I recognized my destination on Magnolia Boulevard from a distance, thanks to the bold “Pro8mm” color logo above the entrance. Philip Vigeant, the boss, stood smiling at the door as I parked. I knew Pro8mm only from hearing stories from a producer friend who used the services of a company called Super8Sound many years ago. I inquired whether it was still the same company.

Super8Sound
Phil explained the origins of the company as soon as I arrived: “Super8Sound was started in 1971. It was the first company to have a sound system that interlocked audio with picture in Super 8. As video editing came in, the need for sound technology went away. So we converted a lot of our stuff, including our perforators and slitter into something that could make film, so we could expand the diversity of film, rather than deal with sound.”

This major shift took place in 1989, and the company changed its name to Pro8mm. Phil outlines the modern company’s scope: “We basically provide all the services that someone using film would need to shoot on film and then edit on digital. We make 17 different...
kinds of Super 8 film stock and we provide the processing for those film stocks. We also provide cameras to rent, cameras to buy, and we provide service. We offer a scanning service to scan those pictures onto video or to digital. So we can scan to DigiBeta for high production value stuff or down to MiniDV, DVD or hard drive copies.”

For my Arte TV segment, I planned some Super 8 sequences. Before flying to Burbank, I filmed some Super 8 along the California coast to compare the “Old school” look of Ektachrome 64T reversal film against the “New School” look of a modern negative film later in the television show. I will accompany my film through all of the processing steps at Pro8mm.

I shot the same scenes with two identical Canon 1014 XL-S cameras loaded with different types of film. A friend built me a special bracket by milling and boring thread and adjustment holes into an aluminum disk to construct a dual tripod mount for both cameras. The frames should easily overlap to capture very similar images. I used “Pro 8mm Super 8/80” (Ektachrome 64T) in the left-hand camera, and loaded “Pro8/18 ETERNA 500T” into the one on the right. I also picked up ND 0.6 and ND 0.9 neutral density accessory filters, which I used as required to correct the exposure.

To fulfill the artistic aspect of my work, I sought out the last true hippies along the coast north of San Francisco as my filming subjects. I had to swear never to betray the name of the location and was finally able to convince them to let me shoot silent film. So far, so good. I admit that setting the ASA number against the exposure meter did not work so well. The fact that I am a confessed Super 8 fan with a small collection of old Revue and Piccolo films does not necessarily make me an expert at dealing with Celluloid – I am a child of the video generation!

But it is too late now. Here at Pro8mm, after Telecine and color correction, I will see whether my film comparison failed on account of my inexperience. Maybe the negative film is incorrectly exposed? That would reveal how much incorrect exposure negative stock can withstand with professional post-processing. In any case, I took full advantage of the services offered by my Californian hosts.

The processing day
I excitedly began the processing day with Pro8mm: Phil leads me on a tour of his company while my film swims through the chemical baths in the darkroom: “Obviously, you can’t have Super 8 filmmaking without a camera. A camera is the beginning of the process. So at Pro8mm we have a complete service center where we’ve been repairing and rebuilding the Beaulieu cameras for 25 years. Now we offer a restoration of those cameras, so we completely strip them apart and rebuild them and then we add modifications to them that work in the modern world. So, if you want to have a camera that could shoot synchronized sound, you can get a crystal sync module put in your Beaulieu and you would be able to shoot interlocked audio with picture.”

While looking at the camera, one senses that there is more hiding within the device. Phil explains further: “We made some permanent modifications to the original system, things that weren’t that reliable in the original camera. The grip assembly is gone. The optical system is modified; there is no 85 filter built into the camera, which changes

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the collimation of the lens slightly. So the lens and the body have to be recollimated, making it a standard C-Mount collimation that can be used with any C-Mount lens. There is a different power design: The original Beaulieu had a battery that fit into the body, and we added a power supply jack at the rear. The old batteries that were built into the camera often corroded and all that rust and junk would fall down into the camera and destroy some of the circuitry. This makes it more environmentally solid.”

