

Try to find a quiet place when someone is talking to the camera - unless you are commenting live action.

The VTR's we are using have automatic level, and every little noise where you are with the mike gets sucked in and recorded on a certain level, so use the mike close to your mouth, but don't hide your mouth behind the mike - hold it just underneath your chin.

#### CAMERA & LIGHT

Colours are measured in Kelvin. Heaven (extreme blue) has got up to 26,000 °K. Lamps under 100 watt has got an estimated 2,800 °K.

The eye doesn't see this difference as clearly as the camera. The camera we are using is adjusted for artificial lighting at an estimated 3,200 °K, while the sunlight has an estimated 5,500 °K. So whenever we take the camera outside, we need to make the daylight (which the camera sees as blue) a little more red or lower in Kelvin, and for this, we put on an orange filter in front of the lens. Some cameras have built in filters and you adjust them equally.

When we are filming with lamps, take off the orange filter, as the camera is adjusted for lamps which hold a light temperature of an estimated 3,200 °K, or switch the camera to artificial light.

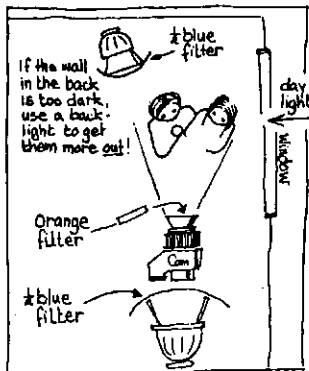
#### BLUE FILTERS FOR THE LAMPS IN DAYLIGHT.

Filters are made by "Lee" or "Rosco". (Flame resistant can take more heat.) Blue filters are graded; full blue, 1/2 blue and 1/4 blue.

For "filming" for example in a room with daylight, and you use the daylight as your main light, you'll possibly need one lamp to lighten up the dark areas, to make the contrast between high light and low light less.

Use the orange filter on the camera as you would when "filming" outside, and on the lamp you put a sheet of 1/2 blue in front of it.

For the camera we use it seems like full blue is too blue. On the shot of Pina Spencer in front of the window inside her camera in "My Day Begins and Ends with Kider", I use full blue on the lamp (800 W.). The



lamp was about 1 meter's distance from her, the lamp has to be that close in order to balance out the light on her face compared to the light in the window behind her. Her face was a little too blue, 1/2 blue on the lamp would have made it, and then the lamp wouldn't have had to be so close to her face, as 1/2 blue lets more light through. 1/2 blue makes the colours a little more red, but not too distracting.

The filter should be an estimated 30 cm away from the bulb - too close makes it melt or turn brown in the hot spot. Also do not use two filters together as they will melt and stick together.

You probably will not be able to buy these filters in a photo shop, ask for the importer, or go to a film or TV studio (or a theater), as they always have some pieces of filter laying around.

#### SOFT FILTERS ON THE LAMPS

Filter we use: Lee "Heavy Frost"

(Peter: "I was wondering if it would help to hang tracing paper 3 feet in front of the lights so that the light is diffused through the tracing paper") "Maybe so, I don't know. That is probably why they use those special panels on TV lights, a great big translucent thing in front of the lights." (Mugshots, 979:41)

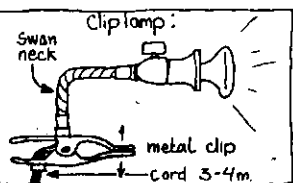
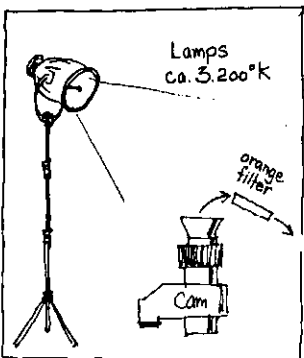
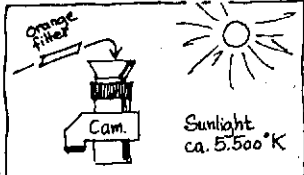
In the early days of TV we used (Kalkr Paper, the same kind architects use) tracing paper, but watch out, it can easily catch fire if it gets too hot, as it did for me once when we were filming old viking gold and silver brooches in a museum, the museum is still there! (see "Light-setting").

#### LAMPS

The lamps we use are "laniro" from Italy, called "Red heads" in England. The lampstands from "laniro" go up to an estimated height of 2.5 meters.

These lamps we also used in TV, each lightman had 4 of these lamps and when out travelling, we could do a lot with them. (It is also possible to get a 30 volt - 250 watt bulb for this lamp and connect it to a 30 volt battery).

In the early days of TV in Norway we didn't have much money for buying



equipment, so we made lamps ourselves, called a "cliplamp", like this:

You can get lamps with mirrors from 60 to 500 watts with an E27 socket. 250w - 500w lamps with mirror are made for photography and have a colour temperature of 3,000 °K - 3,200 °K. The smaller lamps have a lower colour temperature, but are useable. An interview done with two 100w lamps where the fuses are small could do it, - "take it or leave it".

