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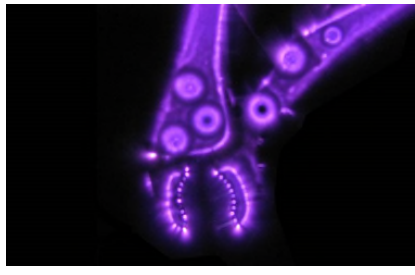
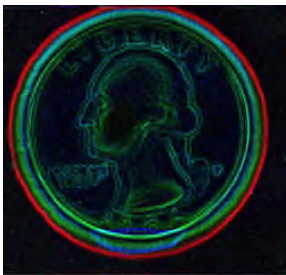
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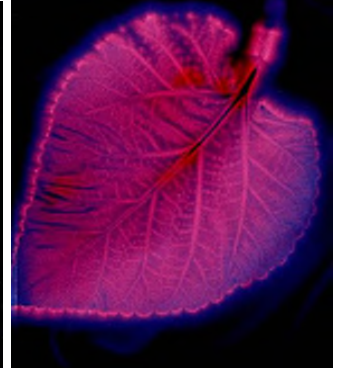
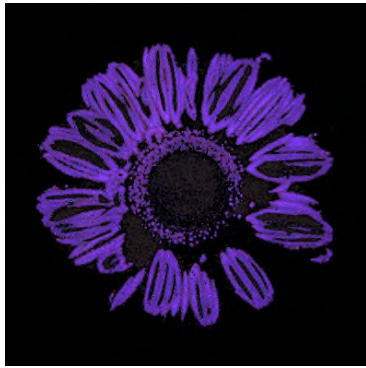
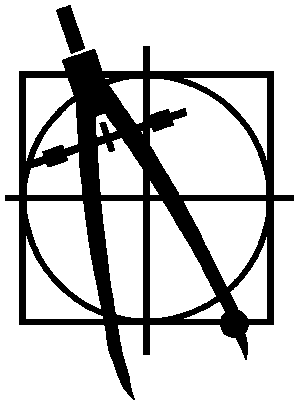
Transparent Discharge Plate (TDP) & Ground Plate (GP) For Kirlian photography



Ground Plate



**Transparent
Discharge Plate**



Read This First

Warning! Kirlian devices are high voltage contact print photography devices. All high voltage devices are potentially dangerous and must be operated with extreme caution. Images only recommends using the Transparent Discharge Plate (TDP) and Ground Plate (GP) with low current high voltage power supplies that only deliver 1 milliamperes of current or less.

Disclaimer: Images SI Inc. or its affiliates assume no responsibility for damages consequential or inconsequential or incidental for the use or misuse of the transparent discharge plate. Images makes no warranties, expressed or implied to the fitness of this device for any particular purpose.

Safety Precautions

- A) This equipment should not be used by children or anyone not familiar with normal safety precautions to be used around electrical equipment.
- B) Use a pair of glass lensed sunglasses when viewing the corona discharge if you do not wear glasses. Common glass absorbs the short wave ultra violet rays which can cause eye irritation.
- C) Do not operate the equipment if there is any evidence of damage to the discharge plate or its dielectric material.
- D) Limit skin exposure to corona discharge about 1 minute a day. Note: A tingling sensation or slight shock can be felt when touching the working side of the transparent discharge plate or touching an object on the transparent discharge plate. This is inherent in this type of Kirlian device.
- E) Images only recommends using the Transparent Discharge Plate (TDP) and Ground Plate (GP) with low current high voltage power supplies that only deliver 1 milliamperes of current or less.

Kirlian Photography Using Digital, Film & Video Cameras

To shoot Kirlian photographs using standard digital, film and video (low light) cameras , requires the use of a transparent discharge plate and (sometimes a) ground plate, see figure 1.



The Transparent Discharge Plate (TDP) has an object side and a camera side. The side with the colored dot is the object side that faces (or is placed on) the object. This will provide the brightest corona discharge to photograph. The camera side faces the camera. The transparent section of the TDP has a better than 90% transparency.

The Ground Plate (GP) makes it easier to ground an inanimate object you want to photograph safely and quickly.

