

## Camera Update procedure

### Important:

Please be aware that Software and Firmware are the heart of all devices. Errors that occur due to wrong upload-procedures or wrong software can sensitively damage your equipment; so if you do not feel comfortable or in case you prefer to have the update done by our field service on site, please get in touch with our local Grass Valley Service engineer who will be ready to assist you.

<http://www.grassvalley.com/support/contact/broadcast>

### Overview:

- 1: What is the LDK Scriptor ?
- 2: What hardware tools do I need ?
- 3: How to Install the Scriptor ?
- 4: How to Setup the Scriptor ? - Config\_IO
  - Downloadspeed
  - Download Method
  - Help
- 5: How to download (Step by Step) ?
- 6: Known issues.
- 7: RS232 cable pinning.



### Conditions:

- \* Windows based OS (admin rights needed)
- \* Network connection ( Switch + Cables )
- \* RS 232 Null modem Cable (see chapter 8)
- \* Service Dongle or USB - RS232 adaptor.
- \* Scriptor, Package and Tools (Last versions)  
(ask local 1<sup>st</sup> line GV Service.)

### 1: What is LDK Scriptor ?

The Scriptor tool is used for downloading packages to the LDK/LDX products. On the camera head (LDK series) you find a RS232 connector. (not available on LDX) On Basestation and Controls MCP / OCP a network connection is used. With the additionally available GV service dongle also USB to RS232 or JTag is possible. For higher download speed a JTag connector is located on the 3G Triax Transmission board from Basestation, Adapter and Conversion box. The Scriptor program is needed to make the connection to RS232, UTP and JTag. This program will check the package in the LDK/LDX system and if needed you can start the upgrade with the latest package. As the systems are running with various combinations of FW and SW versions we create "Packages" for all our recent products. A "Package" is a validated and tested official release and should always be installed completely. There are still some products that are not using a package for software and firmware updates: SD/LDK4502/OCP400/MCP400/LDK6000 In this case there are individual software and firmware files available.

It is also possible to check the status from each LDK/LDX item with the Collect Data script (excel overview) To check the different versions of the LDK8000 it recommended to use the Package advisor script.



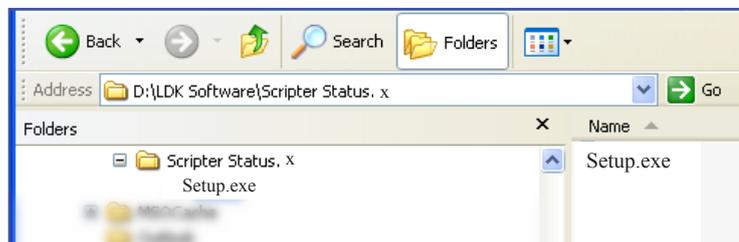
## 2: What hardware Tools do I need ?

- a: Computer (RS232 connection advised) with LDK Scriptor installed.
- b: Cables UTP (RJ-45) / RS232 (Null modem) (see chapter 8)
- c: GV Service dongle (3922 407 59091) additionally available (Needed for 3G Triax).  
this tool is also used when **no** RS232 connector is available on the computer.



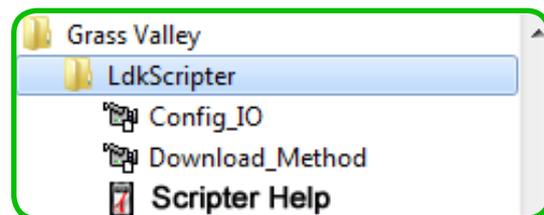
## 3: How to Install LDK Scriptor ?

