

# 2V164J Software

## *Voltage Regulating & Control Relay*

relay monitoring systems Pty Ltd

---

### **Advanced Protection Devices**



User Guide



Test Manual



Relay Software



$\mu$ MATRIXwin



# 2V164J Relay Software

## Links to Other Documents

---

User Guide: [http://www.rmspl.com.au/userguide/2V164\\_user\\_guide.pdf](http://www.rmspl.com.au/userguide/2V164_user_guide.pdf)

Software Downloads: <http://www.rmspl.com.au/digital/uMATRIX.htm>

## Version Control

---

Issue	Date	Summary of changes
A	07/11/2003	UMX updated.

Due to RMS continuous product improvement policy this information is subject to change without notice.  
This document is uncontrolled and subject to copyright.

Author	Checked & Registered	.pdf file created	Released
ARF	DG	DG	



### 3.0 DESCRIPTION – UMX2V164J.UMX

#### 3.1 Standard Features

The 2V164 provides a range of standard features as described in the RMS Technical Bulletin that may be downloaded from:

[www.rmspl.com.au/handbook/2v164.pdf](http://www.rmspl.com.au/handbook/2v164.pdf)

#### 3.2 Special Features of this Software UMX Version

##### 3.20 TPI feedback mode:

When a tap change command is output to the OLTC, the tap change fail timer is started. If a single tap change restores the sensed voltage to a balanced condition the relay is reset. If the sensed voltage remains in error the interval time delay will start based on one of the three methods described below: The required operating mode is selected using the UMX order code.

OLTC AUXILIARY CONTACT METHOD UMX2V164 (As per UMX B)

In this mode an auxiliary contact on the OLTC is employed to signal completion of a tap change. This signal is used by the 2V164 to pause the interval time delay until the previous tap command has been completed.

The default 2V164 T/C feedback status input is set for a control voltage to be removed when the tap change starts (OLTC auxiliary contact opens) and re-applied when the tap change event is completed (OLTC auxiliary contact closes). The interval time delay is paused until the completion of the tap change event.

The tap change output contact will remain closed until the OLTC auxiliary contact first opens for a 1s minimum duration & then re-closes. The interval time delay is initiated at the moment the OLTC auxiliary contact re-closes if the sensed voltage has not already moved back to a balanced condition.

For information on the two other methods, see the 2V164 data sheet or the UMX2V164A & UMX2V164C documents.

*The Tap Change Feedback input is moved to Status Input Group 3 (Status input 5). See wiring diagram 6.0.*

3.21 Load shedding has been removed from the UMX.

3.22 The analogue output on pins 49-51 follow the Setpoint voltage.

3.23 Status Inputs 3 and 4 will increment and decrement the Setpoint voltage by 1.00Volt.  
Note: Status Inputs 3 and 4 must both be removed before another increment or decrement can occur.

The Up Down buttons will increment and decrement by 1.00Volt.

Note: There is no increment/decrement acceleration i.e., one step per button press.

#### 4.0 User Interface.

Refer to the  $\mu$ MATRIX Users Guide for detailed instructions on the operation of the user interface.

To download a PDF version of the guide:  
[www.rmspl.com.au/digital/uMATRIXInfo.pdf](http://www.rmspl.com.au/digital/uMATRIXInfo.pdf)

To download further  $\mu$ MATRIX software & documentation:  
[www.rmspl.com.au/uMATRIX.htm](http://www.rmspl.com.au/uMATRIX.htm)

#### 5.0 LOAD SOFTWARE

Loading a UMX requires at least the following:  
A PC with Windows 98 or later and at least one COM port.  
UMatrixWin software.  
The correct serial cable.  
A general understanding of how UMX and UMP files work with the relay.

*Settable parameters will be overwritten by loading a new UMX file. They can however, be saved to a UMP file and then returned to the relay later. To learn how to do this, refer to the uMatrix Userguide.*

#### 5.1 Loading the UMX

Before loading the UMX2V164J software, ensure that it is compatible with your hardware. Download the compatibility list from the RMS website at:

[www.rmspl.com.au/digital/compatibility.pdf](http://www.rmspl.com.au/digital/compatibility.pdf)

Ensure that the bios version in the relay matches the table in section 2.0 of this document. (If the bios version is different, you may not be able to load this UMX. Contact RMS for support.)

Load the UMX via the front panel COM port using the 'uMatrixWin' software.  
Ensure that the UMX version matches the table in section 2.0.

