

FIELD SERVICE BULLETIN

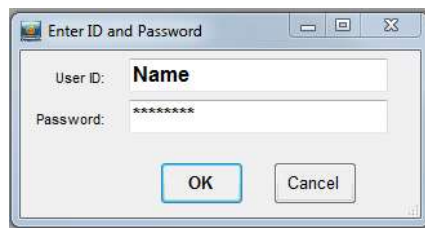
Subject: Troubleshooting for the Protocol Plus communications option

Controller parameters (see Protocol Plus manual to enter Communications Page)

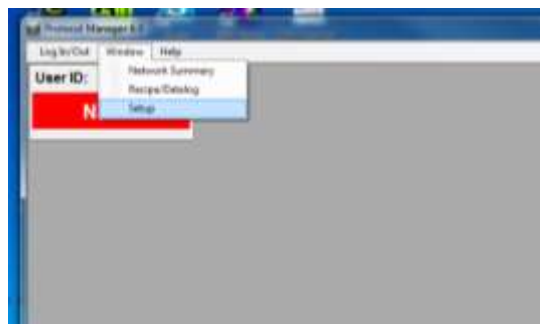
- Address (Default = 1) This setting must be different on each control/oven if using RS422/RS485 interface.
- Mode (Default = OFF) This must be set to Modbus.
- Baud Rate (Default = 19.2K) If you are having problems, going to a lower baud rate may help, but do not change to start with.
- Parity (Default = None) This should remain the default.

Protocol Manager parameters

- Log on the highest level security (Level 4). The default password initially is “despatch”.



- Click on the Windows pulldown menu at the top of the screen.
- Click on Setup menu.



- Click on the Comm Setup tab and verify the settings match the controller parameters set above. Click on the OK button when finished.



- Click on the Network tab and highlight the oven you are trying to setup. Click on the Edit button.



- Make sure the address matches and the password is set to the level 2 password of the controller (Default = 2). The enable communications box should be checked. Click on OK when finished.



The software should now show a green ON-LINE. If not, check the hardware and cabling.

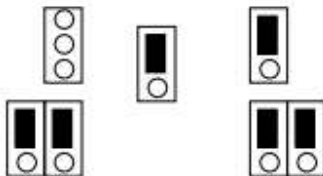
Controller hardware and Cabling

Check the communications card

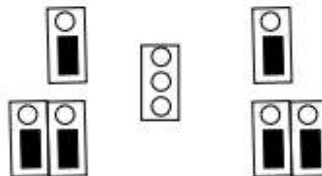
- The card needs to be installed correctly (jumpers are on the bottom of the card and should be facing the green terminals)
- The jumpers need to be setup for RS232, RS422 or RS485 depending on the interface being used. See Figure below.



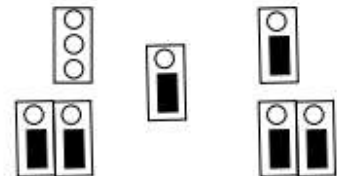
RS232 Jumper Settings



RS422 Jumper Settings

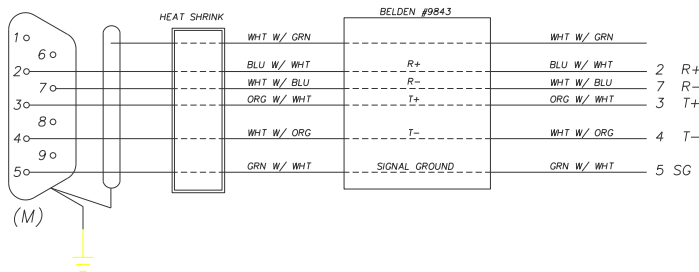


RS485 Jumper Settings



Check cabling between the controller and outside of oven

- The R+ should be connected to terminal #1 on the back of the controller.
Check with an ohm meter that pin #2 on the 9 pin connector on the outside of the oven is connected to this terminal.
- The R- should be connected to terminal #2 on the back of the controller.
Check with an ohm meter that pin #7 on the 9 pin connector connected to this terminal.
- The T+ should be connected to terminal #3 on the back of the controller.
Check with an ohm meter that pin #3 on the 9 pin connector connected to this terminal.
- The T- should be connected to terminal #4 on the back of the controller.
Check with an ohm meter that pin #4 on the 9 pin connector connected to this terminal.
- The SG should be connected to terminal #5 on the back of the controller.
Check with an ohm meter that pin #5 on the 9 pin connector connected to this terminal.