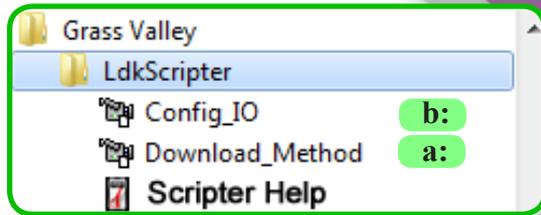
- a: Always use the latest version of Scriptor.  
If Installed, remove old version Scriptor first !
- b: Installing Scriptor can be performed by:  
Starting “Setup.exe” distributed with your program. (Doubleclick Setup.exe)  
and follow instruction on the screen.  
**Attention: Admin rights needed.**



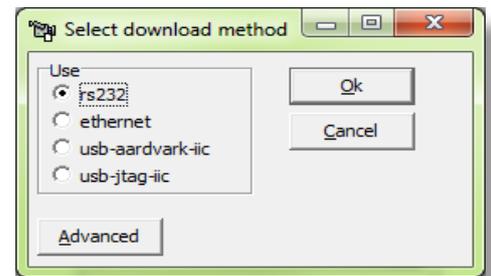
## 4: How to Setup LDK Scriptor ?

Select in the **All Programs** menu: **GrassValley**

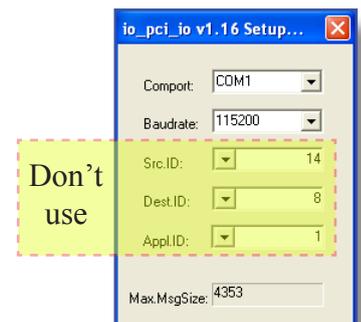




- a:** When opening **Download Method**.
- RS232** = Download via RS232
    - Package for LDK Camera - Adaptor - VF - SXP
    - Boot software for OCP400
  - Ethernet** = Download via the Network (C2IP)
    - Package for Basestation - XCU
    - OCP 400 - MCP400 -LDX
  - usb-aardvark** = GV service only
  - usb-jtag-iic** = Only in combination with 3th Gen. Conversion box.

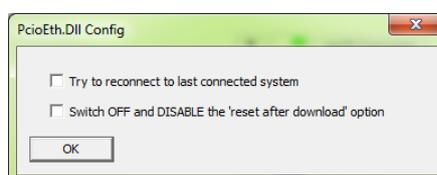


- b:** When opening **Config\_IO** in **RS232 mode**.
- Set used COM port
  - Set Baudrate (Manually)
    - > Set Baudrate to **115200**
      - with databoard 3922 406 52971 (bootsoftware 5.4)
      - with databoard 3922 406 54991 (LDK3000)
    - > Set Baudrate to **38400**
      - with databoard 3922 406 52971 (bootsoftware 5.3)
    - > Set Baudrate to **19200**
      - with databoard 3922 406 86791 (SD,LDK6000)

