

M-7679 R-PAC QUICK REFERENCE GUIDE

PROTECTION, AUTOMATION AND CONTROL SYSTEM FOR RECLOSER, SWITCH, SECTIONALIZER AND ADVANCED DISTRIBUTION AUTOMATION APPLICATIONS.

Source Orientation setting



Required Tools:

- PC running Windows 10® or higher
- S-7600 IPScom Communications Software

Download the latest **IPScom software** at:

<https://beckwithelectric.com/products/s-7600/>

Required Documentation:

- M-7679 Instruction Book
- M-7679 Application Guide
- Communications and Cybersecurity A.G.

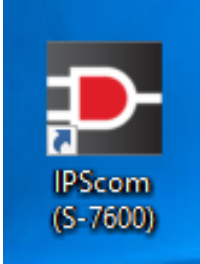
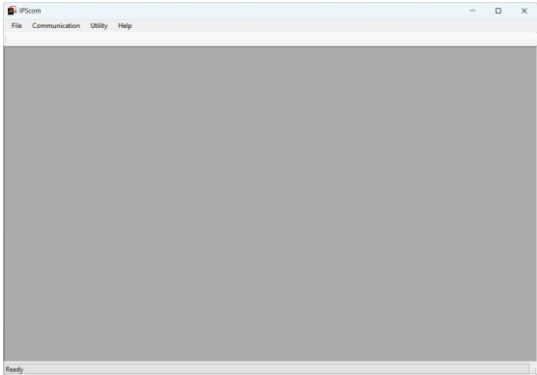
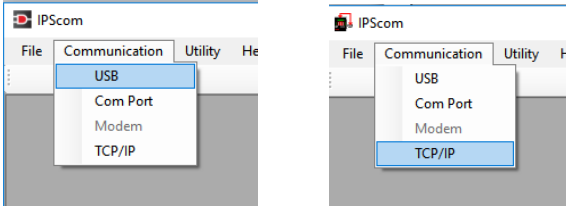
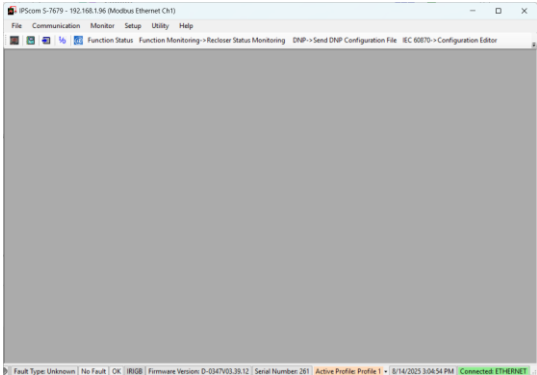
Download the latest **M-7679 Instruction Book** at:

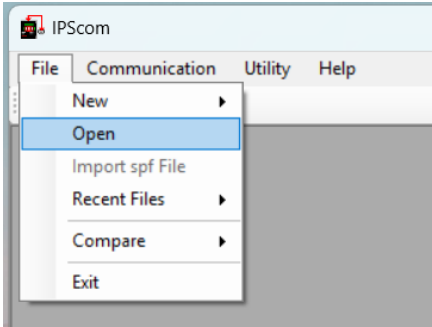
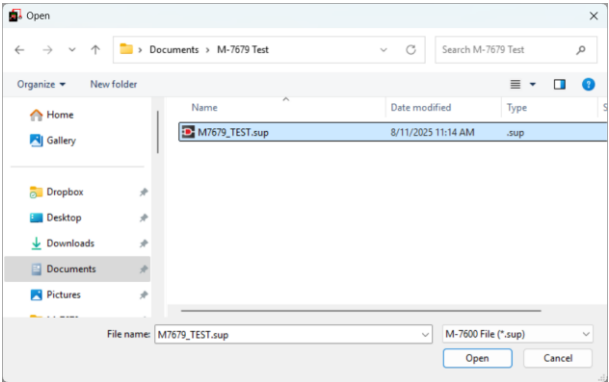
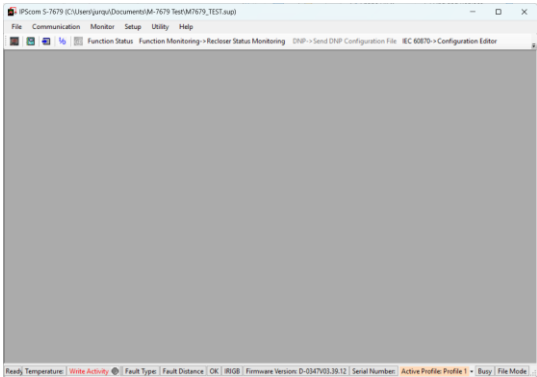
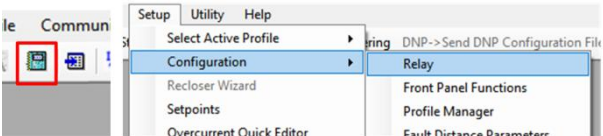
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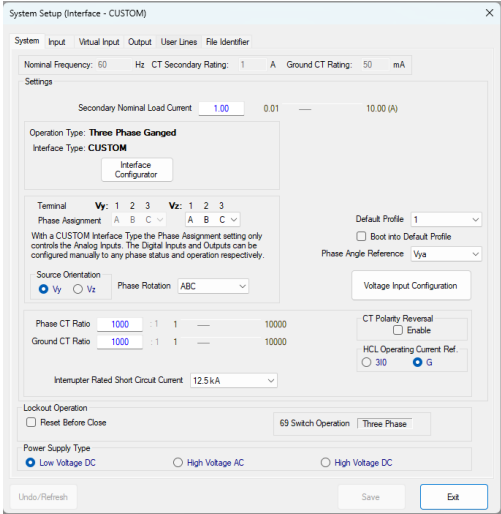
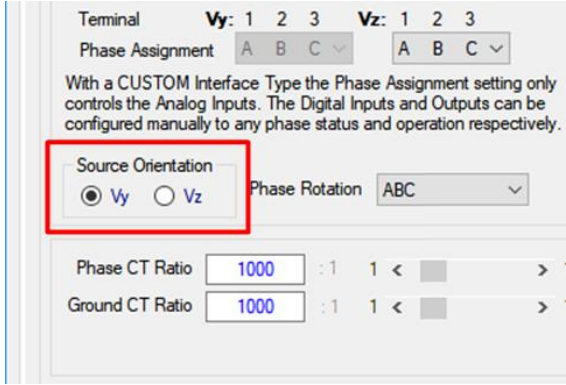
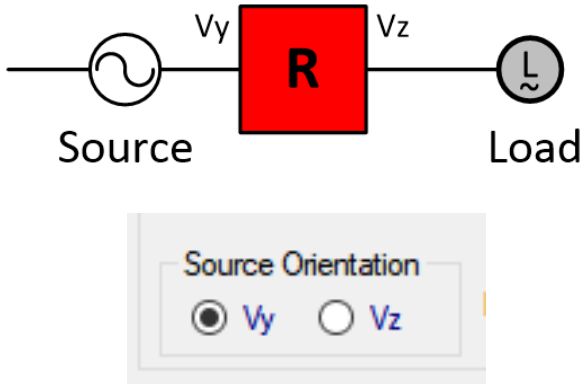
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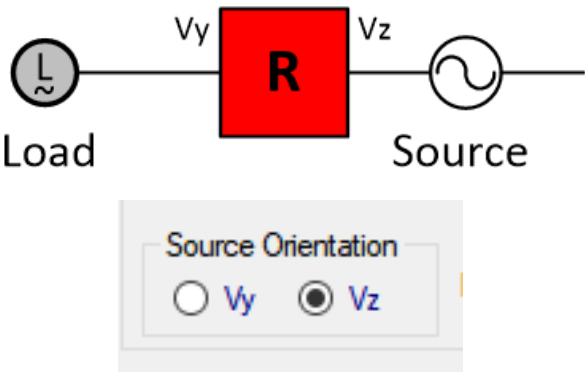
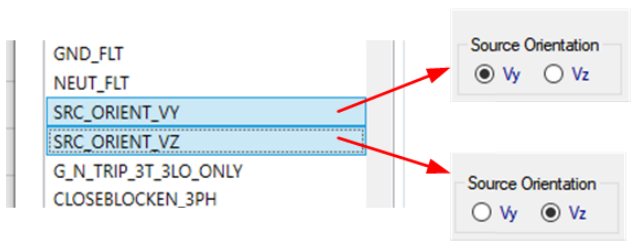
Source Orientation setting

This Quick Reference Guide explains how the Source Orientation setting works in the M-7679 R-PAC. Source Orientation setting is only available in M-7679 R-PAC units with 6 voltage configuration (L6, H6 and X6).

