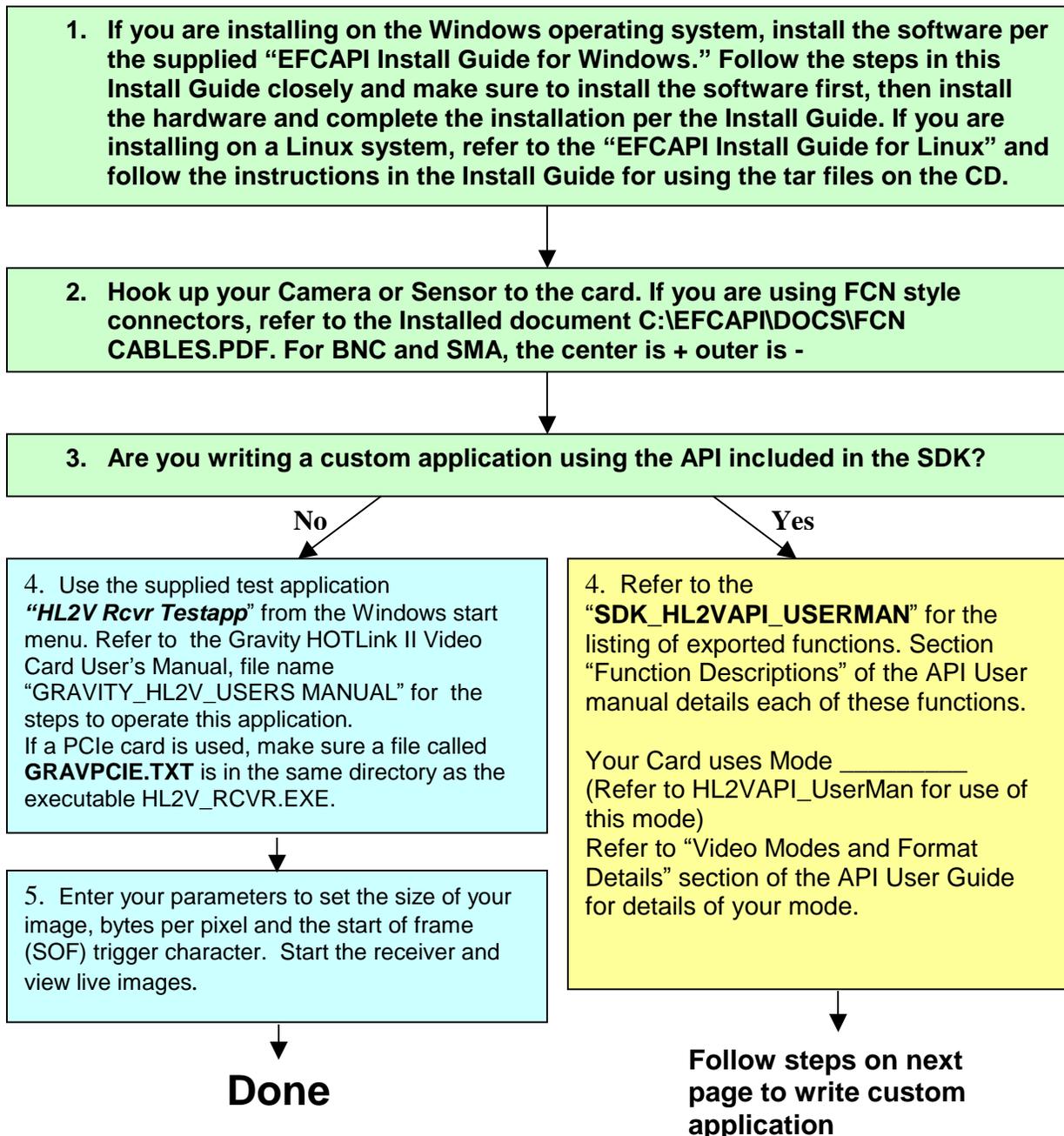# Quick Start for Gravity HL2V (Hotlink II Video) Cards

This document describes the steps required to use Great River Technology Gravity series Hotlink II Video card. This document is applicable to both PCI and PMC versions of the card.

