# Pro Dash Firmware 6.0.247 Update

This update for the Pro Dash will work with the following ECUs:

- Holley EFI HP
- Holley Dominator V4, V5 and V6
- Holley Terminator X and Terminator X Max (V1, V2, V3)
- Holley Sniper
- Stand-alone applications.

## Firmware Update Procedure

## Preparation

You will need to extract the files onto the root folder of a FAT (not exFat) formatted USB memory stick. See image below, the .bin files can NOT be stored under any directory. They must be placed in the root of the "USB DRIVE". Please ensure that you have only one .bin file on the memory stick.

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Aurick access     Trus PC     KINGSTON (E)	Name update-prodasti-6.0.236.bin is-prodasti-htt-6.0.236.bin	Date modified 11/6/2022 S38 PM 13/6/2022 S38 PM	Type BIN File BIN File	Size 22,308 KB 35,617 KB
<ul> <li>&gt; TOSHIBA EXT (D:)</li> <li>&gt; Pretwork</li> </ul>				
2 items				

## Installation Instructions

Once the update process starts, it is important to not remove power until after the update process is complete. The total process will take approximately 2 minutes.

- 1. Open the .zip file and copy the individual .bin file(s) to the root folder of a USB memory stick. There are multiple .bin files, your dash will automatically choose the required file. Ensure you eject/safely remove the USB memory stick from your computer.
- 2. Insert the USB memory stick into one of the USB ports on the dash
- 3. Power on your dash, go to the main menu, press *Configuration*, then press *Update Firmware*.
- 4. You may have to press OK to continue, allow the process to compete and it will power cycle the dash by itself. When it boots back up it may reprogram the coprocessor it is important to let this complete.

<u>NOTE</u>: If you see the "Updating Firmware" message for more than 2 full minutes, you may power off and try again.

- When the dash comes back online, verify the firmware update was successful. Go to the main menu, press *Configuration* and then press *About*. The top line should read: "ProDash SW version 6.0 build 247 HW rev xx FW 45b".
- 6. Turn off the dash and remove the USB stick.

#### Note to installers:

Some units may require a second run of the updater. Press the 'About' button from the configuration menu of the dash after it powers back up to verify the firmware update has been applied, it should read "ProDash SW version 6.0 build 247 HW rev xx FW 45b".

- If you do not see the correct build number, then run the update firmware process again.
- If you see 'ffffffff' at the end of the line instead of 45b, please power off and on the unit a second time and check again.

#### **Operating Mode Verification**

Once installed, go to the configuration screen and verify the Operating Mode selection matches your EFI type or Standalone for non-EFI connected operation.

## **New Features**

## SSR Local output control

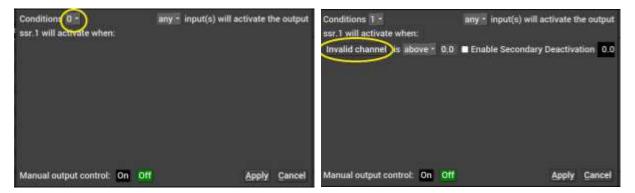
The local SSR1-SSR4 outputs can now be automatically controlled from sensor values. When an output channel is enabled in the dash configuration local I/O screen, press on the small gear icon next to the channel to open the configuration settings.

Note: The SSR1 output may turn on momentarily (0.5 second) when the unit is powering up.

Local I/O CAN1	Devices Plugins	Vehicle Shift Light	Misc	
SSR1 ssr.1	SSR out -	0		
SSR2 ssr.2	(disabled) •	4		
SSR3 ssr.3	(disabled) *	5		
SSR4 ssr.4	(disabled) +	ő		
SPD1 spd.1	(disabled)	33		Π
SPD2 spd.2	(disabled)	34		L⊒k I▼k
				Cancel

While the output configuration screen, the output will be disabled so there will not be inadvertent triggering while you are changing the values. The output will be controlled again once apply is pressed.

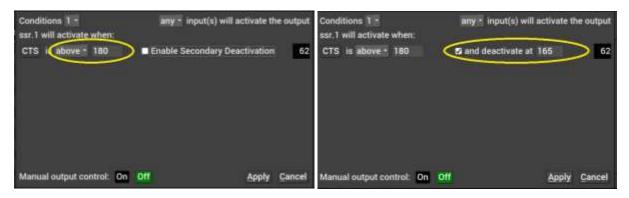
The output can be controlled by up to 5 conditions. If *conditions* are set to 0, then the output is manually controlled using a switch widget. Press on the *conditions* pull down and select 1.



