## **Christian Berger and Cine Reflect Lighting System**



From top: 1. Christian Berger, AAC with CRLS PANIBEAM. 2. Finding a low angle shot with Leica Summilux-C 18 mm. 3. Gaffer Jacob Ballinger on *Ludwig II.* 4. CRLS system of light, mirrors and controls.





## By Annette Zoeh

Christian Berger, AAC began working in 1968 for the Austrian broadcaster ORF. His many feature film credits include *The White Ribbon*, for which he was awarded Best Cinematography in 2009 by the Los Angeles Film Critics, New York Film Critics and in 2010 by the American Society of Cinematographers.

Christian owns TTV Film Production Vienna and is a university professor in cinematography, art and visual expression at the Vienna Film Academy. In addition to shooting, Christian has devoted a lot of time and effort designing his own lighting system, the Cine Reflect Lighting System (CRLS)—which he has used on many productions, including *The White Ribbon*. The CRLS system was presented the Innovation Award 2010 by the City of Vienna.

Recently, Christian used his Cine Reflect Lighting System to illuminate Bavaria Film's biggest film project since *Das Boot*—the production of *Ludwig II*, directed by Peter Sehr and Marie Noelle. Art Director Christoph Kanter converted Hall 12 of Bavaria Film Studios into the famous Munich Residence, Wagnerian sets and Berg Castle interiors.

Christian shot *Ludwig II* with ARRI Alexa in ARRIRAW using Leica Summilux C Primes. He commented, "Alexa was intuitive to work with, and it truly had at least a 13 T-stop dynamic range. The new Leica lenses delivered clear, pristine images with a beautiful transparency."

Leica Summilux-C 35 and 75 mm primes were used the most, along with an Angénieux Optimo 24-290 mm zoom for long lens shots. *Ludwig II* was composed in 2.39:1 and 1:78:1 formats simultaneously. Camera gear was supplied by ARRI Rental. CRLS lighting equipment was supplied by PANI, Vienna, with Jacob Ballinger as Gaffer. The film is scheduled for a December 2012 release in Germany.

Christian describes his Cine Reflect Lighting System - CRLS:

"My main intention was to invent a luminaire that would create beautiful light that would, at the same time, reduce stress on Actors, Directors and, of course, Cinematographers, while at the same time offer great flexibility," Christian explained. "For example, with a 10K blazing in a love scene, how can an actor, sweating like hell and amidst a forest of flags, whisper the words 'I love you?"

The CRLS source produces a parallel beam off the set and it is redirected via special reflectors wherever you want to have your light. It consists of three main components:

1. PANIBEAM 1200 parallel spotlight with a very high output which comes from a 1.2 kw HMI bulb.

2. PANIFLECTORS. Seven different reflector types, bounce the light from the PANIBEAM, defining the quality of light from hard to soft and the light distribution into vertical or horizontal shapes - ellipses, circles, beams or arcs, eliminating most additional use of flags or scrims. The largest reflector size is  $1 \times 1 m$ , the smallest  $10 \times 20 \text{ cm}$ . The desired intensity of light is controlled by the size of the various reflectors. The quality of the light is achieved by use of the reflectors with precisely defined shadows.

3. PANIGRIP ensures increased compatibility with standard grip equipment.

The complete system is available for worldwide and US sales and

rental. It is sold exclusively by Pani Projection and Lighting in Vienna. Most US crews are familiar with PANI HMI follow spots.

The idea of the CRLS is to avoid diminishing the light by "obstacles" (cutters, flags, scrims) and to replace these tools by special reflectors that can dramatically influence dramatically the shape and structure of the light that reaches a scene. For best efficiency, it is crucial to use the special reflectors with parallel light beams. (In other words, they won't work as well with ordinary Fresnels or PARs.) The reflectors use specially calculated laminations and diverse coatings.

On Ludwig II, the Herrenchiemsee castle night scene during a firework display used just two 1200 W PANIBEAMs. Production Manager Ralf Zimmermann commented that on the four months of shooting in many different locations, the CRLS significantly reduced set-up time on Ludwig II.

When Christian is not shooting or inventing, he is teaching. Once a year, he takes his students on an Adriatic cruise to explore and learn about the meaning of light and darkness. He conducts seminars on Johann Wolfgang v. Goethe's theory of color and how people perceive them. Christian is a skillful, sensitive cinematographer with charisma, creative ideas and a very interesting system of lighting.

More info: www.christianberger.at and www.pani.com



Clockwise from top: 1. Ludwig II interior, lit with CRLS. 2. Sunlight on a cloudy day in king's carriage. 3. Interior church scene on *The White Ribbon*. 4. CRLS units outside church, lighting through windows, on *The White Ribbon*. 5. Steadicam Operator Robert Stopfer in the mirror hall of Herrenchiemsee castle. *Ludwig II* stills © Bavaria Pictures, Stefan Falk.