1. **If you are installing on the Windows operating system, install the software per the supplied "EFCAPI Install Guide for Windows." Follow the steps in this Install Guide closely and make sure to install the software first, then install the hardware and complete the installation per the Install Guide. If you are installing on a Linux system, refer to the "EFCAPI Install Guide for Linux" and follow the instructions in the Install Guide for using the tar files on the CD.**

2. **Hook up your Camera or Sensor to the card. If you are using FCN style connectors, refer to the Installed document C:\EFCAPI\DOCS\FCN CABLES.PDF. For BNC and SMA, the center is + outer is -**

3. **Are you writing a custom application using the API included in the SDK?**

No   Yes

4. Use the supplied test application *"HL2V Rcvr Testapp"* from the Windows start menu. Refer to the Gravity HOTLink II Video Card User's Manual, file name "GRAVITY_HL2V_USERS MANUAL" for the steps to operate this application.
If a PCIe card is used, make sure a file called **GRAVPCIE.TXT** is in the same directory as the executable HL2V_RCVR.EXE.

4. Refer to the **"SDK_HL2VAPI_USERMAN"** for the listing of exported functions. Section "Function Descriptions" of the API User manual details each of these functions.

Your Card uses Mode _____ (Refer to HL2VAPI_UserMan for use of this mode)
Refer to "Video Modes and Format Details" section of the API User Guide for details of your mode.

5. Enter your parameters to set the size of your image, bytes per pixel and the start of frame (SOF) trigger character. Start the receiver and view live images.

Done

Follow steps on next page to write custom application

Steps to write custom application

A. Follow the steps in the "Applications and Function Usage" section of the SDK User's Manual and/or refer to the example code for a basic application framework. For a basic receiver application, start with "exampleHL2V" or for Linux use "efchl2v.c"
Also a fully working HL2V application with source code is provided named "HL2Vreceive". This can also be used as a start for the user custom application

B. Use your frame parameters and set all structure parameters that apply. Refer to the "User Types Defined" section of the SDK User's Manual.
In the example source code for exampleHL2V file named *exampleHL2VDlg.cpp*, look for the commented section "USER DEFINED AREA." Enter parameters per your video definition.
You can also copy and paste these parameters from the **HL2V_RCVR.param** file as generated by the *"HL2V Rcvr Testapp"* in section 3.1.4 of the User Manual

C. Add code to the interrupt handler to show or store your data captured. Refer to "Interrupt Notification Methods" section of the SDK User's Manual.

D. Make sure your application includes the header file "EFCAPI.H" and the library "EFCAPI.LIB" located in the C:\EFCAPI\CODE directory.

Build and run your application

Refer to the table below for the applicable documents and software.

Description   **Location from C:\EFCAPI**

Description	Location from C:\EFCAPI
Supplied Factory Test Applications	HL2V_Rcvr.exe (Add GRAVPCIe.TXT file for PCIe operation) or HL2V_Xmit. exe (Add GRAVPCIe.TXT file for PCIe operation)
API User's Manual (included in SDK)	\Docs\SDK_HL2VAPI_UserMan.pdf
User Manual for supplied applications	\Docs\Gravity_HL2V_USERS_MANUAL.pdf
Example Code (included in SDK) Located in EFCAPI\Code\examplesHL2V directory	**exampleHL2V** (For receiver example) or **exampleHL2V_Xmit** (Transmitter example, will only work if for a camera emulator board) or **HL2VReceive** (full feature GUI type Receive application.) Or **HL2VTransmit** (full feature GUI type Transmit application.)
API header file and API library (included with SDK)	\Code\efcapi.h \Code\efcapi.lib
For Technical Support Call Toll Free in US 1-866-478-4491 or 505-881-6262	