Check cabling between the computer and outside of oven

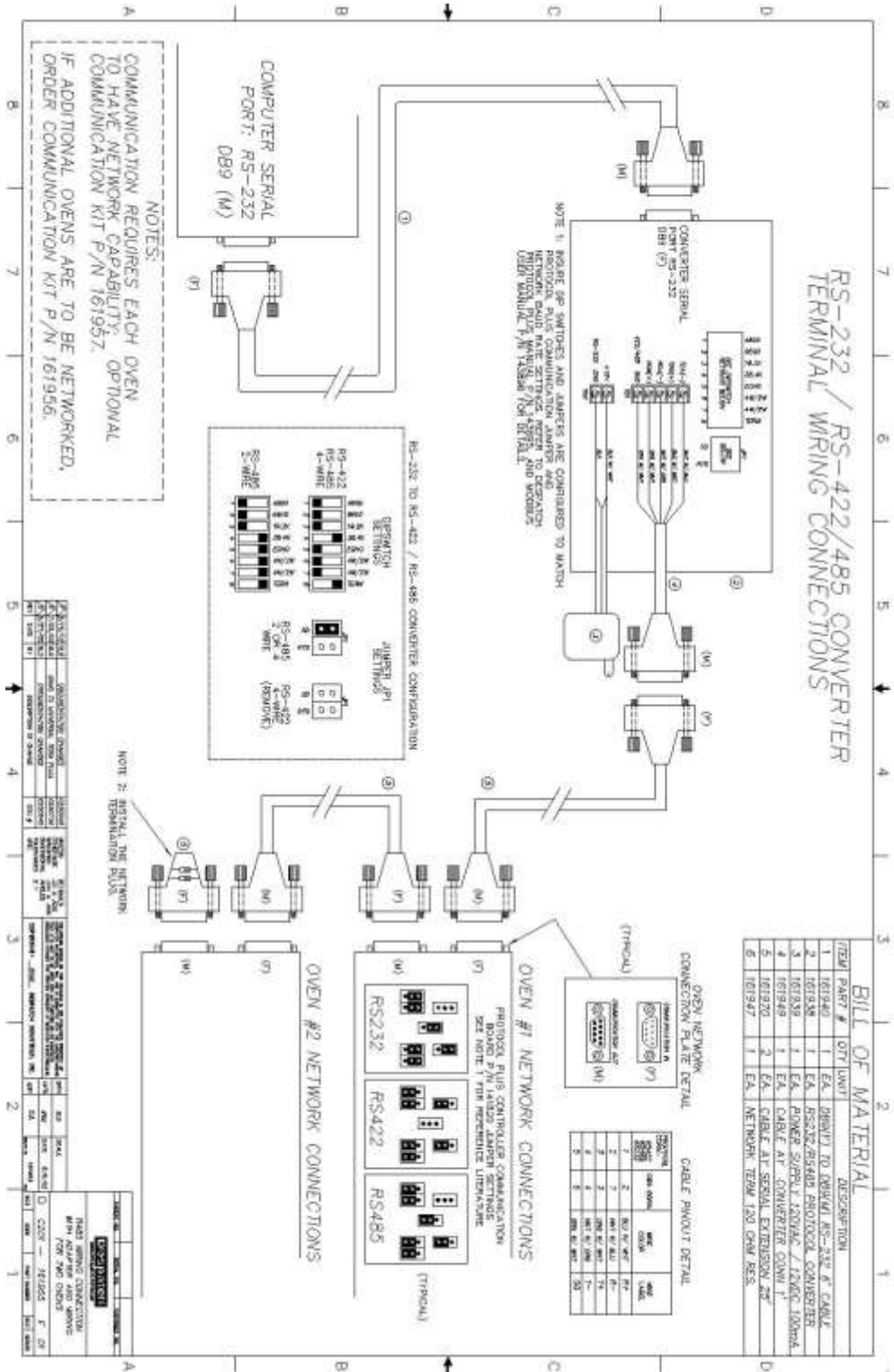
RS232 INTERFACE

The cable running from the Oven's 9 Pin connector and the computer should be a null modem cable (for a PC with a 9 pin connector, pin 2 at each end connects to pin 3 at the other end, and the cable requires a female 9 pin plug at the PC end and a male 9 pin plug at the Oven end). Despatch part number 161971 or equivalent.