Now you can select the channel it will operate on by pressing the *Invalid Channel* button as shown below. From the channel selection list that appears, choose the channel that you want to be used to control this output.

You can select above or below, and change the value that is used to activate (turn on) the output.

If you want to add hysteresis or a range mode, press *Enable Secondary Deactivation* to display the value to deactivate the output at. In the example below, the SSR will turn on when CTS is above 180 and will only turn off once it goes below 165.



The current value of the channel is shown at the right, and will be colored green if it is in the range specified.

any • input(s) will a	ctivate ti	ne output
S and deactivate at 1	55	201
<u></u>		Cancel
		any - input(s) will activate the second seco

## New Channel Selection dialog

The channel selection dialog now has a list of groups to allow quicker selection. The *include disabled* option will show every channel in the group instead of only the enabled ones.

Select value to monitor			Select value to monitor			
All Channels Boost Fuel Idle IO/Inputs IO/Outputs Local I/O Misc Sensor Spark	RTC RPM Inj PW Duty Cycle CL Comp Target AFR Target Lambda Air/Fuel Ratio Lambda Air Temp Enr	Ok	All Channels Boost Fuel Idle IO/Inputs IO/Outputs Local I/O Misc Sensor Spark	AccLon AccLat AccZ GyroX GyroY GyroZ ALS GPS Status GPS Status GPS Lat	Qk	
Include disabled	Sort	Cancel	Include disabled	Sort	Cancel	

# Firmware Release Notes

#### ProDash 6.0.247

- Database updated to support current releases of ECUs
- Fixed initial display of odometer value
- ECU synchronization process improved
- Added Racepak style RPM bar

#### ProDash 6.0.236

- Database updated to support current releases of ECUs
- Fixed warning LED not working when low alarm checkbox was set
- Added channel categories/groups to channel selector
- Added sample meter to gauge customize dialog

#### ProDash 6.0.230

- Improved startup synchronization with ECU
- Fixed RPMBAR alarm region for non-rpm channels
- GPS # Sat in use channel added
- Support for latest rev board
- Local SSR output control logic added

#### ProDash 6.0.220

- Fixed trip odometer reset bug when car was not moved after reset.
- Update for HEFI 6.0.220 compatibility

#### ProDash 6.0.207

- Improved start up time by caching ECU information
- HEFI data log configuration now works with ECU output channel triggers
- Dash logging now contains internal driveshaft RPM channel
- Added momentary switch styles (small, medium & large)



#### ProDash 6.0.200

- changed version/build numbering to avoid confusion

#### ProDash 5.0.86

- Fixed HEFI TPS Autoset error
- Fixed Status LED default alarm colors
- Fixed unresponsive UI if screen was touched outside of a message box.

#### ProDash 5.0.85

- HEFI V6 Water Methanol additional injection mode and extended TPS auto-set error support.

#### ProDash 5.0.84

- HEFI V6 Nitrous tuning issue fixed
- Local data recording in .dlz format for HEFI V6 and Terminator X V2 now supported.
- Symbol background for EFI output channel is now configurable

#### ProDash 5.0.82

- Fixed Terminator X V2.0 channel data

#### ProDash 5.0.81

- Fixed Terminator X V2.0 local data log record format.

#### ProDash 5.0.80

- Internal database update

#### ProDash 5.0.79

- Fixed broadcast in HEFI and TerminatorX modes

#### ProDash 5.0.77 Firmware Update

#### Core improvements

- New message appears to inform user to reboot for setting to take effect (when certain dash settings are changed)
- Fixed updater clearing shift light to defaults
- Screen and mouse swipes now more responsive
- tweaked RTC customize parameters
- Security menu cancel automatically locks security again.
- Odometer TRIP1, TRIP2 added
- New Driveshaft RPM channel if one of the inputs is set to Vehicle Speed
- Coprocessor driver FW 045B
- Auto-restart application on fault