General Guidelines Regarding Grounds

Do NOT ground live or human subjects:

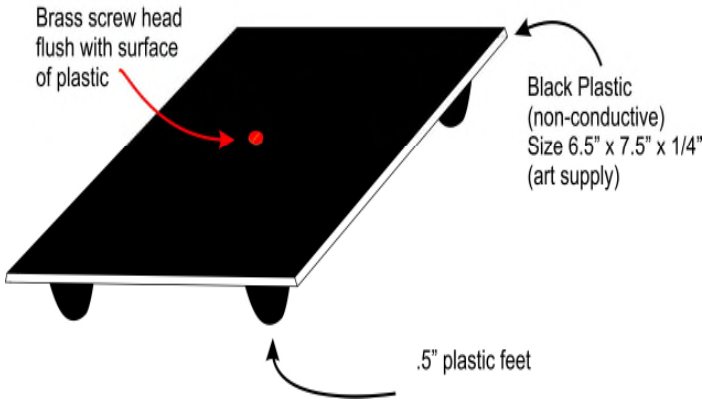
When shooting live or human subjects, do not allow the subject to come in contact with a ground. This will increase the current through the subject and may be uncomfortable to the subject. Typically a person doesn't need to be grounded, they just need to touch the plastic side of the transparent discharge plate to create a corona discharge.

Do ground inanimate objects:

When shooting inanimate objects like coins and leaves, a ground is necessary to create a corona discharge. One may ground inanimate objects you are planning to photograph in any number of ways. The grounding illustrations in figure 5 (next page) detail two methods. The first illustration shows the ground wire directly attached to the object. When shooting like this many times the ground wire will be visible in the photograph. To remove the wire in the photograph I use the second method illustrated, a small hole is made in the black paper background.

Figure 2

Ground Plate for Kirlian Photography



The construction of the ground plate is shown in figure 2.

The ground plate is constructed of a 6.5" x 7.5" non-conductive black plastic plate. The plastic plate has a brass screw through its center. The head of the brass screw is flush with the top surface of the black plastic. This top surface is the photography side of the ground plate. This is where you will place an inanimate object you are photographing, like a leaf or a coin. The bottom (connection side) of the ground plate, has the end of the brass screw protruding and four rubber feet. The feet create enough space under the ground plate to connect an alligator clip wire to the end of the brass screw.

Quick Start Guide

A typical set-up to shoot a Kirlian photograph is shown in figure 3. A ground wire is connected to the brass screw protruding from the bottom of the ground plate, using the alligator clip side of the wire. The banana plug should be attached to a ground. If using the Images Kirlian device, plug the banana plug into the side ground post.

