



***TouchInternational***

**48-B-458-02-KIT**

**4/5/8-Wire Combo Resistive Controller Specification Guide**

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## Document Revision History

Revision	Page	Content	Revised By	Date
1.1	10	Updated AutoCAD Drawings	Bhushan Vaidya	7/13/2009

## Product Overview

### 48-B-458-02-KIT

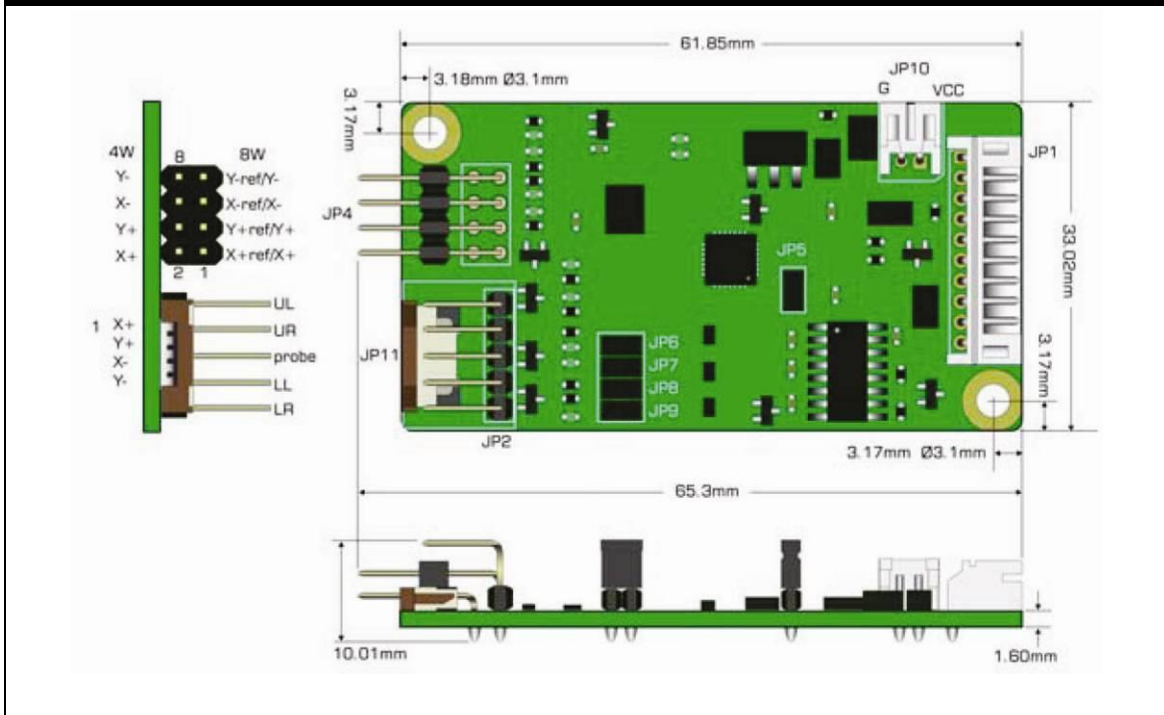
The RoHS compliant controller, specifically designed for 4, 5 and 8-wire resistive sensors, offers a fast touch response while also providing excellent reliability and proven performance. It communicates with the host computer using the USB or RS-232 serial interface. The touch panel driver emulates the mouse left and right button functions.

