

ROUGH CUT

by Robert Rouveroy C.S.C.

On the bottom of this page you'll see a blurb about me as the "gimmick man". It is rather an undignified description of a subject dear to me. That is, that no piece of equipment has yet reached the market that some improvements or refinements can't be made upon. Of course, every cameraman is absolutely convinced that he could design the ultimate camera if someone would just hand him a million bucks and some spare time.

As no one has as yet had the foresight to supply me with that much dough, I've been reduced to making small improvements, here and there. Some of them have been foolish, I admit, but I'm not alone in this. Story goes that eight cameramen had a hand in designing the Bolex-Pro, each of them contributing their pet ideas. In many ways this was the best camera on the market: it did exactly what these eight cameramen wanted it to do. Pity, though, that you'd have to built

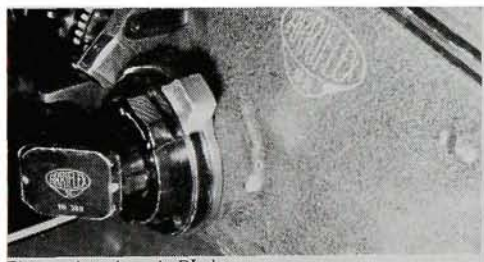


Fig. 1, microphone in BL door

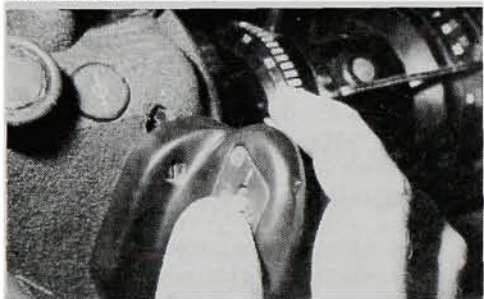


Fig. 2, zoom switch on handle

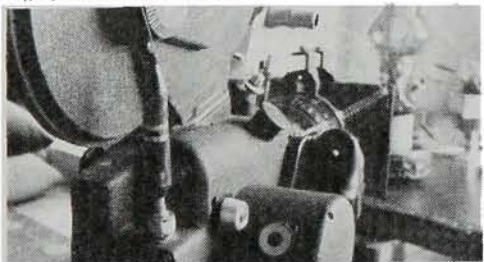


Fig. 3, antenna on BL

Toronto's "gimmick man", Robert Rouveroy C.S.C., is president of Robert Rouveroy Films Ltd. and shares ownership in Cinimage.

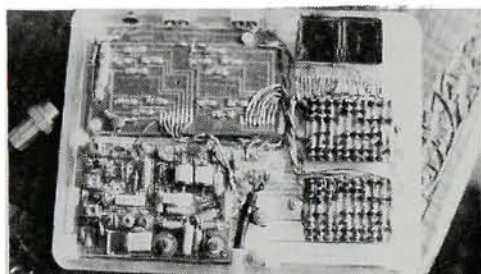


Fig. 4, crystal controlled receiver with 2-tone decoder; diode matrix for 10-position 7-segment encoder



Fig. 5, high-intensity slate light on headphone

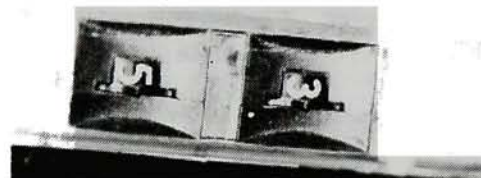


Fig. 6, thumbwheel numbers on slateboard

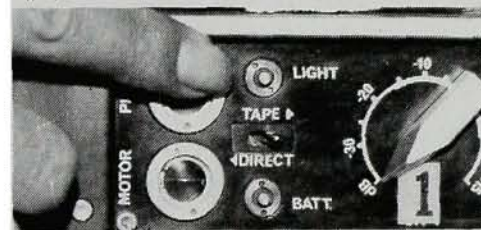


Fig. 7, modified Stellavox slate tone switch

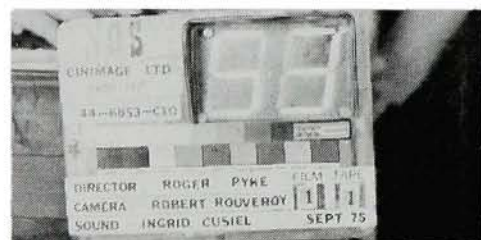


Fig. 8, sync slate in operation (color bar and gray scale added to aid printer)

like a cross between Muhammad Ali and a Sherman tank to carry it around.