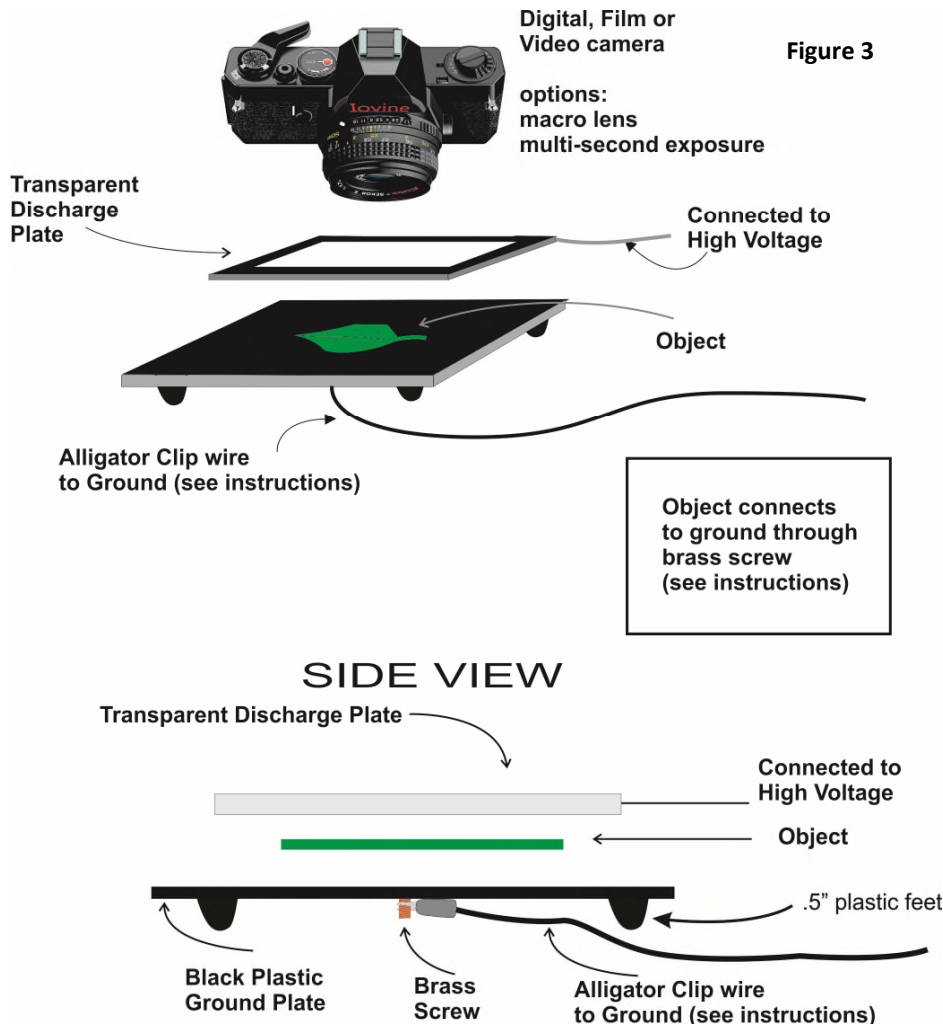


Figure 3

The inanimate object, such as a leaf or coin, is placed on the top side of the ground plate, on the head of the brass screw.

The Transparent Discharge Plate (TDP) is plugged into a high voltage output of the Kirlian device. Identify the object side of the TDP. The object side will have a color dot on it. Place the object side of the TDP on top of the object.

The camera is positioned above the TDP, as shown. Focused the camera onto the object through the transparent plate.

To shoot a kirlian photograph, turn off the room lights so the camera can record the faint corona discharge around the object.

The high voltage is applied to the TDP and the camera shutter is opened to expose the film, or CCD element (digital camera).

Kirlian Photography using Digital Cameras

The procedure described here is a more detailed procedure than is given in the Quick Start Guide. All controls on the Kirlian device work with the transparent discharge plate



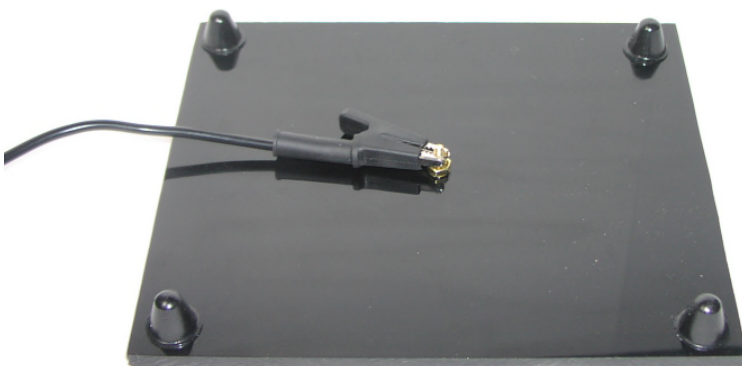
Figure 5. Coin shot with transparent discharge plate and digital camera. Exposure 12 seconds

Typical exposure time using a digital camera is set to 10-20 seconds. Exposure time can be adjusted up or down once you have taken a few images.

As an example, here is how you would shoot a leaf with the camera set to with a 10-second exposure.

Set up your Kirlian photography equipment in a room that can be made relatively dark, see figure 4.

Begin your set-up with the ground plate. The ground plate is black nonconductive plastic that provides an ideal background to improve the contrast and visibility of the objects corona discharge. The ground wire has an alligator clip on one end and a banana plug on the opposite end. The alligator clip is attached to the brass screw protruding from the bottom of the ground plate. The other side of the wire is attached to a ground or plugged into the ground socket on the Kirlian device.



which is connect to ground by the ground wire.

The Transparent Discharge Plate (TDP) is placed over the leaf. Object side of the TDP is placed facing the leaf.

Set the camera's exposure time to 10 seconds.

Position the camera is positioned over the TDP (see Figure 3). Adjust the view through the camera to only show the object under the TDP. If an auto-focus camera is being used, turn off the auto focus mode and set the camera for manual focus operation.