## Supported Operating Systems

OS	Version	Interfaces
<b>Windows</b>	Windows Vista, XP/2000, 9x/ME Windows CE 2.12/3.0/.net/5.0 Windows Embedded Windows XP Tablet PC edition Windows 7	RS232/USB
<b>Windows</b>	Windows NT4	RS232
<b>Linux</b>	Mandrake (Mandrake 9.1/9.2/10, Mandriva 2005, Mandriva 2006) Red Hat (7.3/8.0/9.0) Fedora Core (I/II/III/IV/V) Yellow Dog (3.X) SuSE (9.2/9.3/10/10.1) Ubuntu (5.1/6.06) Debian (3.1, Kernel 2.4.x/2.6.x)	RS232/USB (up to Kernel 2.6.x)
<b>DOS</b>	DOS	RS232
<b>Mac</b>	Mac OS, Mac OS X (IBM, Intel CPU)	USB
<b>QNX</b>	QNX RTOS v6.3	RS232

*Note: The 4, 5, 8-Wire Combo Resistive Controller can emulate both 3M and Elo protocols using RS232 communication.*

## Controller Drawings



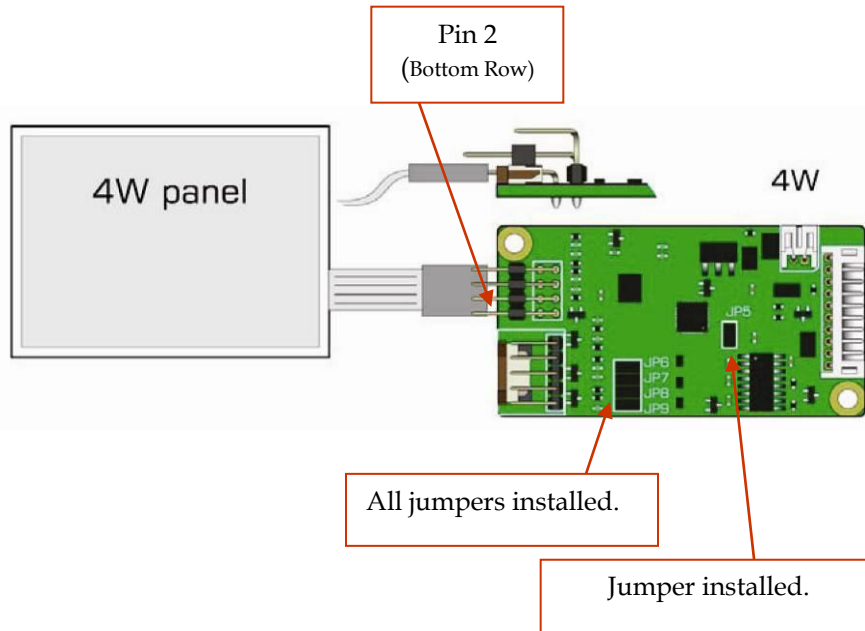
## Specifications

<b>Circuit Board Dimension</b>	34mm x 61.89mm (1.3" x 2.44")
<b>Power Requirements</b>	D.C. +5V (Maximum 75mA, 50mV peak to peak maximum ripple noise)
<b>Operating Temperature</b>	0°C to 70 °C
<b>Storage Temperature</b>	-40 °C to 125 °C
<b>Relative Humidity</b>	95% at 60 °C
<b>Interface</b>	Bi-directional RS-232 serial communication. No Parity, 8 Data Bits, 1 Stop Bit, 9600 baud (N,8,1,9600) USB: 1.1, USB 2.0
<b>Resolution</b>	2048x2048
<b>Report rate</b>	RS232 Model: Max 160 points/sec. USB Model: Max 250 points/sec.
<b>Response time</b>	Max. 20 ms
<b>Attached Cable</b>	<u>RS232</u> : 180cm shielded cable with 9-pin D-sub connector <u>USB</u> : 180cm shielded cable with USB-A connector for USB port <u>Y-Cable</u> : 1*10 cable length, USB 5cm, RS232 5cm
<b>Regulatory Approvals</b>	FCC-B, CE
<b>Panel Resistance</b>	4 & 8-wire resistive model: 200 ~ 900 ohm/sq. 5-wire resistive model: 50 ~ 200 ohm/sq.

