# Quick Installation Guide and User Manual

# EPC Camera EPI /GDV Camera

Electro-Photonic Capture Electro-Photonic Imaging / Gas Discharge Visualisation



EPC Compact Camera



EPC Camera PRO

This User Manual is free downloadable at: www.towardsoneworld.eu

We use the term **EPC** for **Electro-Photonic Capture** both in the meaning of the *process* as well as the *result of the process* of collecting the data. Equivalent, but older, terms are **GDV** for **Gas Discharge Visualisation**, or **EPI** for **Eletctro-Photonic Imaging**.

# Safety measures

The EPC devices contain generators of high-voltage impulses.

Therefore, along with general operating rules for electrical equipment it is necessary to keep the following safety standards.

- Recording of human finger's EPCs is allowed ONLY in MODE 1!!! (This holds for the PRO camera too).
- EPC equipment operation is allowed only at a distance of not less than 50 cm from the computer system unit.
- When connecting the cables the device, the computer and peripheral devices must be disconnected from electric mains. Otherwise the equipment may be damaged.
- One must not touch earthed objects (water-pipes, heating systems, etc.) during the process of taking EPCs.
- The "Start" button must not be switched on without an object for investigation placed on the glass surface of the measurement electrode.
- Earthing is necessary for capturing EPCs of biological objects. The Reference electrode, connected with the EPC device, must be attached to the hand of the patient from which the EPC will be taken.
- The EPC equipment operation is permissible only in the following room conditions: temperature between 15 and 25°C, air moisture between 50 and 90%.
- It is prohibited to take EPCs of patients with cardio stimulators (pacemakers) or other medical devices (worn next to skin or implanted).
- When taking EPCs of patients with a previous myocardial infarction supervision by a cardiologist is recommended.
- It is prohibited to use the EPC device for taking images of highly inflammable liquids and explosives.
- Be always careful when placing a test object on the glass plate of the EPC device. Careless setting of the test object upon the measurement electrode can lead to damage of the glass surface of the electrode.
- For the EPC Compact camera: The battery charger must not be switched on when the toggle switch is in the upper position "ON".
- For the EPC Compact camera It is prohibited to record EPCs during the charging of the battery. This can lead to battery breakdown.

## **EPC Compact Camera Quick User Guide**

#### **Electro-Photonic Capture**

Electro-Photonic Imaging / Gas Discharge Visualisation



**EPC Compact Camera** 



#### Installing the software on your computer

## Please make sure that before installing neither the EPC device nor the USB dongle are connected with the computer.

Please insert the installation CD into the CD/DVD drive of your computer. Normally the program will start automatically with a "welcome" screen.

As language select 'English.'

Several pop-up menus will follow, which we will discuss sequentially.

Click 'Next' to start the installation.



By default the setup program suggests to install the software on the **C: drive** of your computer. We recommend this default location. If you prefer another location, click '**Browse**' and select your preferred location. Click '**Next**' to continue.

🖟 Setup - GDY Software	
Select Destination Location Where should GDV Software be installed?	GDTO
Setup will install GDV Software into the following folder.	
To continue, click Next. If you would like to select a different folder, click Brows	э.
C:\Program Files\GDV Software Brow	se
At least 10,4 MB of free disk space is required.	
www.ktispb.ru Help <back next=""></back>	Cancel

The setup program displays a list of all program modules it will install and the total size of disk space required. We recommend to keep all modules for installation. If for whatever reason you do not to install a certain module, then you may deselect it here. Click '**Next**' to continue.

🐺 Setup - GDV Software	_ <b>_</b> ×
Select Components Which components should be installed?	GDO
Select the components you want to install; clear the components y install. Click Next when you are ready to continue.	rou do not want to
GDV Capture 2 2.9.9	8,9 MB
GDV Energy Field 1.5.6	12,7 MB
GDV Diagram 2.0.7	8,4 MB
GDV Screening 2.1.0	6,4 MB
GDV Virtual Chakra 1.6.5	9,0 MB
GDV Qualification 1.4.1	4,3 MB
GDV Viewer 1.1.9	4,7 MB
GDV Scientific Laboratory 2.3.0	7,4 MB
GDV Atlas 2.0.5	6,1 MB
Current selection requires at least 84,2 MB of disk space.	
www.ktispb.ru Help < Back Ne	ext > Cancel

By default the setup program will create an entry in the Windows "Start" menu as well as an icon on your desk-top. If you prefer to have a so called quick launch icon in the bottom menu bar, then please activate the tag "**Create a Quick Launch icon**." Click '**Next**' to continue.

