The ECI-60 firmware boot loader uses the USB interface and PC/Laptop application to download a selected firmware image (hex file). The ECI-60 installer includes the USB driver. The driver is not signed and will require driver signature enforcement to be disabled on Windows 7. For Window XP there is no known issue with the USB Driver.

## 1. Verify USB Driver Status

To verify the installation status for the USB driver, connect the USB cable to the ECI-60 and then open Device Manager.

File Action View Help			
Computer Management (Local	Monitors Motored adapter	*	Actions
System roots A Task Scheduler	Portable Devices		Device Manager
Event Viewer	Ports (COM & LPT)		More Actions
> 👸 Shared Folders	Processors	1	
Local Users and Groups	Sound, video and game controllers		
Performance	Storage controllers	-	
🚔 Device Manager	⊳ ₁	=	
4 🔄 Storage	Universal Serial Bus controllers		
Disk Management	ECI-60 Electronic Cinema Interface USB Device		
Services and Applications	Generic USB Hub		
	Generic USB Hub		
	Intel(R) ICH10 Family USB Enhanced Host Controller - 3A6A		
	Intel(R) ICH10 Family USB Enhanced Host Controller - 3A6C		
	Intel(R) ICH10 Family USB Universal Host Controller - 3A64		
4	Intel(R) ICH10 Family USB Universal Host Controller - 3A65	-	

## Figure 1 ECI-60 USB Device

For Windows 7 the device will display a caution icon for this driver entry that indicates it is not available for use. To correct this issue, re-boot the computer and after BIOS completes press the "F8" key to display the user options screen. Use the up/down arrows keys to select the "Disable Signature Enforcement" option.

### 2. Select Communication Port

Launch the ECI-60 application and from the "Communications" drop down menu select the "Communications Settings..." option. Select the USB port and then active the Ok button.

Configure Communications	×
Communications Port:	ОК
USB	Cancel
	Insert
	Modify
	Delete

**Figure 2 Communications Settings** 

### 3. Open Firmware Update

From the "Help" drop down menu select the "Firmware Update" item to display the following dialog as shown in figure 3. Use the "Browse" button to select the hex file to be downloaded to the ECI-60.

ECI-60 Remote File Communication Help		
Processor - Default		
Format1 Format2	Firmware Update	Format7 Format8
ECI-60 Film Analog 2ch Input Output Input Surrou Trim Dray Delay Delay	Power the unit on while holding down the "Mode" button. Choose the hex file to be downloaded and click the "Download" button below. C:\Projects\ECI-60\Firmware\eci60v101130.hex Browse	COAX 2 Mute
	Status:	
	-40 Change Settings	USL, inc.
	L C R Ls Rs SW 7 8	Disconnected

Figure 3 Firmware Update Dialog

## 4. Download Firmware

As described in the Firmware Update dialog, turn off the ECI-60 and then hold the "Mode" button while turning on the power switch. The ECI-60 will turn on all indicators and wait for a download to occur via the USB port. Activate the "Download" button and note the status.

rmware U	pdate	Surgery Co.	×
Power the	unit on while holding do	wn the "Mode" but	tton.
Choose th button be	e hex file to be downloa ow.	ded and click the "	Download"
C:\Proje	ts\ECI-60\Firmware\eci	50v101130.hex	Browse
Status:			
Validating Waiting f	download image or response from PIC		
•			Þ
	Download	Done	

# Figure 4 Firmware Download Status

When the download process starts, the indicators on the ECI-60 front panel will start blinking a sequence.

After the download completes, a status message is displayed and the indicators stop flashing on the ECI-60.

Firmware Update	
Power the unit on while holding down the "Mode" button.	
Choose the hex file to be downloaded and dick the "Download" button below.	
C:\Projects\ECI-60\Firmware\eci60v101130.hex Browse	
Status:	
Writing program memory	
The firmware update has completed successfully.	
۲	
Download Done	

Figure 5 Firmware Download Complete

To reconnect with the GUI, the application must first be closed and then the USB disconnected and then reconnected. A restarting of the GUI application will now allow the user to connect with the ECI-60.