# Connecting the Touch Screen to the Controller

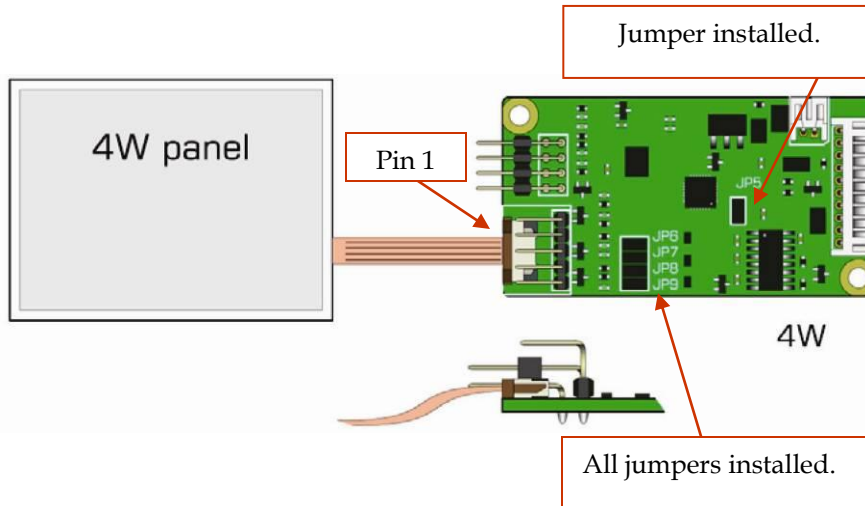
## 4-Wire with AMP Connector

JP4 Pinout	
8	Y-
6	X-
4	Y+
2	X+



## 4-Wire with ZIF Connector

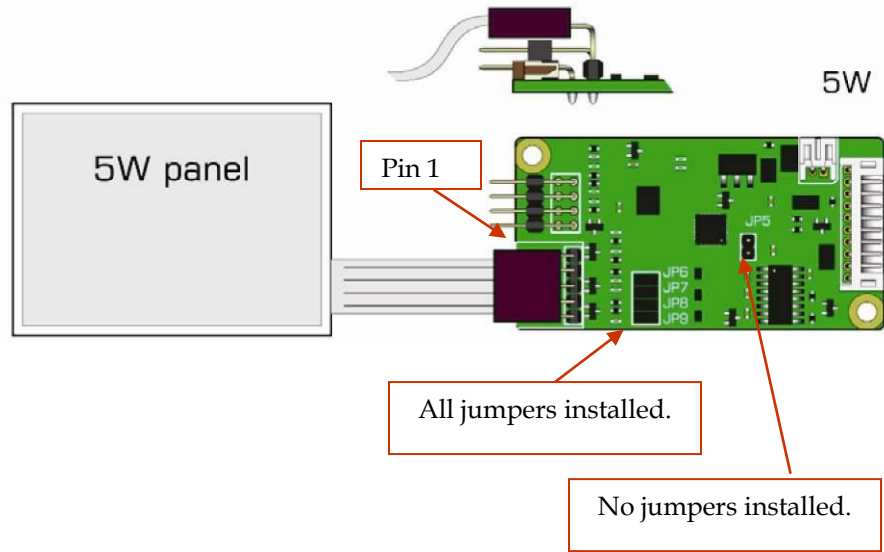
JP11 Pinout	
1	X+
2	Y+
3	X-
4	Y-



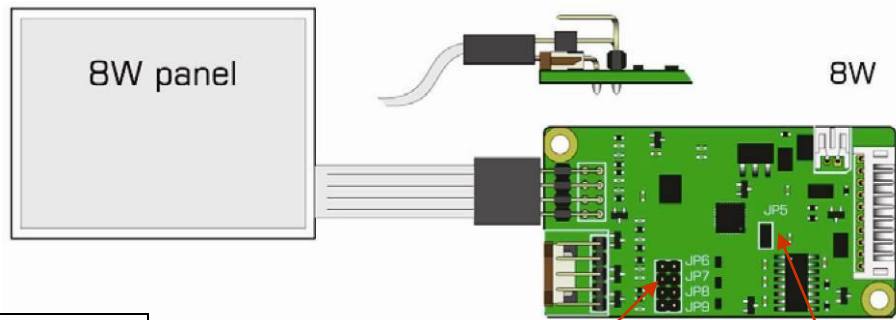
# Connecting the Touch Screen to the Controller