🙀 Setup - GDV Software	<u> </u>
Select Additional Tasks Which additional tasks should be performed?	GDO
Select the additional tasks you would like Setup to perform while installing GDV Software, then click Next.	
Create folder in menu "Start"	
🔽 Create a desktop icon	
Create a Quick Launch icon	
www.ktispb.ru Help <back next=""></back>	Cancel

The EPC package suggests a directory to store patient and image data. By default this is **C:\GDVData**. If your computer has more than one disk drive, then we advise to specify another drive than the C: drive: The C drive usually is the Window System drive, which may be erased when the system gets updated for example. Specifying a drive independent of the system drive is recommended for safety reasons. Click '**Next**' to continue.

🛱 Setup - GDV Software	_ 🗆 🗙
Select GDY Data Directory Where should your GDV data files be stored?	GDTO
Select the folder where GDV Software should store GDV-image files (* subject's data files (*.sbj), then click Next.	.bmp) and
C:\GDVData	Browse
www.ktispb.ru Help < Back Next	> Cancel

The following example shows a folder in the D: drive where image data, patient data, calibration data etc. will be stored. Click '**Next**' to continue.

🕫 Setup - GDV Software 📃 🗖 🔀
Select GDV Data Directory Where should your GDV data files be stored?
Select the folder where GDV Software should store GDV-image files (*.bmp) and subject's data files (*.sbj), then click Next.
D: \A_EPI GDV KORTKOV Graphics Browse
www.ktispb.ru Help < Back Next > Cancel

Now the setup program will attempt to install the Hardware Key Senselock (i.e. the USB dongle) and the EPC (GDV) camera. Please note that at this point neither the USB dongle nor the EPC (GDV) camera should be connected to the computer.



This is again emphasised by a message from the setup program.

	🙀 Setup - GDV Software	_ 🗆 🗙	
	Ready to Install Setup is now ready to begin installing GDV Software on your computer.	GDTO	
	Click Install to continue with the installation, or click Back if you want to review or change any settings.		
	Destination location:	<b>-</b>	
Set	up		X
(	Please, be sure that GDV device and hardware protection key are disconnected fro	m your comp	uter
	OK		
	GDV Virtual Chakra 1.6.5 GDV Qualification 1.4.1	•	
	www.ktispb.ru Help < Back Install C	ancel	

You may now get several times a window from the Wizard which tries to install the device driver. Please click "Next" each time.



Finally you will get the window:



Click "Finish" to complete the installation for the USB dongle. If you were to get a window like:



Then click "Install anyway".



Then finally you will get the window.



Click "**Finish**" to complete the installation for the EPC (GDV) camera. The installation is now completed and the following window displays:



We recommend to activate the tag: "**Do calibration in GDV capture program**". Then click "**Finish**".



You should now connect the USB dongle and the EPC (GDV) camera to the computer by means of the USB cables.

Then the next window and message may appear



#### Select "Automatically install software" and click "Next".

If the calibration program were not to start automatically or if you get the message that the camera is not connected, then please close the current application program. And then start the EPC (GDV) capture program from the desk-top and select "**Calibration**".



## Calibration of the EPC (GDV) camera

Please connect the calibration cylinder and place it on the holder of the camera. The metal cylinder should be placed perpendicularly and as straight as possible on the glass plate. This will be checked with the images to be made.



After launching the "Calibration" module of the EPC (GDV) program the following window displays:

Capture		?	. 8 🗙
test-object for calibration	Page	Action	Settings
Energy polete 🔄 🌠 🚯			
Type of connected GDV-device: GDV Compact with analog videocamera (FTDL4.6001)			
No los			
GDY-moge			

Once the metal cylinder is placed perpendicularly on the glass plate make your first calibration capture by clicking with the mouse on the first empty image field ("no GDV image"). A first picture is captured and will be displayed. The image should be as clear as possible and the radiation should be as even as possible too. You may move the USB cable a bit by hand in order to try to improve the image quality if necessary. Thus make about 15 image captures. If at image 2 or 3 you obtain a good quality, then make about 10 calibration images in that position. For a good calibration a total of 10 images is required.