*To interrogate for versions, press 'SET' and 'DATA' buttons simultaneously, then select 'Version Page'. Alternatively, use uMatrixWin – Options – Utilities.*

Check versions

#### 5.2 Customer Default UMP

Load customer UMP file as per the Job Card. If no UMP file is requested, write N/A in check box.

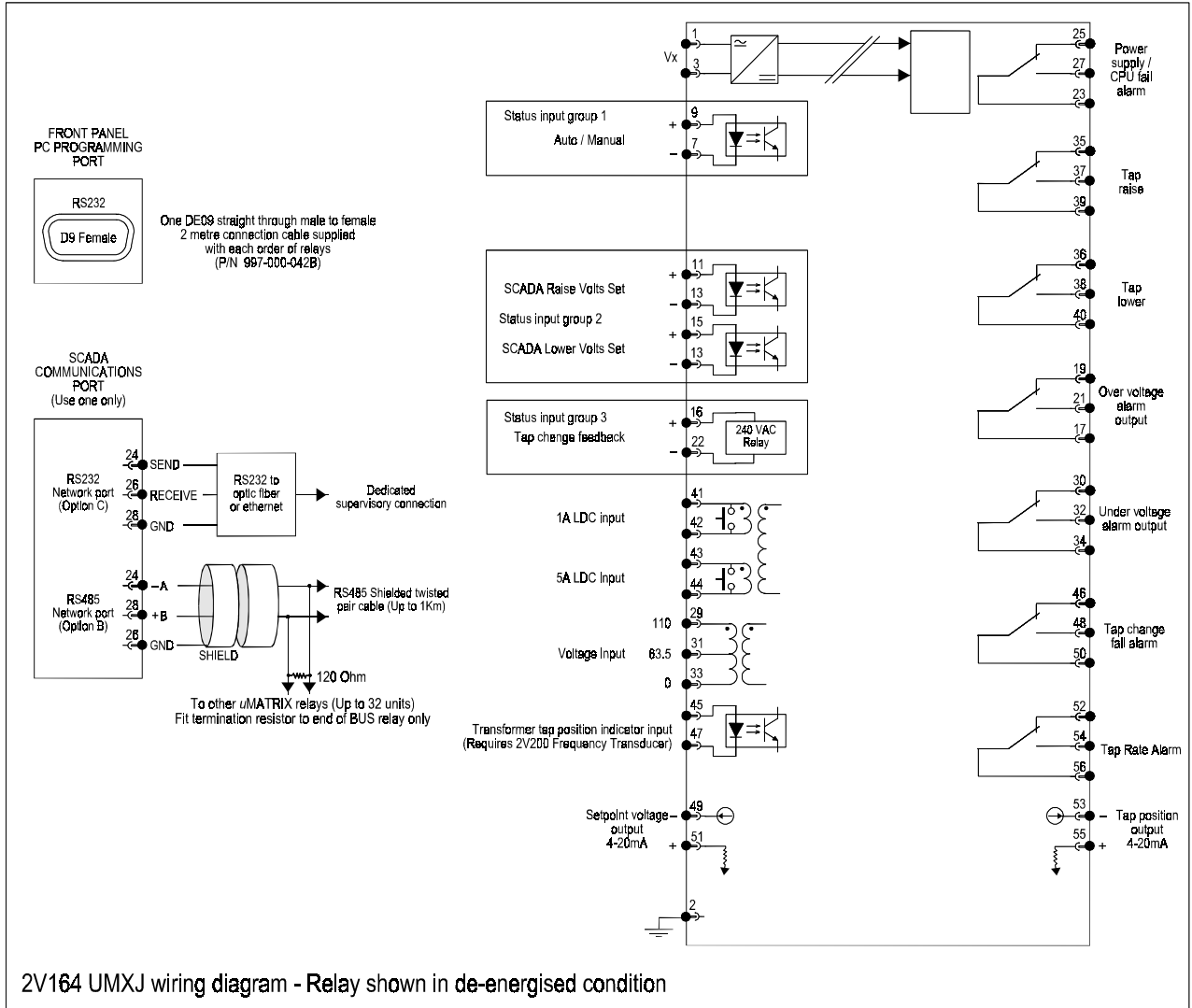
UMP file name

The Relay is now ready for field use.