## 5-Wire with AMP Connector

JP2 Pinout	
1	UL
2	UR
3	Sense
4	LL
5	LR



## 8-Wire

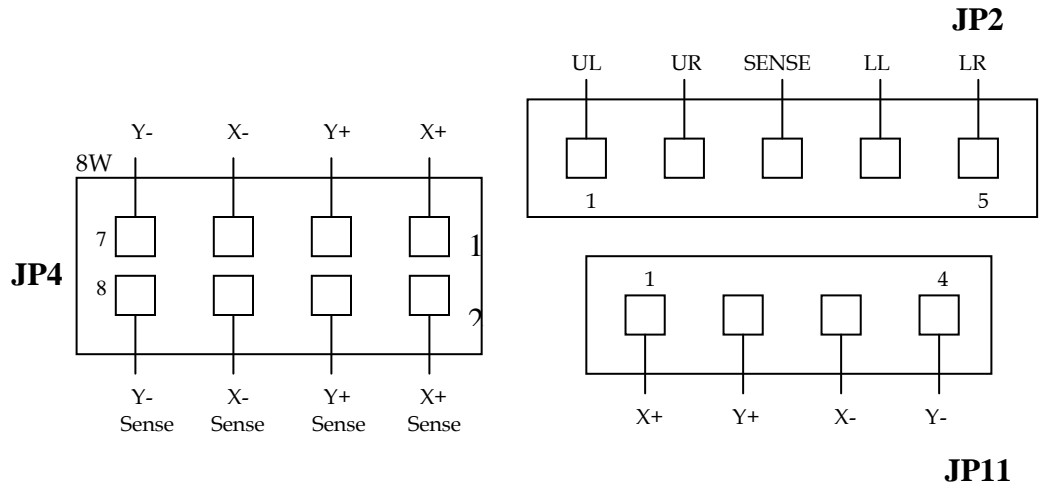
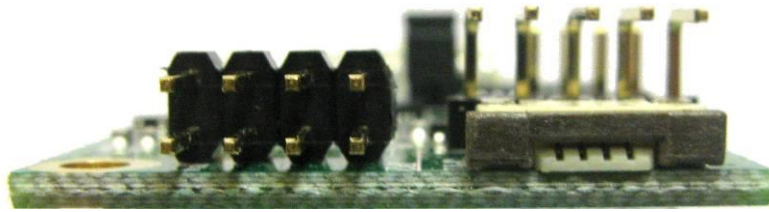


JP4 Pinout			
8	Y- Sense	7	Y-
6	X- Sense	5	X-
4	Y+ Sense	3	Y+
2	X+ Sense	1	X+

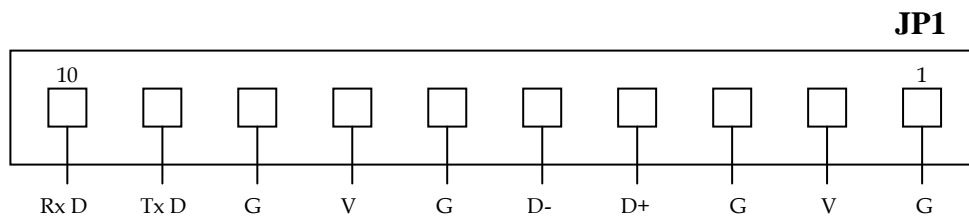
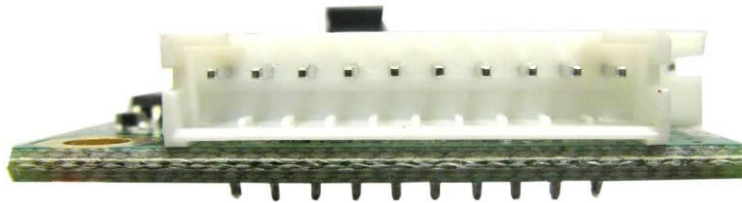
*Note: If you would like the cable to connect the 2x4 row header to the 1x8 row header, please contact Touch International technical support.*

