LANCe DESIGN

APPLICATION NOTE   AMPEX ZEUS TBC

INSTALLATION / OPERATION INSTRUCTIONS FOR SIF-5 INTERFACE WITH AMPEX ZEUS

The SIF-5 interface provides for control of the Zeus via the "REMOTE" port (15-pin D connector) on the rear of the TBC. Functions controlled are:

SETUP LEVEL	HORIZONTAL PHASE
VIDEO LEVEL	SUBCARRIER PHASE
CHROMA LEVEL	PICTURE H-POSITION
CHROMA PHASE	FREEZE STATUS AND MODE
	(field and frame only, no 4 field)

INSTALLATION

Operation of the SIF-5 interface with the Zeus requires that the system control board in the Zeus be fitted with the Ampex serial port modification kit (Ampex part number 1474358-01). This provides a new prom for location U-11 on that board, which converts the remote port to the proper protocol. The part number on the prom itself should be 1474357-010 (checksum=430A). See the second page of this application note for modification procedure.

Set the dipswitches on the interface as follows:

Switches 1-5 to desired VTR number in binary (see manual installation section).
Switch6 = off
Switch7 = off
Switch8 = off to allow freeze control, on to disable freeze control.

Using the supplied cable, connect the interface to the connector on the back of the Zeus labeled "REMOTE". Connect the BNC on the interface to the coax party line.

Place the control switch on the front of board 18 to the "REM" position.
All functions supported should now be operational from the Lance Design control panel(s).

Note that picture H-position is controlled on this TBC by using the "PIX-Y/C PHS" function (part of the timing group) on the control panels. The preset value (+000) will result in the normal (centered) position.

AMPEX MODIFICATION PROCEDURE FOR REMOTE TBC CONTROL

(This procedure duplicates Ampex modification kit p/n 1474358-01)

Required materials: Ampex PROM p/n 1474357-01
                            Small quantity wire-wrap wire

Procedure:

1:     Turn power off to Zeus

2:     Remove System Control PWA from card bay

3:     Replace PROM at location U11 with p/n 1474357-01

4:     Remove back shield from System Control PWA

5:     Add a wire from switch S11 pin 15 to RN2 pin 10

6:     Add a wire from switch S11 pin 16 to RN2 pin 9

7:     Close section 2 of switch S11 ("on" side of switch pushed down)

8:     Replace back shield on System Control PWA

9:     Perform "first birthday" on system as follows:

   a: set switch S10-7 on system control board to opposite position
   b: insert PWA into bay and power up the Zeus
   c: turn power off, and remove system control PWA
   d: set switch S10-7 back to original position
   e: re-insert PWA and power up the Zeus

NOTE: After first birthday, all setup parameters must be reset, including ScH phase. To adjust ScH phase, the MSD and LSD rotary switches on the front of the System Control board will need to be set to 3 and 8, respectively.