Back in 1971 I had the fortune to team up with a remarkable soundperson. We were both under contract to a large TV network at that time, and have worked together ever since. The big problem at that time was the sync-up of film and sound takes, coming in from all over the world to the poor film editor. Sure, the clapboard has been with us since time immemorial, but as filmcrews became

smaller and smaller, who was going to clap that board? So, soundpeople started to devise alternatives that are still with us, like a small lightbulb and beep, accompanied by numbers hastily scrawled on with a felt pen, or small daily calendars ripped off for the numbers.

It still didn't help much. Editors were still getting 80,000 feet of film and transferred tape with hardly any identification. It got so bad that sync-up experts made a good living doing nothing else but just that. If there was a serious time pressure it often happened that extra bodies were called in to sync-up through the night at inflated rates. It still happens that way.

And here is where the "gimmick man" comes in. But in this case it was a woman who got the ideas. My sound technician had brought from Europe a digital clock with just the right innards. True, earlier versions of mechanical read-outs had been constructed by me, but they were rather cumbersome and heavy. So, one day she dashed off a very clever schematic to make the clock operate sequentially, and together we constructed the prototype. It worked fine, so we added a few refinements.

First, a microphone was installed in the Arriflex BL, right beside the viewfinder (fig. 1). A small transmitter with two-tone encoder inside the BL was activated by the (unused) zoom switch in the BL handle and the signal was radiated by an antenna on the back, just behind the footage counter.

The signal is received and decoded by a receiver in the slateboard (fig. 4). The zoom switch has two positions: switch-up and I can ask my soundperson to please take that shotgun out of my shot or, switch-down, it activates the read-out and beep on the (hopefully) switched-on tape. Two rapid flicks light up a small bulb in the headset (fig. 5) which is very, very handy in a crowd.

This procedure is only followed in situations of very high tension, where the soundman and cameraman may be separated. You see, simultaneously the BL gate light fogs a few frames.

Normally, she operates the numbering herself (fig. 6) and presses the

light switch (fig. 7) that operates the board (fig. 8). Now on top of the slateboard there are two switches. The first one will make all lights on the board inoperative. This is very handy when we don't want anyone to know we are recording and shooting. Sync is established through the zoom switch and film-fogger. I can just let the camera run in the general direction, while she tucks the Sennheiser 815 under her arm, also pointed in the general direction — we've got some pretty exclusive stuff that way.

You see, sometimes "gimmicks" can be very helpful. We've at least found that we're much beloved by the film editor. We have not lost a shot yet (knock on wood), and most directors now know they can dispense with the shouted order of "Roll camera, roll sound, mark it, action." We're already underway when he gives us the nod.

As I said before, all these ideas came from my soundlady, and together we built the contraption. It worked fine for a very long time. So one day,

when I came back from a commercial shoot, I found a second switch installed on top of the slateboard. Now I knew we had figured out all the parameters and what we wanted it to do, so I hesitated to ask her what other fantastic thing it was supposed to do. I didn't exactly want to appear dumb. Well, finally I couldn't stand it any longer and asked her point-blank what the damn switch was for.

"That's rather obvious," she said sweetly. "It's just so I can switch you off!" □

From the Mail Box

The following letter was addressed to Robert Rouveroy, author of "Rough Cut":

In *Cinema Canada* No. 27, you mentioned that Sennheiser 815 microphones could be rented for \$15 a day.

I would like to rent one for the purpose of recording a group of musicians on tape. Would this type of mike be suitable for acoustic and amplified instruments as well as for voice? I would also like your advice on where I can rent this microphone.

I look forward to hearing from you.

