

# GTH ELECTRONICS

## *ACE Convertor Special Version O*

### *Option "O": Switchable Time Constant and Automatic Gain*

Amateur TV Reception or ATV Repeater Stations often have to cope with very noisy signals. Optimum performance here 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 (AGC) features of the ACE which are normally disabled for optimum performance in normal video applications where levels are usually relatively constant.

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. Loss of the manual fade is thus the only disadvantage but of course, unlike option "N", this option "O" cannot be mixed with others using the AUDIO and MANUAL buttons.

AUDIO	MANUAL	MODE
OUT	OUT	Fast HPLL + Fixed Gain
OUT	IN	Fast HPLL + Automatic Gain
IN	OUT	Slow HPLL + Fixed Gain
IN	IN	Slow HPLL + Automatic Gain

**Please note** that on this version "O" BYPASS does not affect the operation of the AUDIO and MANUAL buttons as they do not operate in a video adjustment mode but now set operational parameters (i.e. Time Constant and AGC) instead. These parameters, like the OUTPUT TYPE settings, need to be fixed and unaffected by BYPASS.