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PARKER HMI and Visualization Products
Moving to the Next Generation
A Guide to Migrating from the XPR2 to the new XT

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Version 1.0

Parker

About this Guide

This guide is meant to assist users of the XPR2 in upgrading to the latest XT model. Since this guide only provides an overview of the key differentiating features, it should not be used as the sole documentation when moving from a previous generation XPR2 to the new XT.

This guide should be used in conjunction with each individual products data sheet and user manual. Full links to each products individual product page is provided below where the user can find the aforementioned documentation:

Product	Product Page
XPR2	bit.ly/ParkerMotion_XPR2
XT	bit.ly/Parker_XT
Interact Xpress	bit.ly/Parker_Xpress

If you need any technical assistance or have any questions regarding the best method of migration for your specific application. Feel free to contact us at:

Email: emn_support@parker.com
Phone: 1-800-358-9070

Product Overview

The XT is not a standard HMI series; every aspect of its design protects against common failure modes to provide long-lasting and reliable operation and to eliminate machine downtime and maintenance. The XT's fan-less design allows users to install-and-forget by avoiding the most common component failure in HMIs—the fan. In addition, the XT's vent-less design helps shield against metal filings and other contaminants from entering the unit, eliminating any need to internally dust or clean the unit.

Often rigidity comes at the sacrifice of looks—this is not the case with the XT's sleek cast-aluminum frames. Coupled with a mechanically reinforced SD card for storage and intensive shock and vibration specifications, the XT is meant to withstand the most intense industrial applications. Yet, its minimal bezels and cabinet depths provide a modern solution that reduces intrusion into the cabinet and minimizes installation area.

Every application on the XT is powered with the 1.83 GHz processor and 4GB DDR3L DRAM running the award winning Xpress HMI runtime software. The XT can communicate freely with multiple devices using its plethora of device drivers, dual-LAN, multiple USB, and traditional serial ports. With a configurable RS232/422/485 the XT does not constrain your communication options.

XPR2 versus XT

Product Descriptions	
	XT – Parker Xpress PowerStation - NEW The XT is the new Parker Xpress PowerStation, upgraded to meet today's demanding processing needs and harsh industrial environments. With the fan-less vent-less design the Next Generation hardware makes the XT a low maintenance option that keeps machines running for the long haul. Running the latest Interact Xpress 4.1, this generation has updated communication drivers to talk to all the latest industrial devices.
	XPR2 – Previous Generation – MATURE The XPR2 is the precursor to the latest XT. The XPR2 provided a durable, affordable platform with robust features such as solid state compact flash and fanless design. The XPR2 includes Interact Xpress 3.1, an award winning software platform, which provides advanced remoting features and the ease of use of drag-and-drop programming. The XT continues its legacy today with Interact Xpress 4.1.

Table 1 provides a brief summary of specifications meant to highlight the overriding differences between the XPR2 and XT.

XPR2 - Mature	XT - NEW
500 MHz AMD LX800	1.83 GHz Quad Core
512 MB Compact Flash	2 GB SD card
256 MB DDR DRAM	4 GB DDR3L DRAM
4:3 Display	16:9 Display
1024 x 768 Max Resolution	1920 x 1080 Max resolution
Interact Xpress Runtime 3.1	Interact Xpress Runtime 4.1
24 Vdc	24 Vdc
bit.ly/ParkerMotion_XPR2	bit.ly/Parker_XT

Table 1: Side-by-sde specification comparisons between XPR2 and the XT

Migration and Product Differences

Software
The latest Xpress Manager 4.1 is able to upgrade all prior generation Xpress projects (.lrp) into the latest 4.1. Projects **must** be upgraded to 4.1 in order to run on the latest XT hardware. Conversely, projects must remain as 3.1 in order to work with the XPR2. Xpress Manager 4.1 can open, edit, download, and upload 3.1 projects, but **cannot** create new 3.1 projects. If a new XPR2 project is needed, the user must use Xpress Manager 3.1.

When a user upgrades a 3.1 or earlier project to 4.1 they're also upgrading the project from a 4:3 resolution to a 16:9. Screens are not scaled automatically, instead projects will be provided with additional work space to the left of the screen that can be utilized as desired.

Only one instance of Xpress Manager should be installed at a time. If you only need Xpress Manager to program XT PowerStations, only install version 4.1 or higher. If you only need to program XPR or XPR2 PowerStations, only install version 3.1. If you need to program both XT and XPR/XPR2 PowerStations on one computer, use version 4.1. But, be sure not to upgrade any projects to version 4.1 that are intended only for XPR/XPR2 PowerStations as they will not work and the older version will be lost.

