

Crestron® Local SMART Panel Control

Touchpanel Interface DVPHD

1 OVERVIEW

The DVPHD touchpanel interface devices now support local control of several SMART external touch screens. This allows a programmer to access the SMART panel hardkey presses from a DVPHD device extender (SMART Technologies Status Reserved Joins).

Supported SMART Panels

- Sympodium® DT770
- Sympodium® ID350 Series
- DViT™ Overlay (Flat Panel Overlay)
- ID250

Supported Firmware Version

- DVPHD V3.001.0055

2 FUNCTIONAL DESCRIPTION

SMART external touch screens require constant feedback, typically from a host PC application, in order to function properly. This is usually accomplished by routing the SMART data packets from the touch screen to a PC via the DVPHD and the control system and then back the other way.

This new feature now allows the DVPHD to intercept and report the hardkey status to the control system and provide all the necessary feedback to the SMART panel directly.

Hardkey Status

SMART hardkey presses are always parsed and the current state of these hardkeys is reflected in device extender status reserved joins.

While specific hardkey availability varies from one SMART panel to another, any common key will use the same join to report its status.

Refer to the “Device Extender Signal Availability” table in step 5 for a list of the hardkey extenders available for each SMART Panel. All hardkey extenders are active high and level sensitive.

Local Heartbeat / Feedback

Local feedback can be enabled from a console command (LOCALSMART).

LOCALSMART - Turns on/off local SMART control

- [ON | OFF]
- ON - Local SMART panel control is on
 - OFF- Local SMART panel control is off

When active, heartbeats and LED feedback are generated by the DVPHD to allow the SMART panel to function normally. This means all LEDs will light when pressed.

Local Annotation Control

It is also possible to link the hardkey presses directly to the annotation feature in the DVPHD. This feature is activated by a console command (ANLOCAL).

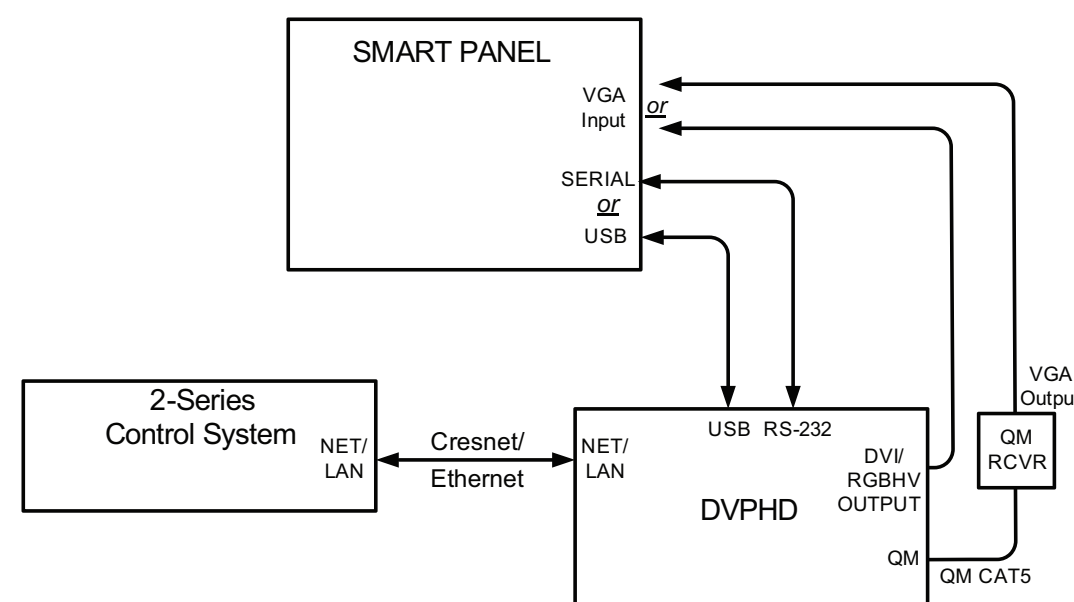
ANLOCAL - Turns on/off SMART panel annotation control
[ON | OFF]

- ON - Local annotation control is on
- OFF- Local annotation control is off

When active, any color selection enables annotation. Any hardkey that de-selects the color selection will disable annotation.

Annotation over video requires that the video window object have a pad area assigned to it. This assignment is done in VTPro-e at design time, and any pad area will do.

