HEDGHOG IV

405 line standards converter and modulator.

The Hedghog IV can be programmed by using the two rotary encoders, push-button and Display The following is a brief description of the various menus.



The top line of the display is the parameter the lower line is the parameter's value.

Rotating the left hand knob changes the parameter.

Rotating the right hand knob changes the value.

The value is updated immediately.

Pressing the left hand knob saves the new values to memory.



PRESET NO x

Preset number.

There are 10 presets numbered from 1 to 10.

Each preset holds a unique converter setting and a unique modulator setting.

The bottom line is the name given to the preset and can be changed further down the menu.



MODE

Selects the operation mode which can be Image, Converter, Test Card, Test Card Scroll, Greyscale or Modulator Only.



TONE

Selects a 400 Hz or 1000Hz test tone. (If using the Tone function it is best to have the audio cables unplugged. As the the tones are injected into the input)



ASPECT RATIO

Selects the the input and the required output aspect ratios.



EQU PULSE

Turns equalising pulses On/Off (only available when in 405 line mode).



CHANNEL NO.

Selects the System A channel or set modulator manually (only available when in 405 line or 405 Line Test Card/Greyscale mode).



CH SYSTEM

Channel system, positive video and AM audio or negative video and FM audio.



VID CAR RF RANGE

Video carrier frequency range of 28.5 to 56.25 MHz, 56.25 to 112.5 MHz, 112.5 to 225 MHz, 225 to 450 MHz or 450 to 900 MHz.



VID CAR FREQ

Video carrier frequency.



VID/AUD SEP

Video audio carrier separation of 4.5, 5.5, 6.0, 6.5 MHz or Variable. When Variable is selected the audio carrier frequency can be set manually. Variable can only be selected when channel system is set to positive video and AM audio



VID:AUD RATIO

Sets the video to audio carrier ratio to 12 or 16 dB. Only available when VID/AUD SEP is set to 4.5, 5.5, 6.0 or 6.5 MHz.



AUD CAR RF RANGE

Audio carrier frequency range of 28.5 to 56.25 MHz, 56.25 to 112.5 MHz, 112.5 to 225 MHz, 225 to 450 MHz or 450 to 900 MHz. Only available when VID/AUD SEP is in variable mode



AUD CAR FREQ Audio carrier frequency Only available when VID/AUD SEP is in variable mode



AUDIO GAIN Audio input gain



SET NAME CHR **X**

The three photos above show 3 positions of 16 used to set the name of the preset. In the three photos characters in position 1,2 and 3 are been set. In each of the photos the cursor is under the character been set. Rotating the right rotary encoder will change the character above the cursor.



STARTUP PRESET Sets the preset that will be loaded at startup.

To save an image

Go to Mode select the image position. Press and hold the right button for about a second It takes about 16 seconds to save an image.

Default Settings

When the microcontroller is programmed the presets have random settings in them. The settings can be filled in manually or a set of default settings can be loaded into them. The default settings can be loaded by pressing both left and right push-buttons and holding them for approximately 2 seconds.