GTH ELECTRONICS

ACE Convertor Software Upgrade 1, January 2002

The previous version of the ACE Converter software offered four new features which were not shown in your User Manual. These new features are accessed by pressing and holding in one of the four non-latching push buttons when the Power button is pressed each time the unit is used. They are cancelled next time the power is turned on if the appropriate button is not pressed in. After power has been turned on any buttons held in can be released and used in the normal way.

A small correction had also been made to the horizontal positioning when converting which will now be absolutely correct when viewed on a TV designed for the relevant output standard. Any sideways shift when converting is due to your TV not handling the different standards properly!

The new functions were as listed below next to the name of the button which turns it ON:

Invert Option: Automatic Input Switching.

This turns on Automatic Input switching between the rear panel "S" & Composite Video Inputs. The ACE then ignores the rear panel "Input Select" switch and automatically switches between the two inputs providing the unwanted input becomes inactive. Since there is only one stereo audio input this function is of most use to those with separate audio switching.

Colour Shift ^: Colour Standard Lock.

This solves the rather rare inaccurate colour standard detection which can occur when handling some difficult faulty PAL tapes, giving rise to vertical colour bands. This function locks out the automatic colour standard selection on the ACE Converter, so in this mode it will only accept PAL/50/4.43 or NTSC/60/3.58. This function should only be needed when copying from old or damaged tapes, or where there are momentary breaks in the colour which can sometimes fool the automatic standard detection and result in false locking of the Philips video decoder chip.

Test Select: Timebase Corrector Disable.

Timebase Correction is normally automatically enabled whenever one or more of the PAL and NTSC buttons are depressed. However, with stable video sources, timebase correction is not always needed when converting between different colour standards if both are 50Hz or 60Hz. This feature will automatically disable timebase correction whenever possible, giving a fixed time delay which can be useful when editing and converting at the same time, and the highest possible quality. NOTE: With unstable sources such as VCR this will cause colour flashing.

Output Type: Video Zoom & Widescreen Letterboxing.

This operates in Seven steps of 5.5% using the "Digitise" knob in place of its normal function. When both the PAL and NTSC buttons are Out this knob will Zoom up the Centre Portion of the screen horizontally and vertically, allowing 14:9 and 16:9 pictures to fill a 4:3 screen on the Third and Sixth positions respectively. If either of the PAL or NTSC buttons are depressed to select TBC mode, or when converting, this feature changes to a horizontal expansion only and can be used to expand video taken on a camcorder fitted with an anamorphic lens or to convert anamorphic DVD video to fill a 4:3 screen. This can be selected without TBC if it is disabled.

If you continue to hold the Output Type button in for a further 5 seconds the picture height will drop to 3/4 to allow an anamorphic widescreen picture to be converted to 4:3 letterbox format. The digitise control then offers 7 steps of 5.5% expansion for the usual semi-widescreen effect.

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ACE Convertor Software Upgrade 2, November 2002

This latest version of the ACE Converter software extends the Aspect Ratio Conversion features by adding "Pillarboxing". This is accessed in a similar way to the original "Letterboxing" option. The time delay for letterboxing to be activated has been reduced from 5 seconds to 2.5 seconds but if the Output Type button is held in for 5 seconds the new "pillarboxing" option is enabled.

The new function is again listed below next to the name of the button which turns it ON:

Output Type: Video Zoom & Aspect Ratio Conversion

A temporary hold of the Output Type button just during power-on enables the Zoom function:

This operates in Seven steps of 5.5% using the "Digitise" knob in place of its normal function. When both the PAL and NTSC buttons are Out this knob will Zoom up the Centre Portion of the screen horizontally and vertically, allowing 14:9 and 16:9 pictures to fill a 4:3 screen on the Third and Sixth positions respectively. If either of the PAL or NTSC buttons are depressed to select TBC mode, or when converting, this feature changes to a horizontal expansion only and can be used to expand video taken on a camcorder fitted with an anamorphic lens or to convert anamorphic DVD video to fill a 4:3 screen. This can be selected without TBC if it is disabled.

If you continue to hold the Output Type button in for a further 2.5 seconds the picture height will drop 3/4 to allow an anamorphic widescreen picture to be converted to 4:3 letterbox format. The digitise control then offers 7 steps of 5.5% expansion for the usual semi-widescreen effect.

If you continue to hold the Output Type button in for another 2.5 seconds (i.e. 5 seconds total) the picture height will go back to normal and instead the picture width will drop by 3/4 to allow a 4:3 picture to be compressed horizontally to fit into an anamorphic widescreen 16:9 picture. The digitise control then offers 7 steps of 5.5% expansion for a variety of compromise options with variable side bars and variable cropping of the top and bottom of the original 4:3 image. On the 6th step, settings are correct to convert a letterbox image back up to anamorphic 16:9.

The full range of options is thus as follows (with PAL & NTSC Buttons OUT):

1. Letterboxing, dropping the image height by 3/4 to convert 16:9 anamorphic images into 4:3 letterbox format with black bars at top and bottom. This involves no loss of image area.

2. Addition of variable zoom allows letterbox size to be increased through six stages up to full screen height, losing the sides, allowing the usual 14:9 option to be easily achieved.

3. Pillarboxing, contracting the image width by 3/4 to convert 4:3 full screen images into a 4:3 image within a 16:9 frame with black bars at the sides. This again involves no loss of image area.

4. Addition of variable zoom allows the 4:3 image within the 16:9 frame to be increased through six stages up to full screen width, losing top and bottom, allowing reduced side black bars at the expense of cropping of top and bottom.

5. Pillarboxing plus variable zoom set to position 6 out of 0 to 7 is also correct for converting 16:9 letterbox images back up to full height anamorphic format.

The pillarboxing option (without the zoom) can also be combined with timebase correction, i.e. it still works with the PAL or NTSC buttons IN, so that older VHS material can be aspect ratio converted, standards converted and/or stabilised at the same time. Vertical scaling does not function with either the PAL or NTSC buttons IN so some of the above options are not available. **Please note** that some picture instability is normal when changing settings with PAL/NTSC IN.

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