You may delete the first couple of captures: select the image with the bar under the image and then click "**Delete**". Delete as many images as required to obtain a final set of 10 images as shown in the following figure.



We now proceed with this set of convenient image captures. Click "**Save GDV images**".

Finally click "Process". This will result in the following review:

GD	<u>()</u> Capture														? 🗆 ð 🗙
Calibration	n results														Page Action
Parameter Date and tim Obt-device r Path to GDV- Radius error Intensity em Area Average glow Inner glow ra Noise level GDV-images	e of calibration e of CDV-images capture nodel: images Files or v area udus size	Value 7/30/2011 2:05:37 PM 7/30/2011 2:05:37 PM GOV Compact with enalog 0.03 % (chould be less th 1.03 % (chould be less th 1.2622 1.2551 57 30 370 × 285	j videocamera (i RAPHICS\Calibr: ien 2.00 %) ven 5.00 %) ven 5.00 %)	FTD1.4.6001) ation(30-07-2011)											
File name 0011. hmp 0012. hmp 0013. hmp 0014. hmp 0015. hmp 0016. hmp 0017. hmp 0019. hmp 0019. hmp 0019. hmp	Date and time of capture 7/30/2011 2:00-59 PM 7/30/2011 2:01-00 PM 7/30/2011 2:01-00 PM 7/30/2011 2:01-04 PM 7/30/2011 2:01-04 PM 7/30/2011 2:01-12 PM 7/30/2011 2:01-15 PM 7/30/2011 2:01-15 PM 7/30/2011 2:01-17 PM	Inner radius irregularit 0.76 % (chierance 4.00 0.78 % (chierance 4.00	y s   %) 5.61 % (t   %) 5.61 % (t   %) 5.33 % (t   %) 5.33 % (t   %) 5.18 % (t   %) 5.18 % (t   %) 5.43 % (t   %) 5.43 % (t   %) 5.43 % (t	Area error colerance 15.00 %) colerance 15.00 %)	Intensity error 1.67 % (tolerance 5 2.77 % (tolerance 5 2.46 % (tolerance 5 2.14 % (tolerance 5 2.14 % (tolerance 5 2.15 % (tolerance 5 2.45 % (tolerance 5 2.45 % (tolerance 5 2.05 % (toler	ar 0.00 %) 0.00 %) 0.00 %) 0.00 %) 0.00 %) 0.00 %) 0.00 %) 0.00 %) 0.00 %)									
115995							Dependence of the	test-object's glow	area on noise leve	:	:	:	:		
86996															
99 57998	\														
28999															
0											20 1				220 255
Intensity: 233	, Test-object glow area: 0		51	00			1	Noise level							200
													<< Back	Exit without saving	Save calibration results
		lt is imp • Ra • Are	ortai dius ea er	nt to c error ror	heck t	he foll	owing	featur	es:						

Intensity error

All these values should be within the range specified behind them in ellipses.

It is recommended to make a folder "Calibrations" and to store the result therein.

#### Preparation of the patient for reliable and useful EPCs

- It is recommended to make the EPC in the morning before any possible intake of medicaments, or at least 3 hours after a meal or the smoking of cigarettes.
- It is prohibited to use alcohol within a period of 24 hours before the EPC.
- It is recommended to make the EPC after defecation. Do not take clysma before the EPC.
- Do not make the EPC within 15 minutes after washing hands of the patient.
- Let the patient relax for 5 10 minutes before taking the EPC.
- Let the patient not wear any metal objects (rings, bracelets, (semi)precious stones) and remove mobile phones or other electronic devices.
- It is advised that the patient does not wear tight clothing, shoes or belt, which might perturb or influence the blood circulation.
- It is advised that the patient wears short nails: Long nails may add useless information to the EPC.
- If a patient would miss a finger, or part thereof, please take a new EPC of the corresponding finger on the other hand.

## Using the EPC (GDV) camera

Now image captures of the ten fingers can be made.

It is recommended to close any other application and then start from the desk-top the "GDV screening" program.