3 HOOKUP



4 SYSTEM SETUP

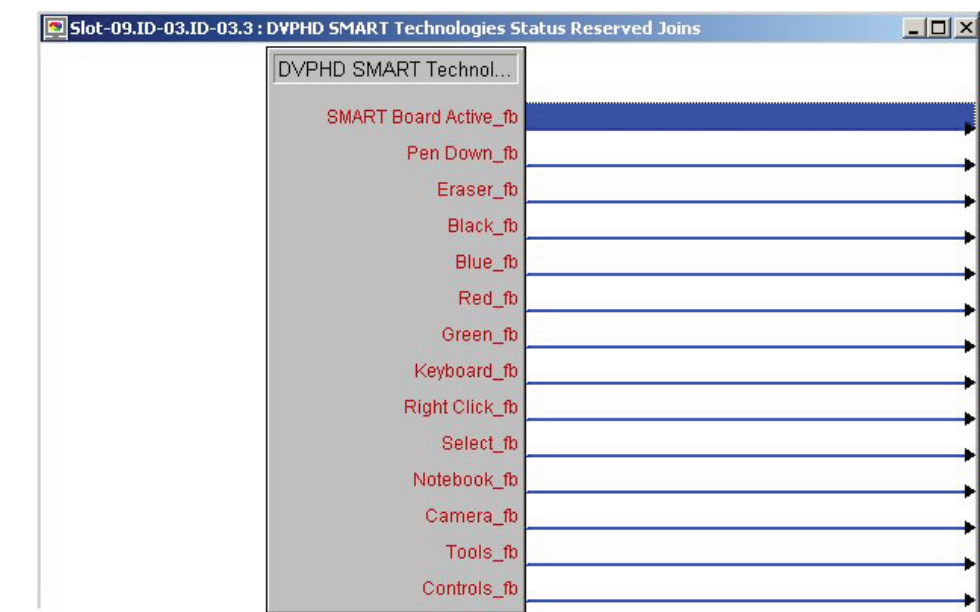
With the system components connected as shown in the hookup diagram above, do the following to configure the SMART panel to work with the DVPHD:

1. Enable local SMART control via LOCALSMART console command.
2. Apply power to the SMART panel.
3. Select the desired input on the SMART panel. Observe that the STATUS light turns green.
4. Go to the Setup Menu and calibrate the touch screen. You can use the Crestron Toolbox console to run calibration by typing **Caltouch**. This will calibrate the DVPHD to the SMART panel.
5. Load the VTPro-e project with the video window and pad area to the panel.

5 SMART HARDKEY DEVICE EXTENDERS

In the SIMPL Windows program that includes the DVPHD, right-click on the touchpanel interface symbol in slot 09, select **Insert Device Extender** from the menu, and select **DVPHD SMART Technologies Status Reserved Joins** from the list. The symbol shown below appears, allowing these signals to be used to activate any desired function.

Not all signals are available from every panel. Refer to the “Device Extender Signal Availability” table below to determine which signals to use for the panel in your system.



Device Extender Signal Availability

DT770	ID350	DViT Overlay	ID250	EXTENDER	DESCRIPTION
X	X	X	X	SMART_BOARD_ACTIVE Cue name = Smart Board Active_fb	Active when a SMART panel is detected on USB or setup for an RS232 connection
X	X	X	X	SMART_PEN_DOWN Cue name = Pen Down_fb	Active when a SMART screen is being touched.
X	X	X	X	SMART_BUTTON_ERASE Cue name = Eraser_fb	Active when the eraser button/function has been activated. It is interlocked with the color joins and the right click and select joins.
X	X	X	X	SMART_BUTTON_BLACK Cue name = Black_fb	Active when the black button/function has been activated. It is interlocked with the color joins and the right click and select joins.
X	X	X	X	SMART_BUTTON_BLUE Cue name = Blue_fb	Active when the blue button/function has been activated. It is interlocked with the color joins and the right click and select joins.
X	X	X	X	SMART_BUTTON_RED Cue name = Red_fb	Active when the red button/function has been activated. It is interlocked with the color joins and the right click and select joins.
X	X	X	X	SMART_BUTTON_GREEN Cue name = Green_fb	Active when the green button/function has been activated. It is interlocked with the color joins and the right click and select joins.
X	X	X	X	SMART_BUTTON_KEYBOARD Cue name = Keyboard_fb	Active when the keyboard button/function has been pressed. It is momentary and will transmit a release when the button is released.
X	X	X	X	SMART_BUTTON_RIGHTCLICK Cue name = Right Click_fb	Active when the right click button/function has been activated. It is interlocked with the color joins and the eraser and select joins.
X	X		X	SMART_BUTTON_SELECT Cue name = Select_fb	Active when the select button/function has been activated. It is interlocked with the color joins and the right click and eraser joins.
X	X			SMART_BUTTON_NOTEBOOK Cue name = Notebook_fb	Active when the notebook button/function has been pressed. It is momentary and will transmit a release when the button is released.
X	X			SMART_BUTTON_CAMERA Cue name = Camera_fb	Active when the camera button/function has been pressed. It is momentary and will transmit a release when the button is released.
X	X			SMART_BUTTON_TOOLS Cue name = Tools_fb	Active when the tool button/function has been pressed. It is momentary and will transmit a release when the button is released.
X				SMART_BUTTON_CONTROLS Cue name = Controls_fb	Active when the control button/function has been pressed. It is momentary and will transmit a release when the button is released.