LANCE DESIGN

APPLICATION NOTE SIF–7B TBC INTERFACE

The Lance Design SIF-7B VTR Interface is designed to be used with the Lance Design TBC Remote system; i.e. CP-150, CP-160, and CP-160B control panels.

This interface is a 'universal' interface, in that it supports multiple protocols and machine types. It is primarily intended for Sony HDW and SRW series VTRs, which have a 9-pin 'Video Control' port. The protocol used for these machines is the Sony 'extended' protocol, which supports Composite, Standard-definition Component, and High-definition Component outputs.

The interface also supports the original Sony video control protocol, which we refer to as the 'D2' protocol. This is usable with older Sony digital machine types (such as the D2 machines), and some other machines. The 9-pin connector on the interface may not match the older machine's connectors, and a special cable may be required.

The protocol selection is made by section 8 of dipswitch S2. This switch is inside the unit, and is not the one accessable through the cutout on the end of the unit. This switch also selects the baud rate of the interface-to-vtr link.

The functions of both dipswitches are as follows:

Dipswitch 1 sec	1-5 = VTR ID Number [see CP-160B manual]
Dipswitch 1 sec	6 = On bypasses requirement for VTR Acknowledge
Dipswitch 1 sec	7 = Off for HD Timing Primary, On for SD Timing Primary
Dipswitch 1 sec	8 = On inhibits freeze control from CP-160B panel
Dipswitch 2 sec	1-5 = Baud rate selection for VTR link
Dipswitch 2 sec	6-7 = Not Used
Dipswitch 2 sec	8 = Off for 'extended' protocol [SRW/HDW], On for older VTR types.

Baud rate should normally be set to 19.2K for HDW/SRW and 1200 for older types.

The interfaces are supplied set for SRW/HDW use [19.2K Baud, Extended Protocol].

[continued]

The interface provides the following control:

VIDEO LEVEL – simultaneous control of HD, STD, and Composite outputs
CHROMA LEVEL – simultaneous control of HD, STD, and Composite outputs
CHROMA PHASE – Composite output only
SETUP (BLACK LVL) – Composite output only

SYNC PHASE – Coarse sync timing of HD outputs
SUBC PHASE (or FINE PHASE) – Fine sync timing of HD outputs
AUX PHASE 1 (formerly Y/C Delay) – Coarse sync timing of STD DEF and Composite outputs
AUX PHASE 2 (formerly Color Frame) – Fine sync timing of STD DEF and Composite outputs

*Note that the HD and STD DEF timing functions can be swapped by turning on DIPSWITCH section 7.

VIDEO FREEZE is also controlled via the CP-150/CP-160. This may be inhibited by turning on DIPSWITCH section 8.

The SIF-7B must be externally powered with the 9V DC wall transformer (supplied).