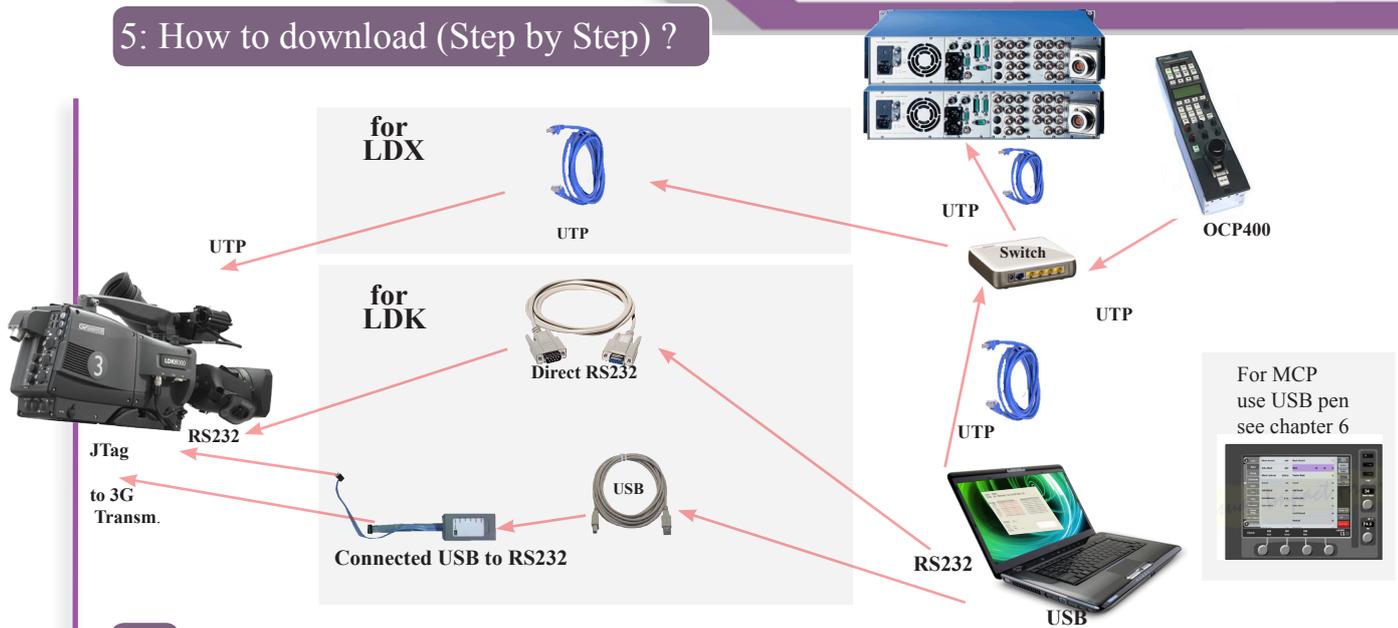


When opening **Config\_IO** if Download Methode is set to “ethernet mode”.

**Do not touch! GV Service settings only.**



## 5: How to download (Step by Step) ?



### 5.1: Connection RS232, USB, UTP.

There are several ways to make the connection to the **LDK / LDX** environment.

	RS232	GV dongle JTAG	Network (Head)	Network (C2IP)	USB stick	DVD (ISO)
<b>LDK series</b>						
- Head	X					
- Basestation	X			X		
<b>LDX series</b>						
- Head			X	X		
- XCU				X		
<b>3rd Gen. Transm.</b>						
- Triax Transm. brd.		X		X		
- Adaptor		X		X		
- Basestation/XCU		X		X		
- Conversion box		X				
<b>Controls</b>						
- OCP400	X			X		
- MCP400				(chapter6)	X	
- LDK Connect						X

### 5.2: Settings.

- 1: Select Download Method. (Ethernet or RS232 or usb-jtag-iic) (chapter 4a)
- 2: if RS232 mode is used, check your Config\_IO settings. (chapter 4b)
- 3: Select Package from you computer.

### 5.3: Scripts.

There are 6 types of scripts that will run with the scripser.

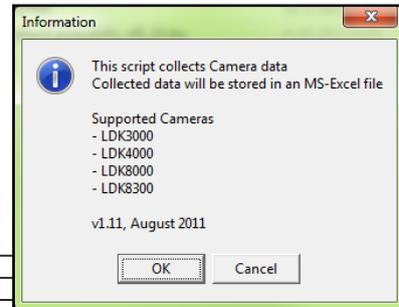
- 1: Script for status check (create excel file). (**Collect xxx Data.tsc**)
- 2: Script for checking camera version (**Package advisor**) (only needed with LDK4000/8000)
- 3: Script when no package is used. (SD/ LDK4502 / OCP400 / MCP 400 / LDK 6000).
- 4: Script for update Package. (**Package\_LDKxxx\_3922407xxx\_0x.exe**) (unpack by execute)
- 5: Script for diagnostics. Only with LCD VF (**CollectVFStatusInfo\_LDK530x.tsc**)  
(**CollectVFOperationLogData\_LDK530x.tsc**)
- 6: Script to change internal setting. (Service only)
- 7: Script for License upgrade. (Sales)

## 5.3.1: Script status check. (Collect Data Script) (MS Excel necessary !)

For LDX only there is also the LDX Inside tool available (Collect Data is include in this tool)

- The following scripts collect the information on the Software, Firmware and Package status of the device and the installed boards and write it into an Excel file.
- These collect scripts are available.