Serial Communications
On both the XPR2 and new XT series, the configurable RS232/422/485 serial ports are defaulted to RS232. To configure the RS232/422/485 port in an XPR2 PowerStation, a user would simply need to change the configuration settings in Xpress Manager. To configure the RS232/422/485 selectable port in the XT, it is necessary to both configure a set of DIP switches, configure a BIOS setting, and change the settings in Xpress Manager. The DIP switches are accessible on the XT by removing the cover plate. The full instructions for configuring the XT COM port are provided in the user manual available bit.ly/Parker_XT.
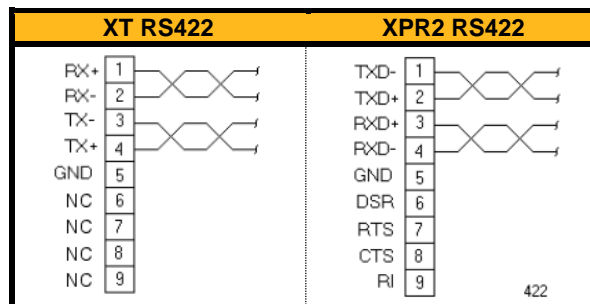
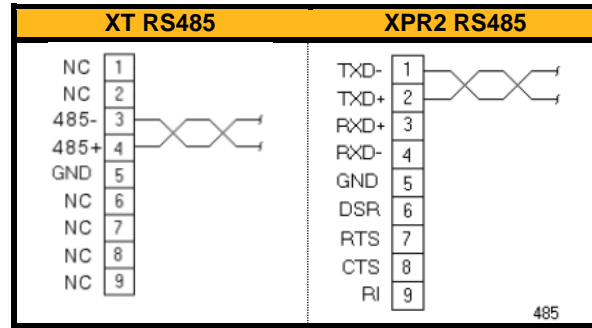| XT	XPR2
COM 1: RS232/422/485 COM 2: RS232	COM 1: RS232 COM 2: RS232/422/485

Table 2: XT versus XPR2 Serial Port Comparison

The XPR2 configurable serial port was located on COM2 while the XT the configurable serial port is located on COM1. Users that configured COM2 and utilized it within their Xpress application may need to reprogram their unit to instead reference COM1.

The pin-out for RS232 is identical between the XPR2 and XT series; However, there are differences in the RS422 and RS485 pin-outs shown in the wiring diagrams provided below:

RS422 and RS485 Diagrams

XT RS422	XPR2 RS422
RX+ 1 RX- 2 TX- 3 TX+ 4 GND 5 NC 6 NC 7 NC 8 NC 9	TXD- 1 TXD+ 2 RXD+ 3 RXD- 4 GND 5 DSR 6 RTS 7 CTS 8 RI 9 422

XT RS485	XPR2 RS485

Physical Differences

Table 3 provides a list of the XPR2 models and their closest mechanical size equivalent in the XT series. The new XT models do not provide a mechanical drop-in replacement and this table is meant to be used as a product comparison alone. The new XT 16:9 models provides 40% more screen space over the previous XPR2 4:3 series. In addition, the new XT series provides additional size ranges not previously available in the XPR2 series.

Some users may chose this opportunity to either increase or decrease the size of their touch screen depending on preference. If the application does not allow flexibility to transition from an XPR2 4:3 cutout to the new XT 16:9 cutout, it is recommended that the customer user Parker's new transition plates, described in the next section.

XPR2 Model Size	XPR2 Cutout [mm]	XT Model Size	XT Cutout [mm]
EPX200…	--	XTA-000-…	--
6" XPR206	114.3 x 157.5	7" XTA-007-…	136.0 x 192.0
8" XPR208	154.0 x 220.0		
10" XPR210…	252.7 x 320.0	10" XTA-010-…	176.0 x 272.0
15" XPR215…	315.0 x 403.9	15" XTA-015-…	259.5 x 349.0

Table 3: XPR2 models and closest mechanical XT equivalent

Transition Plates

To make the mechanical transition as easy as possible, Parker has developed 4:3 to 16:9 adapter plates for some sizes. These plates require no changes in the users' current XPR2 cutout and allow the new XT series to fit within the same mechanical constraints.

The transition plate system consists of two steel plates. The first steel plate containing the treaded studs, is set within the legacy XPR2 cutout on the outside of the customer enclosure. The threaded studs provide the alignment required to ensure proper installation and centering. The second plate is attached to the first from the inside of the enclosure. When compressed with the included lock nuts, the two plates provide a compression force providing a seal and secure hold. The new XT then mounts into the assembled transition plate system using the same installation process and clamps as if it were mounting into a new standard enclosure cutout.

The outside-facing steel plate is colored ANSI 61 gray to match Hoffman and many other enclosure brands. If a different paint color is required, please contact Parker.
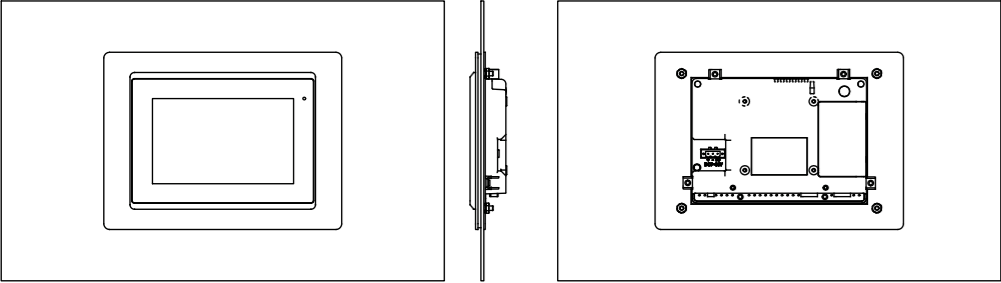
XPR2 Size	XT Model	Conversion Plate Part #
10"	XTA-010-…	ADPT-010-600
15"	XTA-015-…	ADPT-015-600