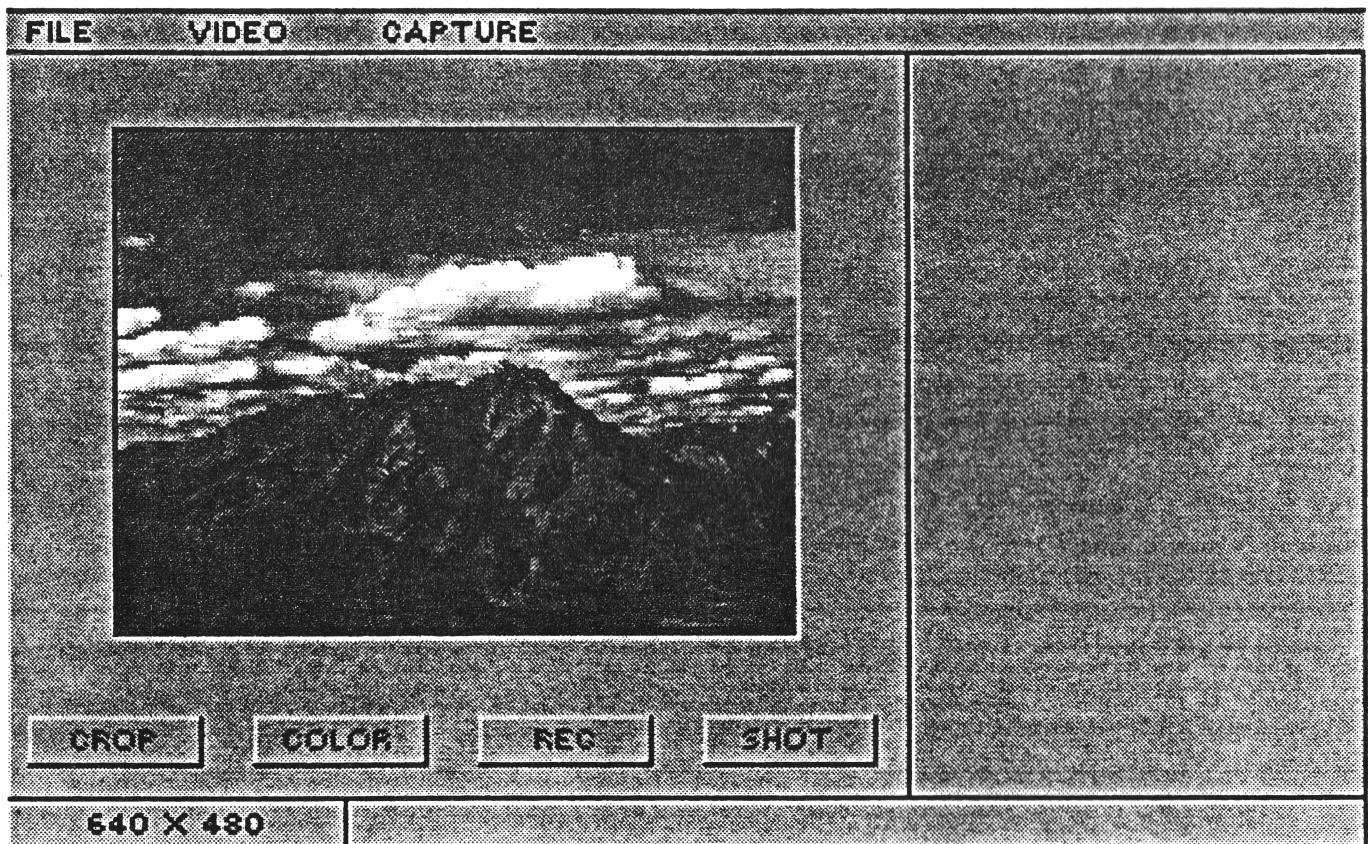


### 4.2.3 Program Interface

After the program has started, the following screen appears.



On the top of the screen is the menu bar which contains various options for selecting different sources, standard, capture modes etc.

Live video preview is present on the centre of the screen.

There are 4 buttons located under the preview screen. These buttons are used for capturing individual frames and movie, tuning colour and cropping the video.

At the bottom of the screen, there are two bars. The bar on the left is the size information bar. It displays the current capturing size in pixels. The first integer gives the width while the second one gives the height. The bar on the right is the general information or the process bar. It displays information of process such as saving, loading and display the current state of the process.

very similar and seldom used colours to free up more entries in the colour palette.

For YUV mode, the lookup table should be filled sequentially from 0 to 255 which means no translation at all.

**MODE**

8-bit write port used to set the grabber into different operating modes such as 8-bits colour, gray, (16-bit colour) and Fill LUT mode.

D7	D6	D5	D4	D3	D2	D1	D0
X	ZERO	INTEN	TCEN	GREN	CMODE1	CMODE0	LUTRW

LUTRW is the Fill LUT enable bit. The colour lookup table pointer address is reset when this bit is 'LOW'. When it is 'HIGH', grabbing is not possible.

[CMODE1..0]

- 0 grey mode.
- 1 YUV colour mode.
- 2 8-bit colour mode.

TCEN is time code enable bit. A 1 prevents the first 21 scanlines of each frame from scaling. Hence, time code and closed caption data is grabbed at the largest scale for easy software decoding.

INTEN is interrupt enable bit. A 1 enables interrupt signal to the bus when GRABF is high.

GREN is grab enable bit. A 1 enables writing to the frame buffer. Enabling and disabling takes effect beginning from the next frame.

ZERO must be set to 0.

**I2BUSW**

8-bit write port to generate I2C bus data and serial clock in order to configure digital colour decoder.

D7	D6	D5	D4	D3	D2	D1	D0
X	X	X	X	X	X	SCL	SDAO

SDAO stands for I2Cbus serial data.

SCL stands for I2Cbus serial clock.

**STATUS**

8-bit read port to indicate the status of grabber.

D7	D6	D5	D4	D3	D2	D1	D0
X	X	X	X	SDAID	VS	HREF	GRABF