



Panoram

Of the
Oakland Camera Club
Member of the
 Photographic Society of America
and
 Northern California Councils of
 Camera Clubs
 Jim Johnston, President
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 Stereo Division Chair



December, 2000

Volume 65, Issue 12

Twin Camera Systems



Twinned Pentax P3 and Kiev 35A rigs

By Harold Baize

My first stereoscopic photographs were taken with a Kodak Stereo, but I soon wanted to expand my horizons and try full frame twin camera stereo. I'm glad that I did. Nonetheless, most stereo photos are taken with a true stereoscopic camera. There are many reasons for that. Twin camera rigs tend to be quite bulky and cumbersome. They can be difficult to synchronize. Even more of a problem is that full frame 35mm cameras are typically

wide, often more than 150mm across. The result is that two cameras set side-by-side for making stereo pairs, will result in a lens separation more than twice that of a stereo camera (70mm). The images taken with these stereo camera rigs will be "hyper" and fine for making stereo photographs of large object or scenic photography, but cannot be used to photograph objects closer than about 12 feet.

Inside this issue:

<i>Twin Camera Rigs</i>	1-2
<i>3D Combine</i>	3
<i>Winning Slides for 2000</i>	4

(Continued on page 2)



Spray of surf captured with twinned Pentax P3s

(Continued from page 1)

There may be limitations to twin camera systems but the advantages of using a modern full featured camera for stereo work is very appealing, and we can't all afford to purchase a top-of-the line RBT camera. This article will briefly describe some of the twin stereo camera rigs of Oakland Camera Club members, with particular attention to the two systems put together by myself (editor).

Pentax P3

The first pair of cameras that I twinned were a set of the venerable Argus C-3 "Bricks". They worked but since they were no more advanced than any of the fully manual stereo cameras of the 1950's there was little advantage to using them. So about six years ago I decided to get a pair of SLRs. Budget concerns limited my choices. I considered twinning a pair of the great work-horse of manual SLRs—the Pentax K-1000; but decided instead to buy a pair of Pentax P3 cameras because they offer auto-exposure and only cost about \$25 more than the K-1000s. It turned out that I made a good choice.

The P3 is a light weight SLR with three modes of auto-exposure: program, aperture priority, and shutter priority. It can take a variety of lenses including some with auto-focus. The shutters are electronically triggered and controlled by the auto-exposure system. Like most other full function SLRs the P3 has a cable release socket that takes a standard mechanical cable release. Unfortunately, when you use mechanical cable releases it is difficult to precisely synchronize. I was disappointed that the P3 was not equipped with an electronic shutter release connection.

Then it occurred to me that the mechanical cable release might complete the shutter release circuit. I experimented

with some wire and to my delight and amazement, the shutter is triggered by a simple connection of the outer mechanical cable release socket with a contact point at the center of the mechanical cable release. After making this discovery I fabricated the camera synchronization wiring with some speaker wire, the outer thread-heads from two old cable releases, and a 20 cent switch from Radio Shack (see photo on page one).

The results are excellent. Although I have not used equipment to test the shutters to see how well synchronized, the camera rig seems to be perfectly synchronized. Photographs of birds in flight, splashing water, and other fast moving objects show no difference between exposures. The split second synchronization is made possible when the shutter release button on each camera is depressed half way. This activates the metering in the cameras so both are set to immediately fire. The end result is a near perfect synchronized SLR twin rig at a cost of less than \$500.

Kiev 35A

The Pentax P3s are a great twinned camera rig, but they are quite a load to carry around. They also have a rather wide minimum stereo base of approximately 150mm which severely limits their use for photographing close objects, particularly people. The ideal 35mm camera for twinning would be very compact, light weight, and feature aperture priority auto-exposure. I should also add that it should be affordable. Does such a camera exist?

Yes, the Kiev 35A! I was fortunate to notice a posting on the Sell-3d list serve for two of these small cameras and quickly bought the pair of them for only \$35.00. At that price the cameras only cost a little more than the batteries they take. Although you may not be able to find them that cheap, they are readily available on eBay for \$35.00 each.

(Continued on page 3)

(Continued from page 2)

The cameras are basically a Russian imitation of the German made Minox GL. They have coated 35mm f2.8 lenses. They are powered by four 1.5 volt button batteries, or two 3 volt batteries. The aperture priority auto-exposure system is on when ever the front "clam-shell" lens cover is open and the film has advanced, so it is ready to shoot. The f/stop and film speed are both continuously variable, so you can adjust between the film speed settings. The camera then chooses the shutter speed.

What makes these cameras great is that they are so small that you can easily mount close enough to have a stereo base of only 99mm— a mere 29mm wider than the standard Realist. An added bonus is that the pair of cameras is lighter than a Realist!

I twinned mine by using a mechanical twin cable release that I had previously purchased from *Reel 3D Enterprises* (<http://www.stereoscopy.com/reel3d/index.html>). The Kiev 35As make a wonderful twin camera rig, however these cameras suffer from the problems that plague other cameras from the former Soviet Union. Specifically, they show some light leaks, and they are also more fragile and not as well made as the German cameras they have copied.