- CollectBasestationData
- CollectCameraAdaptorData
- CollectCameraData
- CollectConversionboxData
- CollectNoTubeVFData
- CollectNoTubeVFlog



Camera Info					
TypeNumber	LDK3000				
PID code	0237JE				
Board Info					
Board Name	HW 12nc	HW status	HW PID	Firm-Software Info	Package Info
Data Camera	3922.406.5297.1	24	01HS5C	I2NC : 3922.407.5299.1 Date : 10-08-2009 Status : 12.00	I2NC : 3922.407.5676.1 Date : 11-08-2009 Status : 03.00
Syne Monitoring	3922.406.5437.1	17	01JBFG	I2NC : 3922.407.5314.1 Date : 16-04-2009 Status : 08.00	I2NC : 3922.407.5676.1 Date : 11-08-2009 Status : 03.00
Pulse Pattern Generator	3922.406.5301.1	17	01L8CQ	I2NC : 3922.407.5452.1 Date : 25-09-2008 Status : 02.00	I2NC : 3922.407.5676.1 Date : 11-08-2009 Status : 03.00
Digital Video Processing	3922.406.5470.1	23	0273RS	I2NC : 3922.407.5429.1 Date : 30-07-2009 Status : 03.00	I2NC : 3922.407.5676.1 Date : 11-08-2009 Status : 03.00
DVP Nios	3922.406.5470.1	23	0273RS	I2NC : 3922.407.5298.1 Date : 21-07-2009 Status : 05.00	I2NC : 3922.407.5676.1 Date : 11-08-2009 Status : 03.00
Right Connector Board	3922.406.5310.1	17	01LFOF	I2NC : 3922.407.3826.1 Date : 08-08-2007 Status : 05.00	I2NC : 3922.407.5676.1 Date : 11-08-2009 Status : 03.00
Filter Driver Board	3922.406.5114.1	17	022904	I2NC : 3922.407.4312.1 Date : 15-07-2005 Status : 05.00	I2NC : 3922.407.5676.1 Date : 24-02-2010 Status : 07.00
Data collected on					
Date	22/03/2010				
Time	08:42:43				

**It is strongly advised to Collect all data for each session.**

- a: Before upgrade: Store the Data you will get:  
 "LDK8000\_XXX(SN)" but add "\_1" at the end.  
 It will create an Excel-Sheet with all Camera Data with the Name  
 "LDK8000\_XXX (SN)\_1.xls"

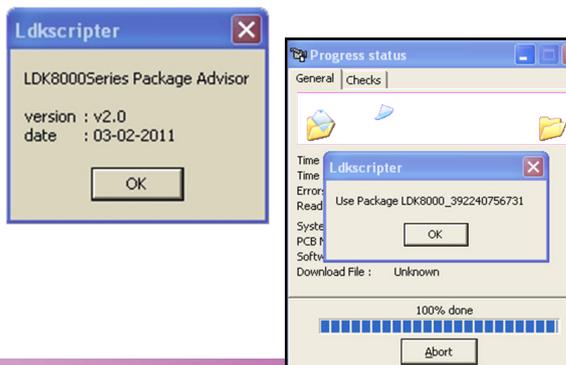
- b: After upgrade: Do the same as in a: but add "\_2"

After this you will have 2 files for each system part.

"LDK8000\_XXX (SN)\_1.xls" before the update  
 and "LDK8000\_XXX (SN)\_2.xls" after the update.

## 5.3.2: Script for Checking Camera version (LDK8000 Package advisor)

This Script is a Powerful tool, to determine which Package is suitable for your LDK4000-LDK8000 Series Camerahead.



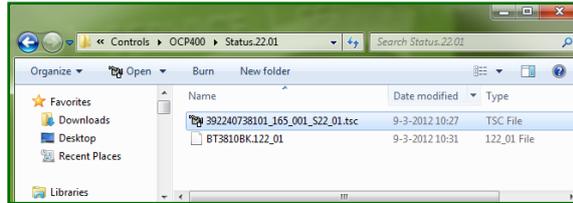
Download procedure

101010 101010 101010 101010 101010 101010  
 110011 110011 110011 110011 110011 110011  
 100011 100011 100011 100011 100011 100011  
 111000 111000 111000 111000 111000 111000

### 5.3.3: Script for individual file Update.

There are still some products that are not updated with the use of a package.  
 In this case there is a script available for each individual file.  
 (SD Camera / LDK4502 / OCP400 / MCP 400 / LDK 6000).  
 Here you need to connect via RS232 or Network and run the .tsc file out of the folder.