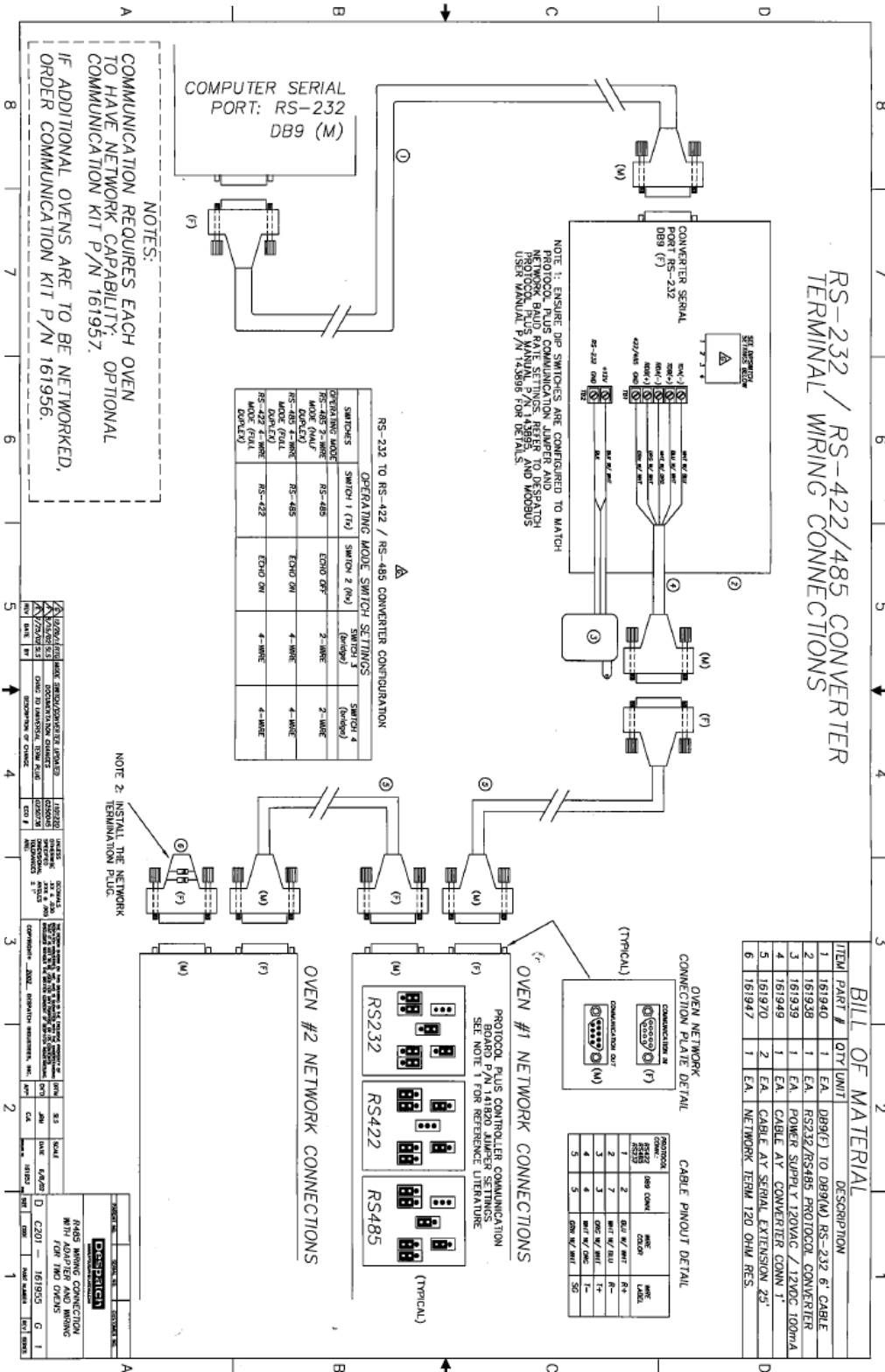
RS422/RS485 INTERFACE

The typical wiring schemes are shown below. Additional ovens (maximum of 32 ovens) can be added using cable p/n 161970.

Old Serial Converter



New Serial Converter



USB Converter

DIP SWITCH SETTINGS			
RS-485 2-WIRE MODE NO ECHO	SW1 SW2 SW3 SW4	ON	OFF
		ON	OFF
		OFF	OFF
		OFF	OFF

NOTE: PART 305401 INCLUDES A 3' USB CABLE

BILL OF MATERIAL			
ITEM	PART #	QTY	UNIT
1	305401	1	EA.
2	161949	1	EA.

DESCRIPTION	
SERIAL ADAPTER USB TO RS485	
CABLE AY CONVERTER CONN 1'	

DRN	A09	SCALE	
OK'D	D09	DATE	11/12/12
APP	A09	MADE TO	NIS

	SERIAL ADAPTER USB TO RS-485 ASSY
--	--------------------------------------

PARENT NO.	SERIAL NO.	CUSTOMER NO.

SIZE	CODE	PART NUMBER	REV	SERIES
B		274155	A	01

REV	DATE	BY	DESCRIPTION OF CHANGE	ECO #	UNLESS OTHERWISE SPECIFIED DIMENSIONAL TOLERANCES ARE:	DECIMALS	THE DESIGN SHOWN ON THIS DRAWING IS THE EXCLUSIVE PROPERTY OF DESPATCH INDUSTRIES AND IS SUBMITTED WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR ITS CONTENTS DISCLOSED WITHOUT THE WRITTEN CONSENT OF DESPATCH INDUSTRIES.	COPYRIGHT © 2012 DESPATCH INDUSTRIES.