**Canon versus Beaulieu**

Of course, at this point I ask myself why I shot my hippie footage on the old Canons borrowed from a friend in Germany. Maybe it was because I worked without sound? Next time, it can be done with a Beaulieu. I would have been quite wrong if I had guessed how many components make up a Beaulieu 4008 ZM. There are approximately 1,800 little screws, rods, springs and other components assembled to create the cult camera. I asked Phil where they acquire the cameras. What condition must they be in to become new “Classic Pros?”

“We buy them used from customers and they’re in various states: some have corroded out quite a bit, but there’re all mechanical parts from steel, glass and very light circuitry. So everything in here will last basically forever as long as someone maintains it. The biggest problem with most of these is that the lubrication has dried out. So we have to take the whole thing apart and clean off all the old dried gunk and rebuild the thing, just as if you’re in the factory 35 years ago, assembling it for the first time. At some point it’s just too expensive to make certain parts that don’t exist anymore, so those cameras then become scrap.”

A Pro8mm overhaul involves removing components that are unimportant to today’s professional filming approach, while supplementing the device with practical new features: “The modern camera is much more about professional work and reliability rather than some of the consumer convenience features. There is a built-in 85 filter in this camera, which cuts down some of the resolution. In those days it was convenient, but today we don’t care as much about convenience, because it’s about professionalism. If you get rid of it and use add-on-filters, you get much better quality.”

**Max-8: Super 8 in 16:9**

However, Pro8mm has not changed a lot of the design, because “It was pretty perfect when it was designed almost 37 years ago. It’s been updated. They’ve gone through four or five different improvements internally in the circuitry, in the speeds and we’ve kept that lineage going. We have what we call Max-8, which is a wider gate modification, so that you can film in Super 8 in 16:9. To go with the wider gate, you need a viewfinder that shows you where 16:9 framing is as opposed to 4:3 framing. So we’re progressing this base technology into the future so that it will be more compatible with what people are using today.”

But the body of the camera, nevertheless, appears a bit different from the original, as Phil explains: “We obviously want to identify the camera as something new. A camera a technician spent 20 hours rebuilding is much different than one that has been sitting on someone’s shelf for 35 years. And, unfortunately for people buying cameras used, they may have been in their nice box for 30 years, but they are now 30 years old. They are not going to work the way they should, because they have been sitting dormant for too long. So we put on new labeling.”

I could stay in the camera department the whole day, but I hear that my hippie film will soon leave the darkroom and I can find it in the laboratory fixer bath. My stomach tenses a little, because the moment of truth about its exposure comes closer and I am getting increasingly nervous. We are already on the way to the laboratory when Phil suggests an excursion into the film preparation area.
My timing is good, because today they are not working behind the black revolving door and we can turn on the light. Film scraps, 35 mm and 8 mm reels, knives, scalpels and other tools lie everywhere between large slitting machines and modified Super 8 packaging machines. It is absolute chaos in the windowless room. I am surprised that the light switches are taped. Phil explains that his employee Simon, who cuts and perforates the 35 mm film, is blind. The light switches are taped as a precaution. I am astonished.

Color negative, color reversal, Blak & White reversal

“We have three different kinds of film stocks: color negative, color reversal E6 like Ektachrome and Black and White reversal. Negative has become the most popular Super 8 stock because of its flexibility. In 1992, we started loading color negative stocks in Super 8, so people could use the variety of stocks that were used in 16 mm and 35 mm in their Super 8 camera. In the United States, that’s become the predominant film stock, because it mimics the way professionals use film.

Basically, we have all the 35 mm major motion picture film stocks available in Super 8, so if you want to shoot the latest Kodak film like 35 mm 5201, you can shoot it as Pro8/01 and put billions of dollars worth of Kodak technology into your little Super 8 camera. Fuji also makes fantastic film stocks and they are constantly coming up with new things.”

Somebody shouts from the laboratory that it is time for Phil and I to come in. I sprint, reluctant to miss my strip of film. As I arrive, a timer rings and whoever shouted disappears behind a black revolving door in the corner of the room. There is an unpleasant chemical stink, it is hot and the machines make a dreadful noise. “This is the ECN color negative processor, a continuous feed color negative processing machine. There is a machine almost this big on the other side of this wall, where the film is fed in, goes through the developer, through the stop and then after the stop, it can come into the light. Through the entire process, all the chemistry is being replenished from upstairs.”