See example for OCP400:



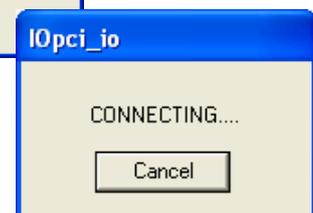
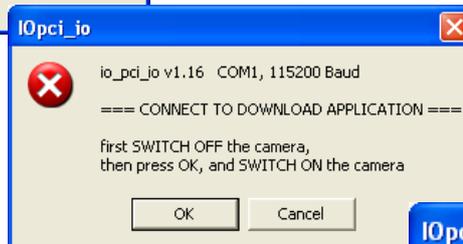
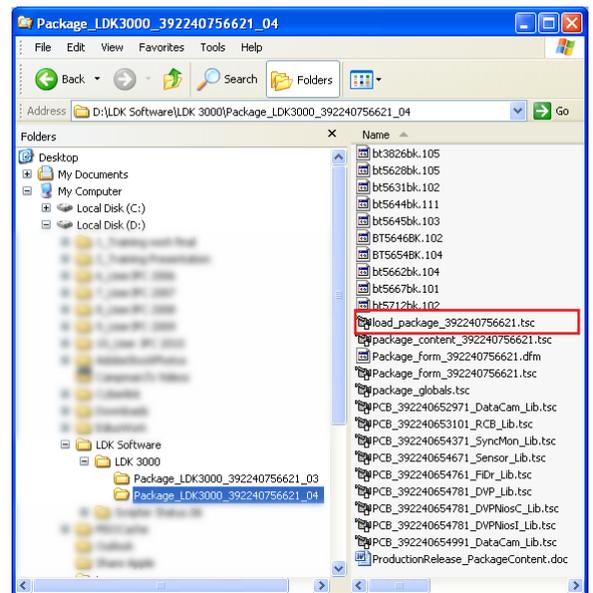
### 5.3.4: Script for Package Update.

After downloading the Package you need to unpack the .exe and place it in a folder on your computer.

Running a package script can be done by double-clicking a file with extension

**“load\_package\_3922407xxxx1.tsc”.**

The installation program (Scripter) creates an association with the LDKscripter.  
 Simply follow the instructions presented to you.



Continued Update Package next page.

Page 6 of 8

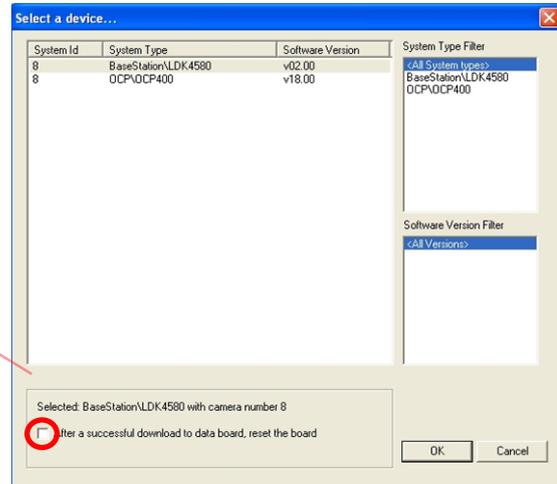
## Select Device Window

When using Download Methode “Ethernet” the following screen is visible.

Important:

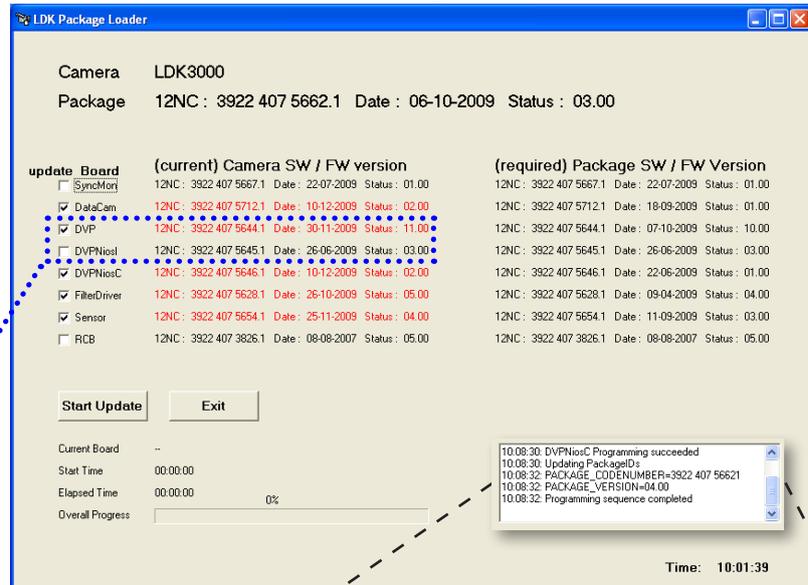
**For Basestation Package Download:**

Make sure that the TAG (See **Red** circle) “After a successful download to data board, reset the board” is NOT selected! Choose the equipment you want to connect to. Then click on “OK”.



## Package Loader Window

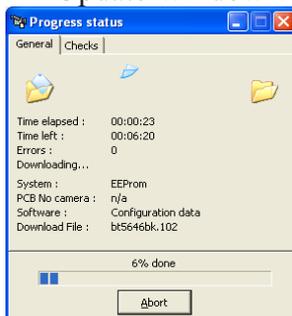
The system will automatically check the status of the System and select all necessary components which need to be updated.



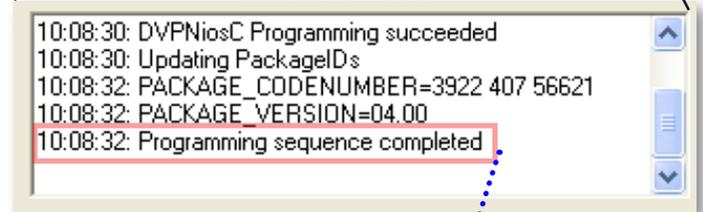
<input checked="" type="checkbox"/> DVP	12NC : 3922 407 5644.1	Date : 30-11-2009	Status : 11.00
<input type="checkbox"/> DVPNios	12NC : 3922 407 5645.1	Date : 26-06-2009	Status : 03.00

Tagged **Red** = Update needed / available  
 Untagged **Black** = No update needed

## Update Window



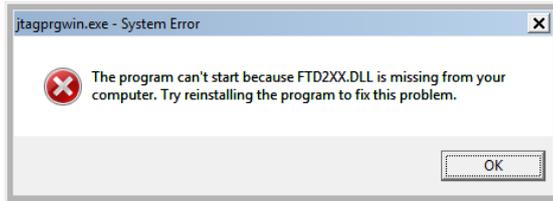
## Status Window



After successful update you will find “Programming sequence completed”  
 Then press “Exit” and Power Cycle the device.

## 6: Known issues

### 7a. Known issue with 3<sup>rd</sup> Gen. Triax without using GV service dongle.



When trying to download Packages to 3<sup>rd</sup> Gen. Triax systems **WITHOUT** a GV Service Dongle available this error message could appear.

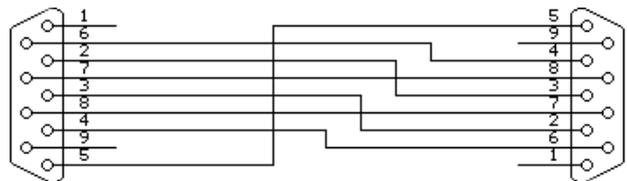
Press OK.

The update continues via RS232 or Network.

But it takes at least 35min till 2 hours for this update. With the Dongle (JTag) connected to the transmission board from Adaptor, Basestation or Conversionbox it take only 3 min.

## 7: RS232 connector pinning (null modem)

Computer		Name	Camera
1		not used	1
3	*	TXD	2
2	*	RXD	3
6		DSR	4
5	*	SG	5
4		DTR	6
8		CTS	7
7		RTS	8
9		RI	9



\* Standard cable. Don't use: LDK Scriptor functions will not work.