Manually focus the camera on the object with the room lights on. After the camera is focused, shut off all the room lights. Use a flashlight to navigate around the room, if necessary. Open the shutter release of the camera and turn on the high voltage power supply. Keep the hv power supply on for the full length of the exposure you are making (10 seconds). After the exposure has been made, turn off the hv power supply. Turn on the room lights

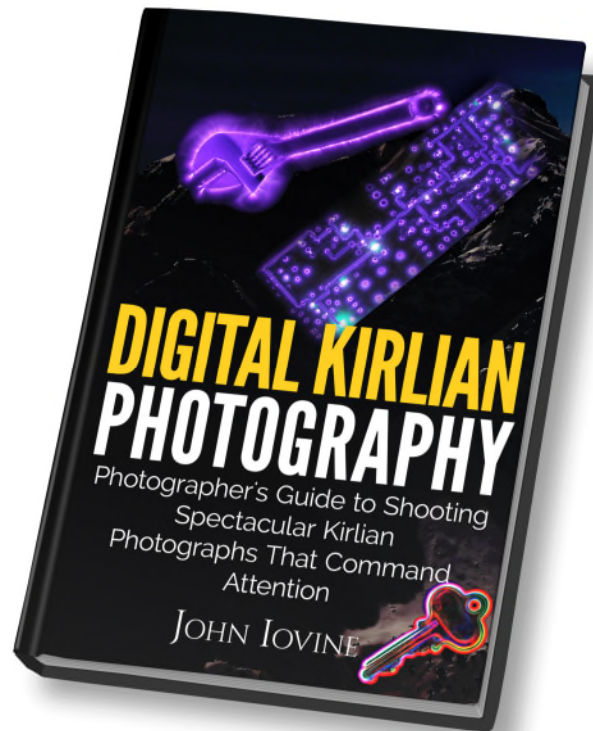
You can view the image and adjust the exposure time up or down.

The same technique described here for taking stills may also be used to film real time Kirlian video. The video camera required must be capable of taking low light video, or be equipped with an light enhancing image intensifier.

Grounding for Kirlian Photography

When shooting live or human subjects, do not allow the subject to come in contact with a ground. This will increase the HV current through the subject and may be uncomfortable to the subject. Typically a person doesn't need to be grounded, they just need to touch the plastic side of the transparent discharge plate to create a corona discharge.

When shooting inanimate objects like coins and leaves, a ground is necessary to create a corona discharge. One may ground inanimate objects you are planning to photograph in any number of ways. The grounding illustrations in figure 5 (next page) detail two methods. The first illustration shows the ground wire directly attached to the object. When shooting like this many times the ground wire will be visible in the photograph. To remove the wire in the photograph I use the second method illustrated, a small hole is made in the black paper background. The ground wire is fed through the hole to touch the object being photographed. Resting the object on top of the ground wire, gives a nice black background and a ground for the object without any obtrusive wires. You may also use a small grounded copper plate in place of the wire as long as the object you are shooting makes contact with the plate through the hole of the black paper background.



Digital Kirlian Photography Book

Experimenter's guide for building your own Kirlian photography equipment saving you hundreds of dollars. Use your own digital camera, iPhone or low light video camera to capture the hidden electrical portraits of many common objects.

Kirlian photography is a high voltage contact print style process.

Kirlian images capture the luminous corona discharge between the subject and a high voltage electric field. No external light source is used in creating these images. The interaction between the object and the high voltage field produces a unique image via the corona discharge.

Available from:

[Amazon.Com](https://www.amazon.com)

[Images Scientific Instruments website.](http://www.imagescientific.com)

Kirlian Photography - A short history

The beginning of electro-photography can be traced back to the late 1700s. In this time period, Georg Christoph Lichtenberg appears to have been the first to observe electrophotographs. Lichtenberg made note of his observation of pictures made in dust created by static electricity and electric sparks.

Nicola Tesla (1880) photographed many corona discharges using his famous Tesla coil. In the early 1900s, Russian Engineer and electrical researcher Yakov Narkevich-Todka exhibited interesting electro-photographs he made. A little later, but around the same time, Dr. F. Strong of Tufts University Medical School used a Tesla coil to make electrophotographs of his hand.

Russian Researcher Semyon Davidovich Kirlian and his wife Valentina began their work with high-voltage photography by accident in 1939. Semyon Kirlian was an electrical repairman in the city of Krasnodar. He had been called to do a repair at a local research institute. While at the institute, he happened to see a demonstration of a high frequency device used for electrotherapy. As a patient underwent treatment Kirlian noticed small flashes of light between the patient's skin and the machine's glass electrode. Kirlian wondered if he could photograph that light. Kirlian substituted a metal electrode for the glass one used in the machine to prevent exposing the film to light. Then, using himself as a subject, he was able to photograph the corona discharge.

