



Super Edit™ TECH NOTE
Version 1.2A and later for DPE

VTR TBC Control Panel on DPE Editor

Introduction

Some Models of Digital VTRs allow for the remote sensing and restoration (store & recall) of the internal TBC settings between the VTR and Super Edit. As a separate feature, in a separate Tech Note, EMEM-like store and recall of such TBC data is described.

Available for the DPE series editor is a new application that runs under NT and allows the display, adjustment, and setting to default values of the internal TBC of these specified VTRs. This NT application icon is called simply **TBC**. Super Edit must be configured to be able to communicate with the TBC application. As part of this configuration, store and recall of TBC EMEM data is enabled.

TBC control is supported for the following Sony and Sony-interface-style VTRs:

DVR-10	DVW-500	DNW-25/220	AJD-350 (D3)
DVR-18	DVW-510	DNW-30	AJD-360 (D3)
DVR-20		DNW-50/45	AJD-580 (D5)
DVR-28		DNW-75	
		DNW-100	

The TBC control panel is divided into two sections, available by toggling the More/Less button.

<u>V</u> Out Lev:	Video Output Level
<u>C</u> hroma:	Video Output Chroma
<u>H</u> ue:	Video Output Hue
<u>S</u> etup:	Video Output Setup Level (See note below re: PAL systems)
<u>V</u> In Lev:	Video Input Level
<u>H</u> Phase:	Video Output Horizontal Phase
<u>SC</u> Phase:	Video Output Sub-Carrier Phase
<u>V</u> Phase:	Video Output Vertical Phase.

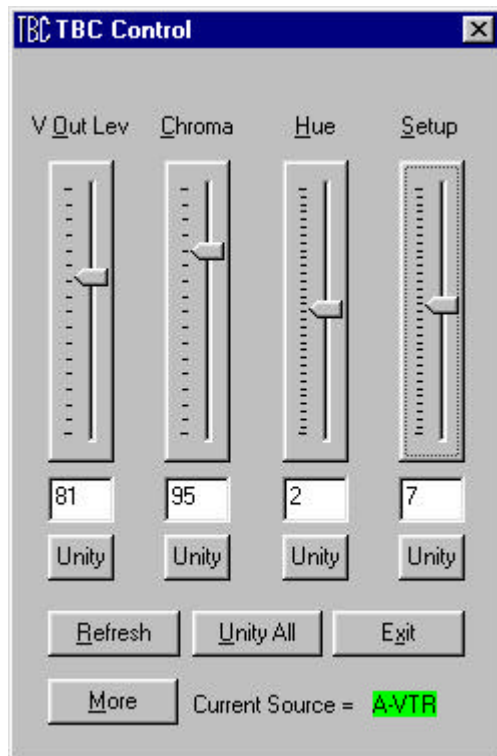
TBC control is available for the Type 0 TBC data for DVR (D2), DVW (Digital Beta-Cam), and Panasonic AJ-D VTRs (both D3 and D5). The DNW family of SX machines uses Type 1 data. Type 0 and type 1 is described below. Type 0 and Type 1 have the same meaning as QMEM xx0 and xx1 described in the QMEM Tech Note. Values that are set using the TBC panel can be stored and recalled using QMEMs.

Type 0 TBC data contains values for: **Output Video Level**, **Output Chroma Level**, **Output Video Hue**, **Output Setup Level**, **Video Input Level**, Output **Horizontal Phase**, Output **SC Phase**, and Output **Video Phase**.

These settings affect ALL the VTRs inputs and outputs (composite, SDI, and component analog, if so equipped).

Note that for **PAL** systems, the **SETUP** settings are used for PAL Black Level, and the **CHROMA PHASE** settings are used for PAL Burst Chroma Phase.

Type 1 TBC data contains values for **Composite Output Level**, **Composite Output Chroma Level**, **Composite Output Hue**, **Composite Output Setup Level**, **Composite Output System H Phase**, **Composite Output System SC Phase**, and **Composite Output Video**. These adjustments affect only the composite inputs and/outputs. Please note that the **Video Input Level** is not adjustable on these VTRs. Additionally, on the DVR500/510 VTRs, **Video Phase** is likewise not accessible.