Krisztina Taylor

And Rouveroy replies:

Dear Ms Taylor,

Thank you for your inquiry regarding the Sennheiser 815. As you know, I'm a film cameraman and therefore my knowledge regarding microphone use is definitely not the last word. However, I called around to top-notch soundmen for advice and they seem to concur with my views.

There are no hard and fast rules on what mike is best for what purpose. It depends on the material being recorded. You did not explain the type of music, be it rock or pop or classical. I surmise you're talking about a rock group, as you mentioned amplified instruments. Then again, where are you recording it? Inside or outside? What are the acoustics? How large is the group? What kind of instruments do they play? Are they a very "loud" group, or moderate?

Professional recording in a studio decrees multi-track tape, and therefore multiple microphones, carefully set up so as not to interfere with each other through the use of discriminatory electronic networks and physical baffles. Amplified instruments are directly fed into their own tracks. Sometimes only small groups of musicians record their separate tracks. During playback, other groups or single instruments

record their own tracks. During the final mix, the multitracks are blended to form the whole, usually in stereo. Vocalists especially are recorded separately, as their voices tend to blend into the general din. Very often at a rock concert the music you hear comes from a tape, with the whole group "faking" lip-sync, because, frankly, none of the groups, including the Beatles, are that good at a live concert. Diana Ross, for instance, almost never sings on stage if she can help it. She just mouths it. Please refer to a *Newsweek* article, June 28 issue.

The 815 is a very sensitive condenser microphone. It is a "shotgun" type mike. This means that it will accept sound in a fairly narrow beam from the front of the microphone. However, sound becomes more and more directional at a higher pitch. You'll find that the 815 is very directional at frequencies above 1000 cycles. Lower than that, especially below 400 cycles, the 815 is not directional at all. So therefore it depends very much on how far you'll be from the musicians, and if they are inside or outside. If the group is very loud, there is a tendency for the microphone to "collapse". As no headphone can keep out direct sound during recording, it is very hard to ascertain if this happens.

So, if the group plays inside, with relatively low-resonance walls, and if you are yourself not with a group of screaming people, your best bet is any good omni-directional microphone, such as the Sennheiser 105 or any of the good AKGs. You'll have to be relatively close to the group. Your best position would be equally distant from all instruments, but favoring the less loud section. In a really "dead" studio, it might be of advantage to point the mike towards the most reflecting wall, rather than the group. However, during a film mix, it is possible to add artificial "ambience" or a bit of echo. Many soundmen prefer this route, because it gives them more "control" if they have to do with only one mike.

The Sennheiser 415 is something like a half-"shotgun". It might be your best microphone all around for music recording as its beam acceptance is fairly broad. It

sounds "richer" in most music recording applications. If you make several tests before you do the actual recording, you may find you'll get a sound that you can live with. The best position is probably twice as far from the group as with the 105, depending on the size of the group. Again, try to favor the weakest sound.

The 815 is probably best in a very live surrounding, such as the Maple Leaf Gardens. The distance should be about four times the width of the band on stage. This ensures that you won't miss the instruments on the side. However, the 815 is also much better in a outdoor setting, such as Ontario Place. Here your distance should be about 6 times the width of the group. Ambience and echo can be added later. Be sure to point the mike away from very loud instruments to prevent "collapse". By the way, be sure to look at the tape-recorder and switch the recording to "music". Never attempt to use the equalizers on a Nagra. Do your recording as "flat" as possible. During transfer or mix you may equalize and enhance as much as you wish, but you can't put in what you did not get in the first place. As a matter of fact, never equalize anyway during the original recording, be it music or speech.

Sorry the answer could not be short. Recording is a highly exacting science involving a lot of artistry. If your soundtrack is used in an expensive production it might be advisable to engage the best soundman you can afford. You usually get what you pay for.

Rental microphones are seldom in top-notch shape. Most sound technicians own their gear and would never consider lending or renting them out. All condenser microphones are quite fragile and expensive. The AKG D900E is more sturdy as a shotgun and might be better to rent. All rental houses in Toronto have an assortment of mikes. I'm sorry I cannot recommend one above the other.

Thank you again for your interest in "Rough Cut". I hope I've been of service to you.

Robert Rouveroy