#### **Operational Changes**

- Note: SSR1 output still has a ~500mS pulse on power up
- Added gauge fallback mode to simplistic gauges when a htt is not found for a product.
- HDL log fragment support, currently set to roll into a new log file every 30 minutes
- Standalone default layouts tweaked, turn signals fixed
- Fixed soft switches with connected HEFI

#### **UI** improvements

- File browser move file function added
- Fixed digital gauge contrast in warning zone
- Symbol widget now shows error color if status is fatal
- Fixed displayed channel name on symbol gauge edit
- Fixed modality of backup/restore progress indicators and messages
- Fixed units for local I/O channels
- Gauge averaging mode changes now work properly without restart
- Dash Configuration: Error message if more than Engine RPM channel is configured.

#### Prodash 5.0.58 Firmware Update

- Updater no longer renames firmware update file with 'installed-' prefix, permitting the same USB stick to update multiple units.
- Cleaned up calibration curve table in dash configuration
- Added 90 ohm fuel gauge sensor type
- Fixed 5V pressure sensor calculations
- Fixed scaling of pressure and other 5v sensor types.
- Updated security lock/unlock dialog
- HDL log mode verified with HEFI, TermX and Sniper, Standalone
- Local playback mode works with either HDL or DLZ files. Note: forward/rewind only works with HDL files
- Local sensor broadcast if configured in TermX IO structure
- Gauge values font size updated

#### ProDash 5.0.54b Firmware Update

#### Core improvements

- New coprocessor firmware and driver, local inputs are read at up to 100Hz rate
- Gyro channels operational
- Records data logs in 'Holley Data Log' (HDL) format. Use the new Holley Next-Gen Log Viewer application to view.
- HDL filenames are of the form *sssss\_nnnn.hdl,* where S is the serial number and N is an incrementing count from 0000-9999 with wrap around
- Datalog playback now has forward/reverse function
- Local speed3 / speed4 inputs now operational
- Supports EGT 8ch in standalone mode
- Gui speed improvements

#### **Operational Changes**

- "RPM" mode in a local channel now gives a real revolutions per minute (i.e., not divided by number of cylinders).

- "Engine RPM" mode is the only one that uses number of cylinders in the calculation, and will override the main gauge RPM channel.

#### UI improvements

- Cleaned up look/feel of dialogs, blur feature on background
- Graph widget now has minor tics implemented.
- Analog gauges: Additional border styles available: Black, Grey and Silver. These are shown in the *Customize gauge* dialog under 'Border Style'. Default border style for new gauges is 'Black'







Figure 1 – Grey

Figure 2 - Black

Figure 3 - Silver

- New Odometer preset function available in Utilities | Service menu
- Added drop-down sensor selection for analog inputs:

ocar I	O CANI D	evices Plugins Vehicle Mi	ec.			_	
	Name	Туре		Pin	Notes		
101	io.1	Holley 200psi (554-103)		18	lo.1		
02	io.2	(disabled) Custom 5V		27			
03	io.3	Holley 50psig Holley 100psi (554-102)		19			
04	io.4	Holley 200psi (554-103) Holley 500psi (554-136)		28			
05	io.5	Holley 1600psi (554-104)		° 20			
06	io.6	Holley 3000psi (554-137) 100psi Oil Pres GM LSx Oil Pressure		= 29		. ●	k

Holley 50psig Holley 100psi (554-102) Holley 200psi (554-103) Holley 500psi (554-136) Holley 1600psi (554-104) Holley 3000psi 100psi Oil Pressure (overrides oil pressure) GM LSx Oil Pressure (overrides oil pressure channel) Racepak 200C IR temperature Racepak Laser Height Holley 30amp Sensor (554-170) Holley 50amp Sensor (554-171) Holley 200amp Sensor (554-171) Holley 350amp Sensor (554-170) Holley 1bar (538-24) Holley 2bar (538-13) Holley 3bar (554-107) Holley 3.5bar SS (554-134) Holley 5bar SS (554-108) GM LSx MAP (overrides MAP chanel) Holley CTS GM LSx CTS Custom CTS Holley MAT Custom MAT Custom Ohms Custom 5V

- New Bargraph Style 2 widget, allows control over both width and height of the bar. Minor Ticks are viewable as bars between legend values

		5900	rpm			
1 m						
0		4	5	6	7	8