Title	Touch Panel Display Software Update 4.02
Date	March 2019
Scope	This bulletin applies to Ionpure Touch Panel Display, model IP-POWERDSP-TP (W2T829935), which can be used with two of the Ionpure DC Power Controllers, the IP-DCR600V15A-M (W2T827123) and the IP-DC3PH600V-M1 (W2T827150).
Purpose	Several enhancements have been implemented because of requests from our customers, including retention of DC current setpoints after interruption of 24 VDC control voltage, password protection, and correction of resistance calculation.
Tools:	Windows based PC and a USB memory stick (1GB or higher) formatted in exFAT. A stylus or pen is recommended for pressing the small buttons on the Touch Panel Display menus.

Software Installation Procedure

NOTE: the folder "XpanelProject" must be in the root directory of the USB drive to perform software update on the touch panel display (TP DSP). See Appendix.

1. Download zip file "IP_SOFT_TPDSP_0319_v402.zip" to desktop or directly to USB drive
2. Locate zip file and perform "Extract All…" to D:\ (or drive letter of USB stick).
3. Once completed, remove USB memory stick from PC
4. With TP DSP powered off, insert the memory stick into the USB connection on the bottom of the TP DSP.
5. Connect a 24 VDC power supply to the TP DSP and plug in the 24VDC power supply to power up the TP DSP.
6. Wait for the TP DSP to boot past the menu screen to the Ionpure Overview (1-4) screen.
7. The following sequence is required to enter the "Xpanel config": press lower left corner (white box appears); lower right corner (white box appears); upper right corner (the "Xpanel config" box will appear).
8. On the Xpanel config press "EXIT" (bottom right).
9. On Ethernet Loader v1.35 menu, push "Removable Storage -> Xpanel" (on the left near the bottom).
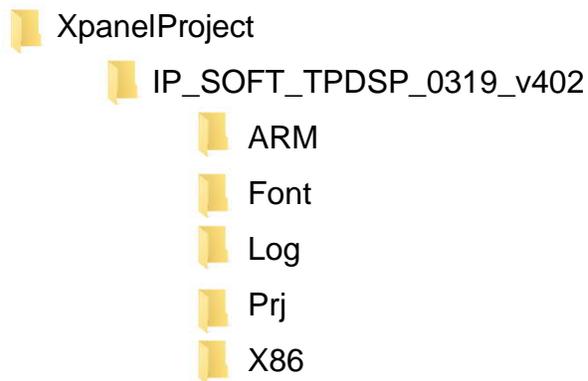10. If you forgot to plug in the memory stick in Step 4, plug it in now and hit the "Refresh" button.

11. Select (highlight) project IP-SOFT-TPDSP… (this software works with DCR and DC3). Ver 2.5.2. refers to the Xpanel software that is used to create the program for the TP DSP.
12. Push "Project Update" button.
13. Wait until the line below Storage -> Xpanel reads "All file update: OK", then close the Storage -> Xpanel window and push "OK" at the top right of the Ethernet Loader v 1.35 window.
14. The "eldr" window will pop up - hit OK until it goes into System Shutdown.
15. Hit OK again to restart.
16. Wait for the TP DSP to finish restart and go to the Ionpure Overview (1-4) screen.
17. Software update is complete. Unplug the memory stick. Cycle off/on the 24 VDC power supply to make sure the TP DSP boots up to the Ionpure Overview screen.
18. See TP DSP instruction manual for operation details (including password).

Software Update Features

- Retains current setpoint after power shutoff.
  - Auto submits retained current setpoint to turn back on power supplies after 45 seconds of HMI program start.
- New lock/unlock security login.
  - Setpoint, enter, and external control buttons elevated to login security.
  - Returns to locked condition after control power interruption.
  - Password can not be changed by user.
- Replaced Analog I/O Status section with Power Controller Status section.
  - Stop or Run, like Power Panel Software.
  - I/O status still available through Ionpure Power Panel software.
- Replaced AC Line section with DCR/DC3 Runtime and Serial Number Section.
- Fixed alarm icon so that it goes away when no alarm condition present.
- Increased size of Enter button for easier use.
- Corrected resistance calculation (decimal point location) for DCR on Overview and Detail pages.
- Changed temperature text font.
- Changed number of decimal places on overview page: ###. volts ##.# amps ###.# ohms.

Appendix

Folder structure after extracting file IP_SOFT_TPDSP_0319_v4.02.zip:

- 📁 XpanelProject
  - 📁 IP_SOFT_TPDSP_0319_v402
    - 📁 ARM
    - 📁 Font
    - 📁 Log
    - 📁 Prj
    - 📁 X86

When extracting the file IP_SOFT_TPDSP_0319_v4.02.zip, most unzip programs will (by default) create a folder with the same name as the zip file, and put the extracted folders and files there. For this case you do NOT want to create such a folder, you want to extract the folders and files directly into the root of the USB drive. When you "Extract All", delete the proposed file name and leave just the drive letter, for example D:/.