SOFTWARE INSTALLED BY :

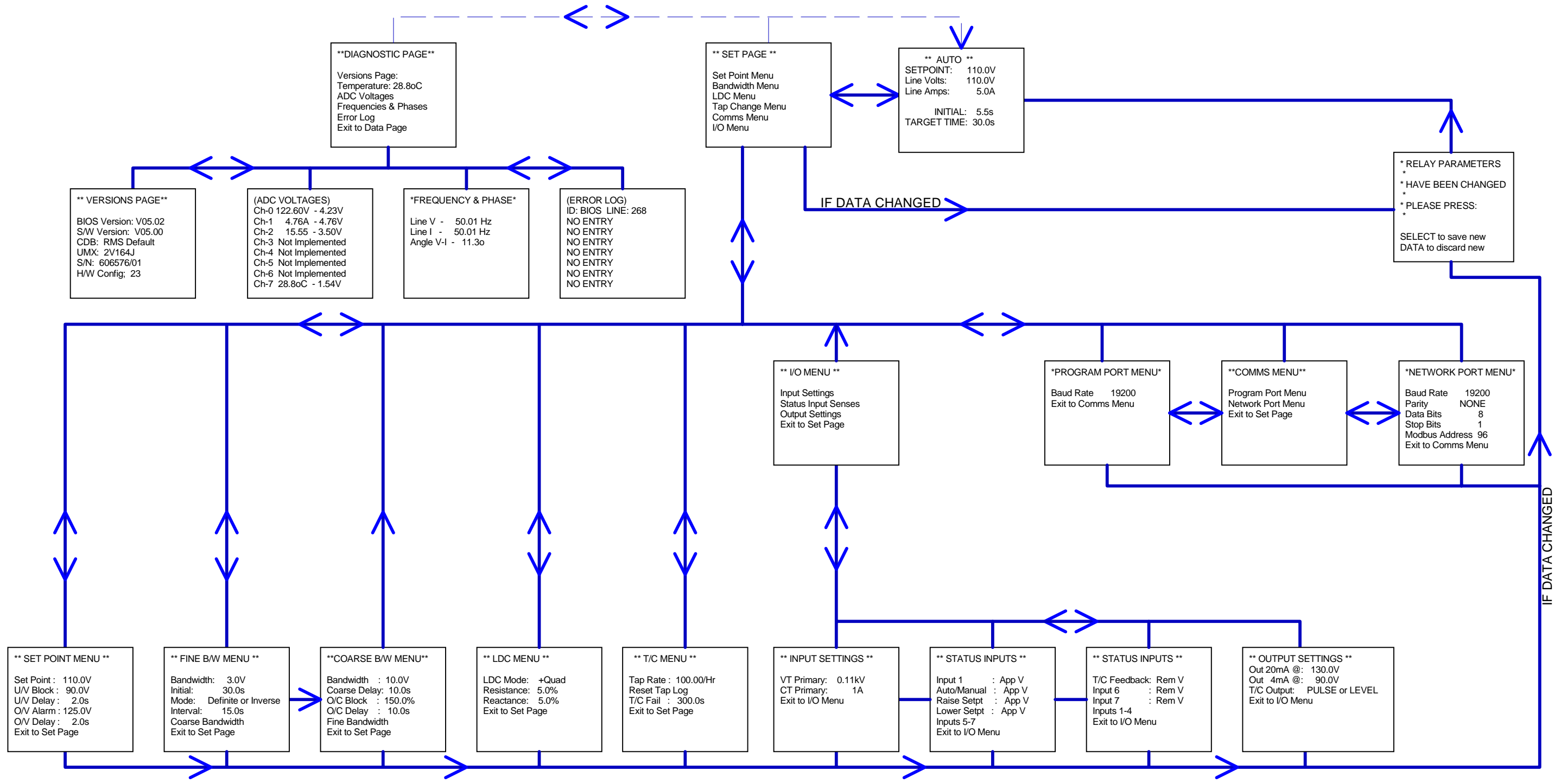
DATE :

6.0 CONNECTION DIAGRAM



2V164 UMXJ wiring diagram - Relay shown in de-energised condition

# 2V164\_J\_MENU\_101



Amendments			2V164J			(CITIPower PULSE FEEDBACK)		
			MENU STRUCTURE					
DRAWN	DATE	D/O CHECK	DATE	APPV CHECK	DATE	DRAWING NUMBER		ISSUE
D.W.B	25-Nov-2003					2V164_J_MENU_101		
DATE: 25-Nov-2003 TIME: 16:12:21 FILE NAME: D:\THE_CHIP\RMS\MATRIX\SPECS\2V164\2V164_J_MENU_101.sch						SHEET:	SCALE:	CURRENT CN
						SHEET: 1	OF: 1	N.I.