

## PAL CODER PLC/2

The Pineapple PAL coder is extremely easy to use, and connecting it up is fairly straightforward. There are two 9 pin 'D' connectors on the ribbon cable. One of these plugs into the R.G.B. monitor socket at the back of the computer. The other one accepts the plug from the colour monitor. The signal levels into the coder will only be correct if the monitor is connected onto the ribbon cable. If you wish to run the coder without the monitor present, then a dummy plug which contains 100 ohm resistors to terminate the R,G, B signals must be used. This can be obtained from Pineapple if required.

The plug top power supply should be set to 7.5 volts for all normal 240volt mains supplies. Note that no damage will occur to the coder whatever setting is selected, however, if a lower setting is used then the coder output will probably have 'hum' bars present. Higher settings than 7.5v will simply dissipate unnecessary power in the unit. Beware if the lead is ever unplugged from the power unit, to restore it the correct way round, or damage will occur to the coder.

The BNC socket on the coder unit supplies the PAL coded signal which is a standard 1 volt (.7 volt picture and .3 volt syncs). Note that on early 300 series computers the output level from the monitor socket was incorrect (too low), and the coded output in this case will also be less than 1 volt. This will not cause incorrect operation of the unit, and most video recorders will have automatic adjustment of signal level which will compensate for this. If the correct signal output level is strictly required then your Acorn dealer can modify your 300 series computer to produce the correct output level.

The S-VHS version of the coder also has a 4 pin 'Mini-Din' connector which provides a standard S-VHS signal output. This output will give considerably better quality recordings if an S-VHS recorder is available.

The switch on the side of the coder box is to select for either interlaced or non-interlaced screen modes. This will probably need to be set to the non-interlaced position for most applications. If, however, you run your

Archimedes in interlaced mode, set the switch to this position. Incorrect setting will simply cause the picture to 'bounce' in the vertical direction.

A demo disc is supplied. with the coder to show it's performance with real pictures and test colour bars. To use this first double click on the !SCRVIEW Icon which will then appear on the Icon bar. Drag any of the Sprite files to this Icon to view them. All these images were produced using the Pineapple Colour Video Digitiser! To try the test colour bar signal simply double click on the 'BARS' Icon. These pictures give a more realistic view of the coder performance than the results likely to be obtained from looking at the desktop windows for reasons explained below.

There are only two adjustments inside the coder unit and although these should really never require adjustment, a description of their functions will be given.

The variable inductor sets the free running frequency of the genlock P.G. chip. This is not a critical adjustment as the pull in range is very wide. This would only need to be adjusted if any 'pulling' were visible at the top of the picture.

The variable capacitor, VC1 sets the frequency of the subcarrier oscillator. This is adjusted to reduce any coloured patterns visible on sharply defined vertical edges (such as windows on the desktop). The patterning is caused by the inability of the PAL system to cope with the high frequencies present in the R,G,B computer output signals. The effect is called cross-colour and is noticeable on normal TV pictures as coloured moire patterning visible on finely striped shirts and jackets.

The effect is only present when using the composite PAL output. If you use an S-VHS recording system and TV set then cross-colour effects are removed.

The patterning is only likely to be noticeable on small text and desktop windows. Digitised pictures which will have originated as a PAL source should not exhibit any patterning whatever the setting of VC1. If however, you experience static coloured patterns on vertical edges you can try carefully adjusting VC1 with a non-ferrous screwdriver.

Make sure that when connecting the coder to equipment such as video recorders or TV sets, the cable is fed from the coder to a socket marked 'Video' or 'Camera' or 'AV' input. The coder does not produce a signal suitable for feeding into any socket marked 'RF' or 'Aerial' input!