#### Click "Start work".

The following window will display:

GDW Streams		?	_ 7 🔀
Subject list	Page	Action	Programs
Add new subject entry or Ioad data from disk			
(Hew subject) Load subject) Load per lat Remove from lat Clear lat			
GDV capture data is not added			
Add capture (Edd data ) Remove capture		(	Save changes
Caltration		<< Bac	

Click "Load subject".

GDO Screening
File name: D:\A_EPI GDV KIRLIAN GRAPHICS\Subject 1.sbj Browse
Personal data
Name: Subject 1
Sex: male Birthday: 31 + 7 + 1991 + Ed day month year
Remark:
GDV Capture data
GDV Capture name: Capture 1 Date:
Remark:
GDV-images without filter
No data
🕲 Capture GDV-images 😂 Load GDV-images
GDV-images with filter
No data
🕲 Capture GDV-images 🖉 Load GDV-images
Cancel Done

In the top field "**File name**" you specify the directory and name of a file to store the result into. You may previously have created a specific directory for that purpose. The extension of the file is ".sbj". Then please fill in all relevant data. Important fields are: Name, Sex, Birthday, and possibly Remark, where you may specify for example "*Capture for therapy*".

Now we are going to make the image captures of the ten fingers, one time **without filter** and one time **with filter** (for an extensive explanation of with and without filter see further below).



#### It is important to pose the tip of the finger in the right position on the glass plate.

The fingers should not be washed just before taking the EPC, unless

- The fingers are very dirty; in that case wipe the fingers clean with a dry cloth.
- The fingers are very wet; in that case wipe them dry with a dry cloth just before capturing.

The finger should not press too hard on the glass plate.

The finger should just rest gently on the glass plate.

The finger should rest under an angle of 45° on the glass plate.

Hence the finger should not rest flat on the glass plate.

Neither should it be perpendicular to the glass plate.

The finger should be placed in line with the main axis of the camera, i.e. it should not be skewed. Thus a slightly oval, more or less symmetric image will be captured.



The corona of an EPC with filter of a **normal healthy person** should look like a dense, evenly spread and balanced ring (circle or oval). There should not be much divergence in radiation, which should be regular and homogenous. Yellow-red colours show up on the outside of the blue ring, but these should not be wider than this blue ring.

Normal corona with filter:



## Defective images of fingers and their possible cause

Wet finger

Intrusion of 'false', i.e. ambient light:



Cut off corona:

Wrong angle of corona (should be 90°)

Wrong filter in use:

Person in meditative state:

















## Taking the EPC – GDV capture

We start by making a series of capture without filter. On the window menu go to the section "GDV images without filter" and there click "Capture GDV images".

File name: D:\A_EPI GDV KIRLIAN GRAPHICS\Subject 1.sbj Browse
Personal data
Name: Subject 1
Sex: male Birthday: 31 x 7 x 1991 x 31 x 7 x 1991 x 31 x 7 x 1991 x 31 x 31 x 7 x 31 x 31 x 31 x 31 x 31
Remark:
GDV Capture data
GDV Capture name: Capture 1 Date:
Remark:
GDV-images without filter
No data
🛱 Capture GDV-images 🗃 Load GDV-images
GDV-images with filter
No data
🛱 Capture GDV-images 📴 Load GDV-images
Cancel Done

This will open a new window with 10 empty image capture fields, labelled "1R", "2R",...,"5R", "1L", "2L",...,"5L". Here "1R" corresponds with the first right finger, etc. Place each finger on the camera, taking care to use the cover cloth around the wrist to prevent false light from entering, and capture the EPC by clicking in the corresponding image field.



Repeat the same sequence for the case "GDV images with filter."

Thus we end up with two series of each 10 images, one without and the other with filter.



Now click "Calculate" on the lower right part of the menu.

Thereafter, depending on the installed software modules, different analyses of the captures images are possible.

To select an analysis click on "**Programs**" on the upper right part of the menu and select the required module.

A pathology of an organ or tissue is manifested as a disturbance of the even colour range or of the main contour of the corona, forming defective zones on the finger corresponding to the defective organ: gaps, point spikes, tree or branch formations, isolated spots, isolated clear lines or spaces within the "bottom line," etc.

Twelve steps of interpretation of the Energy Field:

