content to Fit : When content is played, stretch it to fill window size. Disable this option when driving ribbon / fascia LED displays and content will Auto Tile.

Option : Default Scaler Preset : If paired with a scaler, this preset will be invoked at startup.

Input Capture Rectangle / Output Capture Rectangles:

These values are used to define how the pixels within a window are rendered. Normally the entire canvas is captured and rendered in its native size, but it does not have to be.

Using a combination of these values allows real time pixel remapping which makes ultra wide LED fascia / ribbons possible. For assistance with this, please contact MotionRocket Support.

#### **Button pages**

The main section of the user interface is where the Button Page is shown. It contains several tabs of media buttons. You can have an unlimited number of Button Pages.

#### New Button Page

To create a new Button within the Button Page, Right-Click on an unused button. You will be presented with actions you can perform on the button.

#### Upload New Content

Selecting the "Add New" section, choose New Audio, New Video, or New Image.

Navigate to the desired media.

Videos will give you the chance to choose a sample frame which is used as the button face.

#### Understanding Button Properties

Each type of Media Button have different available properties.

This is an example of a Video Media Button.





# Conclusion

This manual is complete and you should be at the point where you are playing a video or image on the desired output into the desired equipment.

Additional training is available online at <u>support.motionrocket.com</u> or email <u>Support@MotionRocket.com</u> for online training.