

GTH ELECTRONICS

ACE Convertor Special Version OLBM (After June 2003)

Option "O": For Noisy Broadcast TV Reception

Amateur TV Reception or ATV Repeater Stations often have to cope with very noisy signals. Optimum performance requires a long time constant in the horizontal phase-locked loop so that the ACE can ignore the effects of noise on the sync pulses. On the other hand the standard ACE has a short time constant which was specially chosen for optimum performance with the relatively clean but often jittery video coming off VCRs which must be tracked accurately.

Secondly, since fading TV signals can result in video level changes it is also useful to be able to use the Automatic Gain Control features of the ACE which are normally disabled for optimum performance in normal video applications.

Option "O" uses the AUDIO button to control the horizontal phase-locked loop time constant (IN for SLOW) and MANUAL button to control the Automatic Gain Control (IN for AGC).

The automatic fader is still available with variable speed using the FADE button and SPEED control but fading is always automatic and audio is always faded with the video. Of course audio can be left unfaded simply by connecting audio directly and not taking it via the ACE.

Option "L": Colour Standard Lock - Normally ON.

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.

This can be disabled using the normal method for enabling as described in the manual.

Option "B": Output Colour Burst Permanently Enabled

Normally the Colour Burst on the video output of the ACE will be present only if there is a colour burst present on the video input, as per standard practice. However this can prevent you from adding colour, e.g. sepia, to genuine monochrome video which has no colour burst. Please note though that you can always convert colour video to monochrome and then add colour tints without this special version. There are also some other applications where a permanent colour burst might be useful.

Option "B" ensures the colour burst is always ON. The main disadvantage is that a TV monitor on the output of the ACE will then show colour noise when the ACE is fed with a noisy monochrome video input as the TV's colour decoding circuitry will not be turned off.

Option "M": Left/Right Mirror Imaging:

In videophone applications if the local camera output is fed to the local monitor a lateral inversion is needed for the users to see themselves as they expect. Other applications include any situation where the camera views an object or scene through a mirror & must be corrected.

Normally the INVERT OPTION button cycles around 4 combinations of video and colour inversion. For many people this independent control of video and colour inversion is no longer required and total video+colour inversion is all that is needed to capture from negatives etc.

Option "M" uses the INVERT OPTION button to cycle through 4 combinations of these two functions, Video+Colour Inversion and lateral, i.e. Left/Right, inversion of the video image. Order is: Normal / Video Invert + Mirror Imaging / Mirror Imaging Only / Video Invert Only.