Kirlian collaborated with his wife for over 30 years, developing equipment and studying electro-photographs. They made instruments to examine high-frequency currents on living tissue as well as on inanimate materials.

The Kirlians' work was highlighted in a book published in the United States in 1970 titled "Psychic Discoveries Behind the Iron Curtain", by Sheila Ostrander and Lynn Schroeder. This is where I as well as many others first learned of electro-photography photography. Their work became so well known, that electro-photography from that point on became known as Kirlian photography.

Many paranormal claims were made concerning the resulting images. The Kirlians' claimed that this type of photography could be used as a medical diagnostic tool. Stating that disease in subjects shown as a modified or disrupted pattern of discharge, before obvious symptoms became manifested in the subject. Naturally this claim generated much interest in this country.

One must keep in mind that most of the observable Kirlian phenomena that's been reported does not require any paranormal or bio-plasma field to be explained. As an example, stress or the "act of lying" can easily be detected with a lie detector that relies on measuring the change in a person's galvanic skin resistance. Stress caused by lying may also be seen in a Kirlian photograph as a change in the corona discharge (aura). However this change in the corona discharge is easily explained by the change in a person's skin resistance.

And it follows that much of the phenomena claimed to be paranormal by some Kirlian researchers can be explained by employing known physical laws, like changes in subjects skin resistance (which can be due to factors like; stress-lying, illness, fatigue, alcohol consumption, etc. Some other variable factors influencing the resulting Kirlian picture include the object's pressure against film, humidity, air pressure,

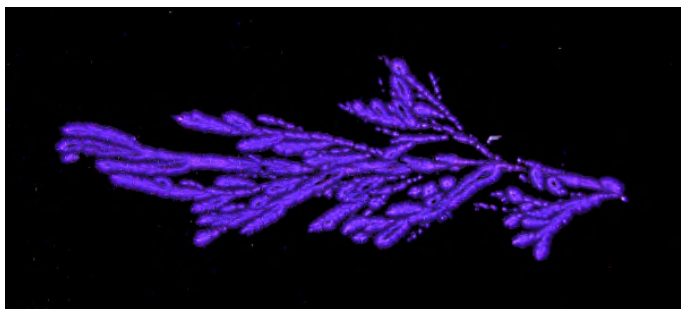
voltage, frequency, and exposure time.

However the most interesting of all the Kirlian claims is known as the "phantom leaf" experiment. Here a small portion of a leaf is cut off; the leaf is then photographed using Kirlian photography. In a small percentage of cases the cut portion of the leaf appears in the photograph as a ghostly apparition. The appearance of the cut portion of the leaf, as claimed by the Soviet researchers is proof of an ethereal bio-plasma body.

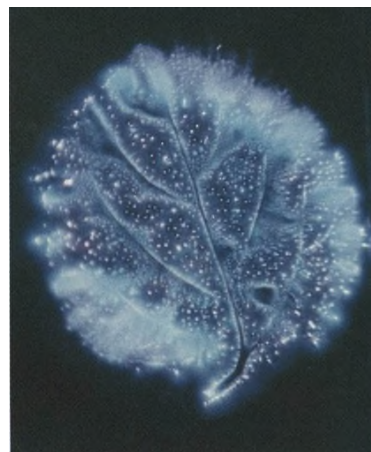
Although a few Kirlian researchers have claimed to duplicate the phantom leaf experiment in their own labs, the most reported successful results (phantom leaf photographs) are from Soviet researchers. The exact experimental parameters (voltage, frequency, etc) needed to obtain phantom leaves are either not available or didn't work for me.

Phantom leaf photographs are very easy to fake using a basic double exposure technique. Take a short exposure of the entire leaf. Stop the exposure, cut off a small section of the leaf, and then continue the exposure. In the resulting photograph the removed section of the leaf will appear as a distinct ghostly image, a phantom.

Whether Kirlian photographs are us showing something new or not they are unique and often times beautiful. You may use Kirlian photography to explore the phenomena or take beautiful pictures. Proof of the phantom leaf effect, if it exists, would begin a new paradigm in both physics and biology. Kirlian photography has the potential for becoming a diagnostic tool (both biological and industrial).



Digital camera image. Exposure 15 seconds shot through transparent discharge plate.



Standard 35 mm camera & color film shot through transparent discharge plate. (exposure unknown)