#### LIGHT SETTING

The old painters used to have their light in their atelier coming from the north, which gave them the same soft light all throughout the day, (even the first photo ateliers were like this) without any sunrays, just the soft reflected light from a cloudy sky, or the soft bluish light from a blue sky.

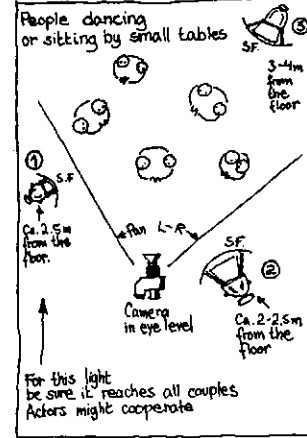
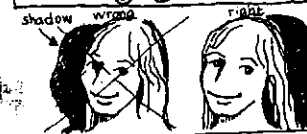
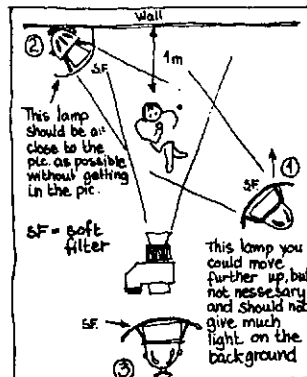
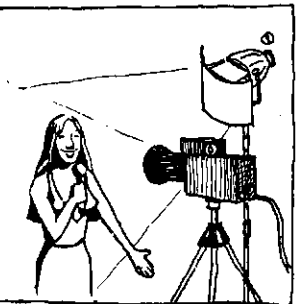
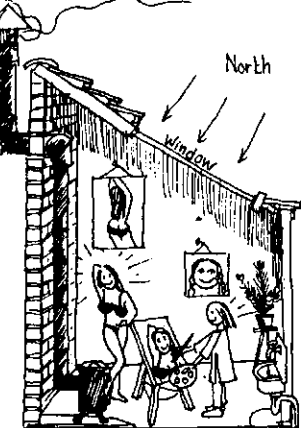
The soft light is also best for colours - less contrast gives the best colours (with the correct exposure).

1) Let's take the simplest form of light setting, with one person in the picture and with one lamp. The easiest is to put the lamp on top of the camera, but if you have a lamp stand it is better to set it beside it and a little higher than the camera (ab. 1 meter) so you can get a little more contrast on the face.

One of the older film camera men always wanted a "dip" under the nose, that's the shadow from the nose. When you use "frost" filter on the lamp it will give a smoother line between the lighted area and the shade.

2) If you have 2 lamps, you can set them up like this: Lamp No1. as it is, and lamp No2. you set up behind the person as shown on the drawing, don't let this lamp be stronger than your front light, rather weaker. This lamp is for lighting up the hair and the shoulders, so the person gets out from the background and it gives more depth in the picture. The background should be slightly darker than the face. Don't let any light rays from this back light hit the glass in the lens, it will make your picture dull.

3) 3 lamps: Watch your watts! Are your volts 230 and you have 10 ampere fuses, your fuses can hold: 30 volts x 10 ampere = 2300 Watts, or 110v x 15a = 1650 W. If you go the other way and you want to use 3 lamps of 800 W: 3 x 800 = 2.400 W, - 2.400/230=10.4 amp.



So using 3 lamps on one 10 amp. line, if nothing else is hooked up, may last for 1/2 hour or so, but to be sure you don't blow your fuses, connect 2 lamps to one set of fuses, and the third lamp together with your VTR and camera on a second fuse line.

So if we have the same setting as before (see no. 2) and add a third lamp, to it, place it behind the camera, and just high enough above it so that you don't see the person's shadow on the wall behind him. This will lighten the shade in the face and give brighter eyes. Now you can move lamp No1 a little more to the side of the person in the picture, if you wish to paint a little more contrast in the face.

As you can see from the illustration the person is sitting about 1 meter away from the back wall, so No2/3r doesn't give any shadow on the wall. If he/she casts a shadow, make sure that the shadow is behind the back of his/her head and not behind his/her profile. Place the person at a slight angle to the camera, and place Lamp No1 at the same angle. If you prefer the person to sit angled the other way, Lamps No1 and No2 have to be moved accordingly.

#### LIGHTING A GROUP OF PEOPLE

When shooting shots like this, and the camera is on eye level and you are zoomed out to wide angle, you'll get long skinny legs, the wide angle shows a picture out of proportion, so don't dwell on wide angle too long, but as soon as you have established the situation, zoom softly into "2 shots" (two people) and keep the zoom in and only change the focus as you pan slowly to the different couples.

Lamp No1 should not be so close that it burns out the people closest by, and gives too little light to those furthest away, if you concentrate the lightbeam and pull the light back, it will give more equal light to the whole group. Lamp 2 should be the main light you expose your picture with, the couple in the back gets less light from this lamp but more from No1. Lamp No3 is effect light to "draw" or lighten out the actors from the background. It must be high enough from the floor so that you don't get the lamp in the lens when panning around.

When "filming" people with glasses, use soft light from the side, as the lights don't reflect on the glasses.