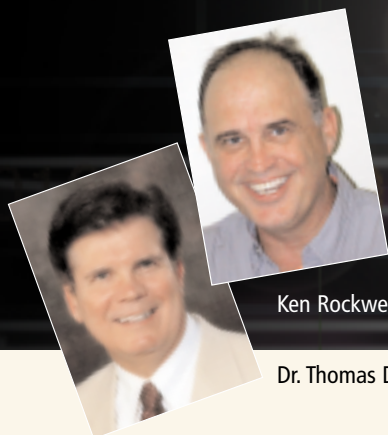


Quality Digital Photography

for under **\$1000**



Ken Rockwell B.S., M.S., M.F.A.

Dr. Thomas DeLopez, DDS

MAGAZINES, TELEVISION AND MOVIES CONSTANTLY PROJECT AN image of a perfect smile to the American public. People demand it and we are making it. In response to these demands, materials and techniques are evolving and the potential for the laboratory to provide a superior restoration for every patient is a reality. New materials like IPS d.SIGN®, with chameleon-like traits, give the dental technician quick and predictable results.

One gap in this process that leaves the technician with insufficient information is the fact that the patient is not always available for the completion of the aesthetics. To close that gap, quality digital photography will give the technician the opportunity to examine the total architecture of each tooth. Color and value are left to the skill of a trained eye. In addition, to make the restorations appear natural, matching teeth also requires attention to the silhouette, texture, luster and subtle characterizations.

The greatest gain from the use of digital photography in a dental set-

ting is the ability to connect the inanimate dental model to the patient's face. The fully functional articulator gives us the geometry and the digital camera gives us the character of the individual person. The right –biometrics, in combination with the study of the natural imperfections, will give us a restoration that matches not only the teeth but matches the individual.

Following is how a Tallahassee, Florida dentist, Dr. Thomas DeLopez, provides his laboratory, Rockwell Laboratories, with this critical information. For under a \$1,000, instant 35mm quality 5"x7" digital photographs are now available. This will graphically enhance the communication between the dentist and the laboratory. The Nikon Cool-Pix 990 (under \$700), with its optical zoom lens, allows the dentist to make close-ups that show tooth positions,

gingival contour, tooth texture and color variations as compared to the shade guides. These prints take just minutes to produce and are an invaluable aid to the lab tech with any anterior restorations. The images are loaded into a computer with a San Disk image mate compact flash external drive

(\$25) and then printed with a Hewlett Packard 952C ink jet printer (\$149) on HP glossy, premium photo paper. The HP Photo Smart Photo Printing software program, which comes free

with the printer, is simple to use and allows for exposure and color alterations as well as cropping, page setup and labeling. This program is much quicker and easier to use than the leading photographic editing software programs. This author usually provides the lab with two 5"x7" photos on a single sheet of 8.5"x11" glossy photo paper with every anterior case.



TECH TIPS

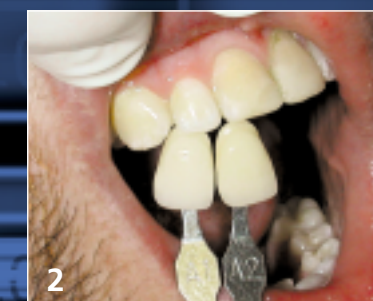
- The 990 is a viewfinder camera so you must use the LED display for close-ups.
- Camera Settings: For close-ups, select manual with a shutter speed of 125/sec and the smallest aperture possible usually about f9; Select: macro, fine quality, flash on and red-eye mode off. For full face shots select the auto setting.
- A 10 x 160mb flash card greatly speeds up the image capturing process (\$150).
- Photo-grade rechargeable batteries are advised.
- The HP 952 is a low-end printer and reproduces images best on HP brand glossy paper.
- This author has great success in using the images captured with this camera on a computer monitor in his patient consultations for cosmetic cases.

CASE STUDY

Greg is a 19-year old college student who was referred to the dental office by a pediatric dentist. Due to trauma, #8 and #9 are aesthetically compromised. Since #9 experienced ankylosis, it was decided that d.SIGN® porcelain fused to a high gold content alloy would provide the most ideal restoration. Through the use of the expanded porcelain kit and constant reference to the digital photographs, the technician was able to characterize the restorative work to match the patient.



Greg before restoration.



This picture helps in verifying chroma, hue and value decisions. In addition, subtle color inclusions are apparent.



In this picture we are dealing with tissue and incisal edge aberrations.



Restorations placed with lips retracted.



Greg's new smile!