Marcus, the Assistant Lab Manager, returns as quickly as he left. A splicer, gloves, bottles of liquids, droppers and little brushes sit on his workbench. He works quickly, always with the same rhythm: He first places a reel on the left, and then he threads the film on the right, cuts and splices. Completely relaxed, he answers my questions. “I’m just breaking down the film, it’s 24 rolls on one reel when it goes through the machine, so when it comes out of the machine, we break it down, separately, depending on how many rolls people have. A lot of these aren’t even being prepped to be transferred to video. That’s why we just put a foot of leader. So now there is one that is being prepped for transfer to video, so we don’t use the glue. Your Ektachrome film looks perfect.” I relax a bit and ask Marcus once again why he does not use wet splices. “When it goes through the Rank transfer, the tape works a lot better. The glue is liable to break and if it breaks you have to run the whole thing over again.” We certainly don’t want that.

Classic Pro Max 8

I continue to watch him for a while, thinking about the modern luxury Beaulieu, the “Classic Pro Max 8.” Phil tears me from my thoughts to say goodbye. Later, I will watch over the shoulder of Kevin, the “colorist,” in the Telecine suite. I take the opportunity to quickly ask the boss how much a “Classic Pro Max 8” costs. He tells me $3,495, and I quickly convert that into Euro (approximately €2,500) and tell him that I will probably have to save a little more. He laughs, and I remember that earlier in the afternoon we discussed the US Super 8 market and its chances of survival: “It is growing in the professional sector, because you see it used in more applications. There are constantly new things coming out. Music videos used to be huge; we used to do hundreds of them. They were play-
ing on MTV and VH-1, but the market in MTV has gone down. Now, the Internet has opened up a new music video world where you can put up a music video on the Internet. Well, the Internet is even more interesting for small format, because it’s small. And the smaller the television display, the better looking the Super 8 is or the more Super 8 looks like 16 mm. Super 8 is going to play a big role in that market because it has the film aesthetic, but it has the low cost needed for the Internet.”

His train of thought makes sense to me. I am curious to see whether he is right and whether we will see more of this little film format produced in Europe to highlight the real look of film on an Internet dominated by video.

In the Telecine suite
My reels are ready and Kevin is waiting for me in the Telecine suite. The Da Vinci color corrector will show whether the hippies can be seen in their full splendor on the reversal and negative films, and how much color, contrast and brightness are visible. “The Da Vinci allows you to isolate certain colors and amplify or de-amplify those particular colors to a certain degree.” We begin with the positive hippies: “This is Ektachrome film, which is reversal and it tends to have a blue-green tint to it. I’ll try to take that out to make it look normal.”

Unfortunately, it seems that Kevin can hardly save anything. The film is overexposed, and I can clearly see my fingers through the naked film in my hand. The joint smoked by the surfer is too bright; his blond hair looks like a halo. One can barely make out the details. Kevin comforts me: “With reversal film, the effect is much more dramatic than with negative film. The reversal doesn’t have very much latitude for exposure and that means that I really can’t do as much adjusting as I can with negative.”

Kevin makes a promising remark, “When we get to your negative film, I’ll be able to show you. The negative should look much better.” I fidget nervously to and fro behind my video camera, observing every change in his facial expression through the viewfinder and trying to see whether he has already adjusted the Da Vinci’s controls to the right spot. And then suddenly I see a happy flower on the Class 1 monitor, followed by a suntanned hippie with beaming white teeth and blond hair, wrapped in dense gray smoke. I know that everything has worked out. There is so much detail in the negative film that I find it hard to believe at first.

So – even though the test shoot was not a complete success – it was eye opening to see what could be achieved with modern negative film and a humble Super 8 camera. It was also reassuring to explore the broad range of services offered by Pro8mm – from Super 8 camera sales and service to Super 8 film manufacturing, processing and Telecine.

Aaton Xtera

Select a camera x or y, provided it records pictures on indestructible film grains, seeds for your filmmaker’s future