Another OCC member, Kevin Chou, has twinned a similar set of cameras. Kevin has combined two Olympus Epic cameras. His twin camera rig boasts the same close stereo base as my Kiev 35A system, and also features 35mm f/2.8 lenses. Kevin reports excellent results from his system but synchronization is limited, this is partly due to the Olympus Epic lacking a cable shutter release socket. Kevin hopes to one day open the cameras up and synchronize them electronically.

Oakland Camera Club member David Thayer has twinned a pair of Konica FS1 cameras, he uses sets of both Tokina 28-70mm and Sigma 80-200mm zoom lenses. David has found that the sliding barrel zoom of the Sigma lenses makes it difficult to keep the lenses in synch if the camera rig is hanging by a camera strap.

The varied experiences of OCC members with twinning and synchronizing 35mm cameras are generally encouraging. If you would like to take the plunge a good reference would be the September 1993 issue of the PSA Journal. The issue contains an article that describes a circuit, designed by Bob Leonard, that will allow precise synchronization of any camera with an electronically controlled shutter.

-Harold



If you view your stereo images on the computer you will need software to properly align the left and right images, set the stereo window, and to convert the final image to one of the many formats used on computers; anaglyphic, cross-eye, parallel, and interlaced, among others.

3D Combine is a shareware program that does that, and more. One of the unique features of 3D combine is the ability to convert a single stereo anaglyph image into separate left and right images. It also has functions to correct rotational error in your stereo pair. *3D Combine* will perform batch conversion of stereo pairs into any of the 3D formats supported, or batch convert from one stereo format to another. The program has support for decoding and encoding AVI video files to let you can create your own 3D videos or convert between formats.

3D Combine boasts the ability to display 3D images on the computer in high resolution either full screen or win-

dowed within the Windows desk top with the ELSA 3D Revelator LCS glasses. Unfortunately this feature does not work with all ELSA video boards, such as the ELSA Winner II (which I have).

3D Combine is reasonably priced shareware with the registration costing only \$25.00. Visit the web site at: <http://www.photoalb.com/combine/>. A competitor to 3D Combine is *DepthCharge Developer Studio SE* from VRex, Inc. DepthCharge Developer Studio offers most of the features of 3D Combine and comes with a pair of VR Surfer LCS glasses for \$79.00. The DepthCharge Developer Studio with the LCS glasses is a good deal, but the program has not been updated in more than two years and the VR Surfer glasses do not work well with many video boards. You can learn more about DepthCharge Developer Studio and the VR Surfer glasses at: http://www.vrex.com/html/dev_studio.html

-Harold

The OCC Calendar

Dues, Dues, Dues!

Yes the dues are due. Well, January 1st, 2001 actually. The dues are \$10.00 for slide and print competitors, and \$5.00 for non-competitors. Additional donations are also accepted. When you consider that the dues do not even fully cover the printing and mailing cost of the *Panoram*, membership in OCC is quite a bargain!

Send your check, payable to the Oakland Camera Club, to:

John Bonwell, Treasurer
1904 Linwood Way
San Leandro, CA 94577-6218

The Oakland Camera Club will hold its annual end-of-the-year luncheon on Saturday, December 9th at 11:30 am. It will be held at Francesco's in Oakland.

Meetings:

Stereo Division

The Stereo Division will meet for the first time in the new Millennium on Tuesday, January 2nd at 7:30 pm at the Salem Lutheran Home. Please consult the January 2001 *Panoram* for more details. .

Slide/Print Division

There is no December meeting, but the first 2001 meeting will be at the home of Bob Baker on January 11th, and the February 8th meeting at will be at Barry Bieler's home. Check the January *Panoram* for more information.

Correction from the winning stereo slides list for November: The title of Barrie Bieler's Group A second place finishing slide is *Reflective*. Sorry Barrie.

Winning Stereo Slides of 2000

Oakland Camera Club Stereo Slide of the Year:

Good Morning California

by Oleg Vorobyoff

Top five Stereo slides:

Group A

Death in the Short Grass

by John Bonwell

Pavement Ends

Traffic at the Golden Gate

A Canadian Highway

Sun Struck Maples

by Oleg Vorobyoff

Group B

StarChild 2: Saturn Rising

Tri-Twist

Florida Roots

Glass on Blue Silk

by Harold Baize

Nothing But the Kitchen Sink

by Ivy Feibelman

News!

The *Panoram* is now available on-line! Recent copies of the *Panoram* are posted to the Oakland Camera Club web site in PDF format. You just need the *Adobe Acrobat*® reader to view the files. Now you can read and print it from any Internet linked computer in the world! Wow.

OUR WEB ADDRESS

www.3dculture.com/occ

CLUB E-MAIL:

occ@3dculture.com

Meetings:

Oakland Camera Club Stereo Division meets on the first Tuesday of every month except December.

Our meetings are held at the Salem Lutheran Home, 2361 East 29th Street, Oakland California, at 7:30 pm. The Salem Lutheran Home has installed a security gate. Don't be alarmed. Just press 001 on the number pad and tell them you are with the Oakland Camera Club. There is ample parking available in a lot below the main building, take the first right turn after you enter the gate.