# Pin Assignments

## Connector



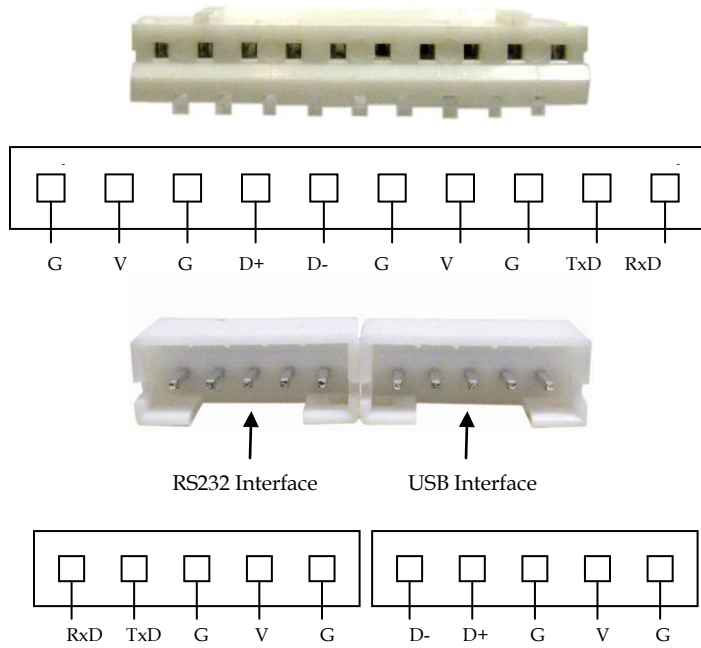
## Y-Cable Connector



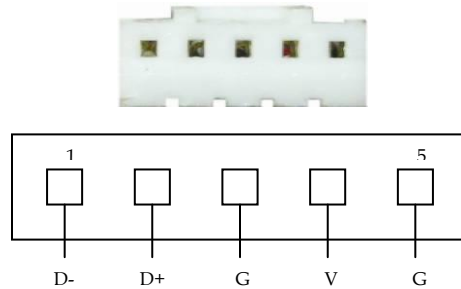


# Pin Assignments

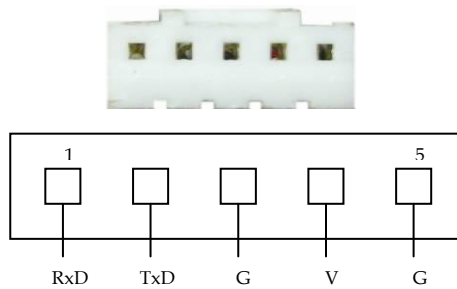
## Y-Converter Cable TI# 1300262



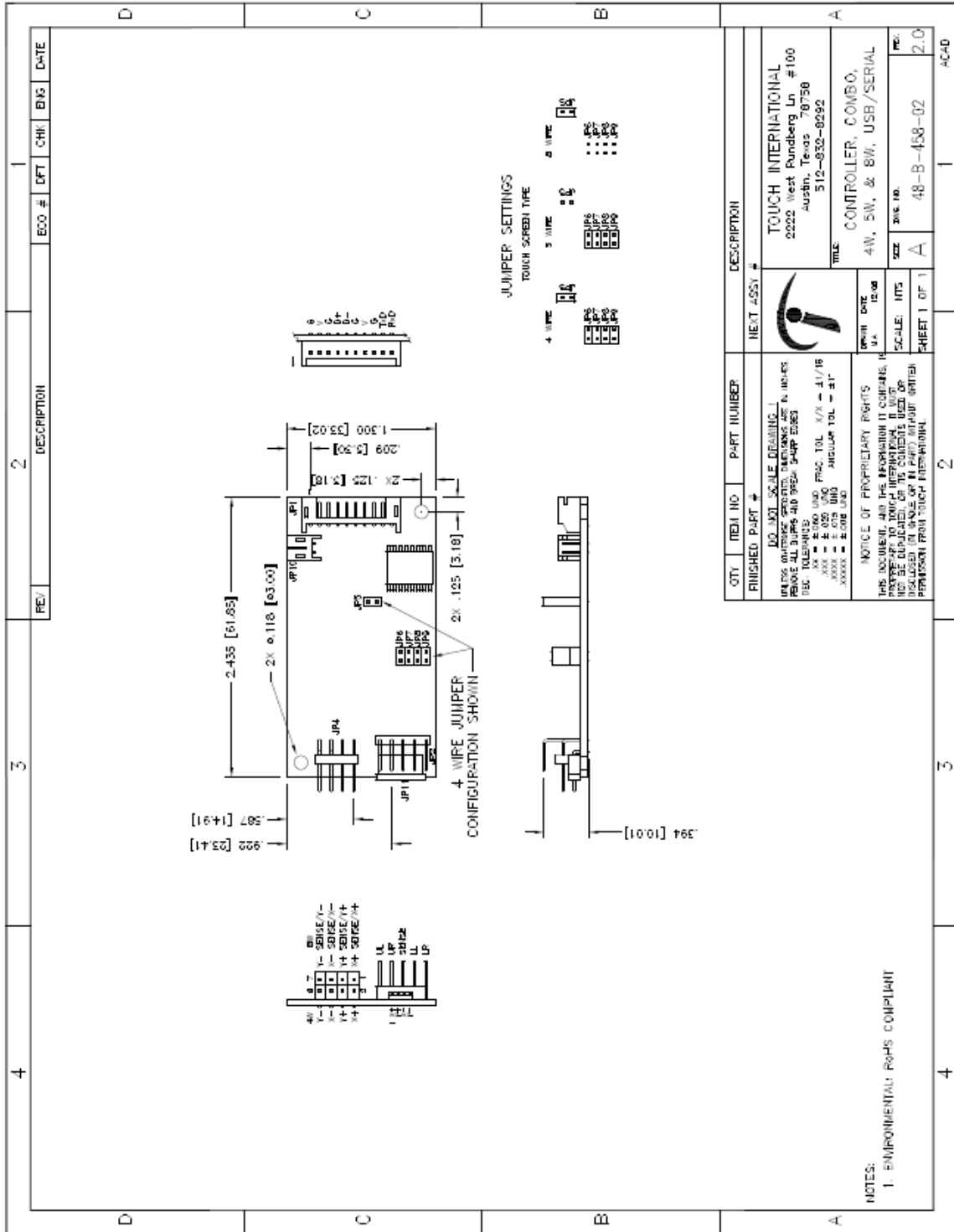
## USB Cable TI# 1300252



## RS232 Cable TI# 1300251



Drawing:



## Kit Includes

Part Number	Description
4/5/8-Wire Controller (1)	TI# 48-B-458-02
Y-Converter Cable	TI# 1300262
USB or RS232 Cable (1)	TI# 1300252 (USB) or TI# 1300251 (RS-232)
<p><b>Contact TI sales representative for a complete list of TI's OEM and retail products.</b></p> <p>Touch International 2222 W. Rundberg Ln. Suite 200 Austin, TX 78758 Tel: 512.832.8292 Fax: 512.491.6381 technicalsupport@touchintl.com www.touchinternational.com</p>	