

Consultant K8055 Howto

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Version 1

K8055



This document is a guide to connecting a Velleman K8055 board to a Mac running ConsultantX software from Control Plus. www.controlplus.biz

Addressing.

The K8055 board has jumpers to set its address from 0 to 3. This allows you to connect up to 4 x K8055 boards to one Mac. Before you connect the K8055 take note of the address jumpers on the board.



Connecting

Plug the K8055 board into a spare USB port before starting ConsultantX. Once the board is plugged in start ConsultantX

Assistant

ConsultantX is a very powerful piece of software and has many options, to make it easy ConsultantX also has a number of assistants. To setup all the options required to communicate with the K8055 board, select *K8055 Assistant* from the *Comms* menu.

Ś	ConsultantX	File	Edit	View	Comms	Window	Enviro
0	0			_	Connec	tions	
				_	Scanne	rs	
					New Se	nsor	
					Sort	►	
					K8055	Assistant	
					Ping As	sistant	

00	K8055 Assistant							
	Use this assistant to create everything required to connect to a K8055 board							
	Name K8055							
	Board Address 0							
	The name field can be anything that helps you remember what this board is for, it must be different to all others you have created							
	The board address is what is selected by the jumpers on the board, must be in the range 0 -> 3 $$							
	Create							

There are only 2 options in this assistant

Name – This can be anything you like that helps you remember what this K8055 board is for.

Board Address – this must be equal to the address of the board you wish to connect to. See the section above on addressing.

Click *Create* to close the assistant and create a connection to the K8055 board.



You can now use this basic display to monitor your K8055 board. This display can be edited to display the data in any format. From the *Environment* menu select *Design* and you can then edit all the objects in the window.

This graphic display is not saved to disk, if you want to keep this window make sure you save it to disk by selecting *Save* from the *File* menu.

Trends

A handy short cut to view a trend of an analog value is to right click on a value in a graphic window. Try it now by right clicking on the black and yellow value for the signal "Analog Input 1". A trending window will be displayed that will allow you to interactively view this sensor value against time.

What does the Assistant do?

This K8055 Assistant creates the following:-

1. A Connection to the K8055, Select Connections from the Comms

menu to see the connections that are configured.

00		Connections	Connections				
New Edit	Delete						
Name	Status	Description					
K8055 Connection	Enabled	K8055 connection					
			1.				

 A Scanner to access the data from the particular K8055 board at the address you specified (0 – 3). Select *Scanners* from the *Comms* menu to see the scanners that are configured.

000					Scanners							
New Scann	er (New Sens	sor A	uto Sensor		\subset	Edit	Delete	Data	Fable 🛟		
Address	0	1	2	3	4	5	6	7	8	9		
										-		
Name				Descri	° ntion			Status				
►K8055 cconr	or			Conn	or			OEEline				
▶ internal	ei			scann				Online ()				
P_internal				SCarin	lei			Online ()				
										11.		

3. All the sensors required to use the data the scanner gets from the K8055 board. Click on the expand arrow next to the scanner to see all the sensors.

00	Scanners									
New Scanner	New Senso	or Au	to Sensor	Edit			Delete Data Tal		able 🛟	
Address 0	1 2 3 4				5	6	7	7 8		
	_	_	_	•	_	_	_	_	_	
Name			De	scription		Status				
K8055_scanner			SC	anner		OFFline				
analog input 1		ele	ement 1		0					
analog input 2		ele	ement 2		0					
analog output 1			element 7			0				
analog output 2			ele	ement 8		0				
Comms OK			0 0	on comm fail		0				
counter 1			element 3			0				
counter 2			ele	ment 4		0				
digital input 1			ele	ment 0 bit 0		0				
digital input 2			ele	ment 0 bit 1		0				
digital input 3			ele	ment 0 bit 2		0				
digital input 4			ele	ment 0 bit 3		0				
digital input 5			ele	ment 0 bit 4		0				
digital inputs			ele	ement 0			0			
digital output 1			ele	ement 6 bit 0		0				
digital output 2			ele	ment 6 bit 1		0				
digital output 3			ele	ment 6 bit 2		0				
digital output 4			ele	ment 6 bit 3			0			

Last the assistant creates a graphic window to display and trend the data from the sensors.



Howto's

To learn more about ConsultantX refer to the other ConsultantX howto's