1	Start IPScm Software by double-clicking the corresponding shortcut.	
2	IPScm will display the IPScm Main dialog screen.	
3	If the process will be performed while connected to an M-7679 R-PAC unit, establish a connection to the unit using either USB or TCP/IP mode.	
4	Once the connection is established, IPScm will display the Connected version of the IPScm main screen. Proceed to Step 8.	

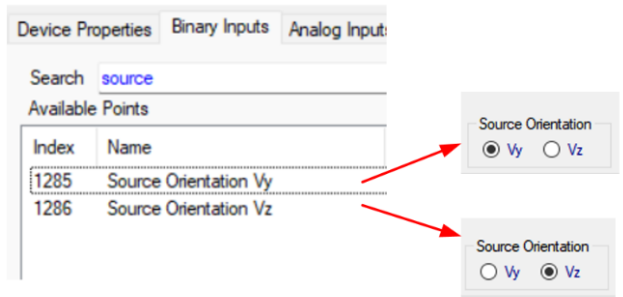
5	If the process will be performed without a connection to an M-7679 R-PAC unit, navigate to File > Open to access an existing configuration file.	
6	IPScom will display the Open Dialog screen. Find the required .SUP file and select OPEN.	
7	IPScom will display the Not-Connected version of the main screen.	
8	Go to Setup / Configuration / Relay or select the Relay icon in the Tool bar.	

9	IPScom will display the System Setup window. The System Setup window contains all the required global settings for proper operation of the M-7679 R-PAC. It contains settings like CT and VT ratios, nominal voltage rating, nominal current rating, etc. The System Setup information is common to all profiles.	
10	All M-7679 R-PAC that have been factory set for 6 voltages include the Source Orientation setting in the System Setup window. The Voltage Input options available for 6 voltages are: • L6: 6 LEA Low Voltage inputs (12Vac Max) • H6: 6 LEA High Voltage inputs (300Vac Max) • X6: 3 LEA Low + 3 LEA High Voltage Inputs	
11	The Source Orientation setting is used to determine which side of the switching device is connected to the Source of the distribution system. The other side of the switching device will be automatically declared by IPScom as the Load side. In the example picture Vy is physically connected to the Source side and Vz to the Load side, so in this case the Source Orientation setting in System Setup must be set to Vy.	

12	If the switching device is installed backwards, Vz is physically connected to the Source side of the distribution system and Vy to the Load side, so in this case the Source Orientation setting in System Setup must be set to Vz.	
13	The Source Orientation setting is used in all protection functions that require source side identification of the switching device. Those functions are: • 51 – Time Overcurrent (P, N, G/GS) • 60FL – Fuse Loss Detection • 59I – Peak Overvoltage • 25 – Sync Check • 32 – Directional Power • 67 – Directional Overcurrent (P, N, G/GS) • Loop Scheme (only available for Distribution Automation Package) • 27BSVS – Bus Side Voltage Supervision • Load Encroachment • SGI – Sensitive Ground Indicator	
14	Starting from IPScom version 10.29.09 and Firmware version 03.29.06, the Source Orientation setting can be used as Digital Inputs in IPSlogics. There are two status bits corresponding to the value chosen by the user in System Setup window: • SRC_ORIENT_VY • SRC_ORIENT_VZ Note: these new Source Orientation IPSlogic digital inputs are available in IPScom version 10.29.09 and newer and Firmware version 03.29.06 and newer.	

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The Source Orientation setting is also available through the DNP protocol, with two Binary Inputs provided to represent the value selected by the user in the System Setup window.



End of Procedure.



Scan for quick access to M-7679
technical literature.



6190 118th Avenue North
Largo, FL 33773-3724 U.S.A.



BeckwithElectric.com
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