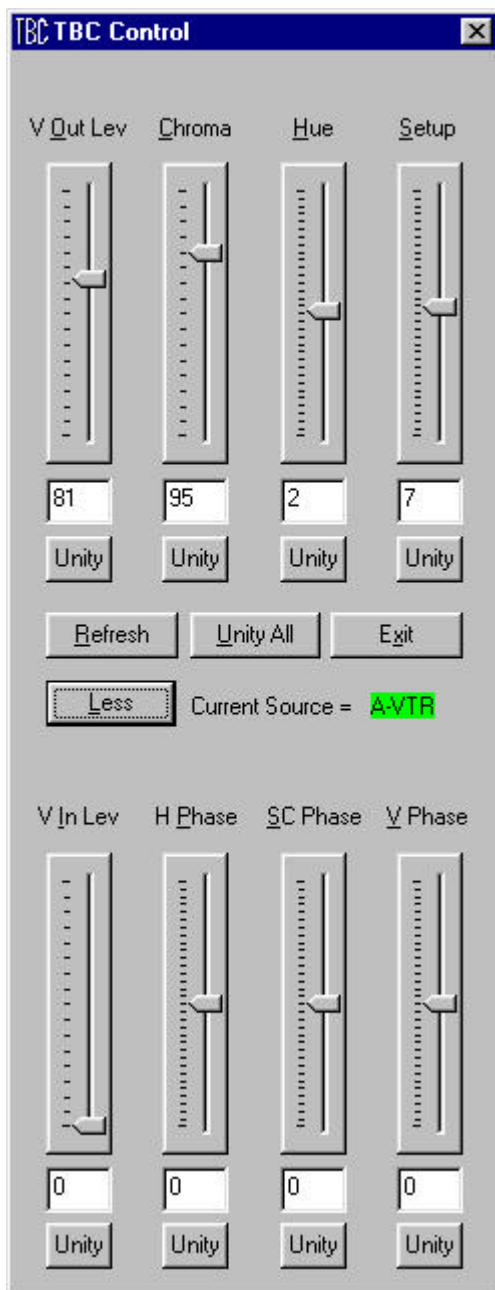
TBC Control Panel Minimized View

The TBC application is *pointed* to the currently selected Super Edit source. This currently selected source is shown in the TBC field "**Current Source = A-VTR**" (or whichever VTR is currently selected). If the VTR name is "?????" then the VTR either does not support internal TBC communication, the currently selected source is not a VTR (AUX, BLK), or the currently selected VTR does not have a port or VTR type assigned to it.

If the background is **RED** then the TBC panel is aware that the displayed information is not current. In this case, the TBC panel enters an accelerated data-gathering mode and will update all eight possible controls in approximately two seconds. When the background is **GREEN**, the TBC panel believes its data is current and is in a slow data update loop, updating one control per second so that the entire panel is updated every eight seconds.

During Preview and Record operations, TBC panel communication is locked out (it is necessary to give priority to the VTRs involved in the edit). During the edit or preview, therefore, the “Current Sources” field shows RED, indicating that the display is not current.

At any time (except during a preview or edit), the operator can click on the **Refresh** button and force an immediate (less than one second) refresh of all eight TBC panel items.



TBC Control Panel
Maximized View

If an edit containing a QMEM is recalled, or a change is made to the selected VTR on the VTRs local TBC control panel, the TBC application is not immediately aware of this change. In this case, the TBC application may require up to eight seconds to reflect the now current state of the VTR's TBC. Clicking on the Refresh button will cause an immediate update of the entire panel.

Clicking on **Unity** will set that control to the manufacturer's stated unity level setting. Clicking anywhere in a controls' area except on the cursor or on the cursor track will give mouse and NT keyboard control to that control. When selected for control, each tick of the mouse thumbwheel will increment or decrement the displayed value by one unit.

The NT Keyboard [**Home**] and [**End**] keys drive the selected control to its minimum or maximum limit. [**Pg Up**] and [**Page Dn**] will increment or decrement the cursor one line (there are 16 lines for most of the controls). The **Up** [↑] or **Down** [↓] arrow will increment or decrement the cursor 1/16th of a line.

Clicking on the cursor will give mouse drag control. Clicking in the cursor track will increment or decrement the cursor as if either the [**Pg Up**] or [**Page Dn**] key was tapped.

The current cursor value for each control is shown in the window below the control. These windows are editable, values entered in these windows immediately are dispatched to the TBC. It is neither necessary nor desirable to use the ENTER key upon changing a value. The ENTER key is connected through Windows NT as the "Exit This Program" default key!

Installation

The TBC application is installed automatically with the Super Edit Program, and a Shortcut labeled **TBC** is placed onto the desktop.

Double-click on the shortcut to begin execution of the TBC application. Do not attempt to run more than one copy of TBC. The TBC application is configured to only look at the currently selected VTR, and if two or more are running they each will be looking at the same source.