

## **Communication Cables Pin-Outs**

### **Cables for Minilink, Comm link and MOD 30ML**

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#### **Problem Description:**

This tech-note covers the pin-outs for the communication cables used with the MOD 30, MOD 30ML and Modcell equipment.

#### **Applies to:**

MOD 30, MOD 30ML, Modcell, Comm link (1720N), Mini-link Ext (1733N) and personal computer.

#### **Explanation:**

Following is a table that summarizes the cables:

Cable Model Number	Connecting equipment	Communication Standard
109S1854	MOD 30ML Built-in RS-232 port in the front on the controller to PC	RS-232
1774F	Comm link (1720N) and PC's 9 pin serial port	RS-232
1753F	Comm link (1720N) and PC's 25 pin serial port	RS-232
Generic	Mini link – Ext (1733N) 9 pin port and PC's 9 pin serial port	RS-232
Generic	Mini link – Ext (1733N) 9 pin port and PC's 25 pin serial port	RS-232
Generic	Mini link – Ext (1733N) 25 pin port and PC's 25 pin serial port	RS-232
Generic	Mini link – Ext (1733N) 25 pin port and PC's 9 pin serial port	RS-232

## Technical Notice

The most commonly used cable for communication with MOD 30ML is the RS 232 cable with Model number 109S1854. The pin outs for this cable are given below:

WIRING CHART FOR CABLE 109S1854					
Wire No.	Color	Pin no. on the 9 pin connector side	Function	To the connector on the MOD 30ML side	Function
1	RED	2	Rx (from PC)	TIP	Tx
2	BLACK	3	Tx (from PC)	RING	Rx
3	BARE	5	Common	SLEEVE	Common

### Cables for 1720 Communication Link:

Pin outs for the 1774F RS-232 cable for connecting PC to 1720 Communication Link is given below:

Color	Pin no. (9 pin connector on the PC side)	Pin no. (25 pin connector on the Comm. Link side)
BLACK	2 Rx	2 Tx
BLACK	3 Tx	3 Rx
RED	5 Common	7 Common
GREEN	7 RTS	5 CTS
WHITE	8 CTS	4 RTS
	1 GND	Shield

## Technical Notice

Pin outs for the 1753F RS-232 cable for connecting PC to 1720 Communication Link is given below:

Color	Pin no. (25 pin connector on the PC side)	Pin no. (25 pin connector on the Comm. Link side)
BLACK	1 GND	1 GND
BLACK	2 Tx	3 Rx
BLACK	3 Rx	2 Tx
GREEN	4 RTS	5 CTS
WHITE	5 CTS	4 RTS
RED	7 Common	7 Common

### Cables for Mini Link External

Pin outs for the RS-232 cable for connecting PC to 1733N Mini Link External is given below:

PC side			Mini Link External Side		
25 Pin port - DB25f	9 Pin port - DB9f	Function	Function	9 Pin port- DB9m	25 Pin port - DB 25m
1	Shell	Ground	Ground	1	1
2	3	Tx Data	Rx Data	2	2
3	2	Rx Data	Tx Data	3	3
7	5	Common	Common	5	7
6	6	DSR	RTS	7	4
20	4	DTR	CTS	8	5
			+5 Vdc	9	

**Notes:**

1. DSR-RTS and DTR-CTS connections are not required if Jumpers W16 and W17 are removed.
2. The +5Vdc connection is for test purposes only.
3. The Ground connections are optional.
4. The cable shield may be connected to ground at either end, but not both.

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# ***Technical Notice***