Rapidlogger Systems

Setup Hydraulic Horse Power (HHP) Variable

Latest Software's and Firmware:

First Generation Rapidlogger:

If you have a first generation Rapidlogger you will need to make sure you have the latest firmware, RapidVu Software and Rapidlogger Utility. Latest firmware for first generation Rapidlogger is 8.7 or later. The RapidVu software rev should be 4.4.48 or later and the Rapidlogger Utility installed should be 4.1.40 or later.

Next Generation Rapidlogger:

For the next Generation Rapidlogger you will need firmware 8.6w or later. The RapidVu software rev should be 4.4.48 or later and the Rapidlogger Utility should be 4.1.40 or later.

If running windows 8 or 10 Rapidlogger Utility should be 4.1.39-Win8 or later.

Setting up HHP variable:

- 1. Run the Rapidlogger System Utility Software
- 2. Click Find Rapidlogger
- 3. Click Read all from Unit. On the right a box of variable details should appear. These are the variables currently on the Rapidlogger.
- 4. We will be adding a variable. See what the last variable number is. Refer to figure 1.

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1 [™] Move	Variable Data Variable Number Toggles		Rapidlogger Unit Rapidlogger Unit Network Address		Variables Defined:	
Variable Variable © Cot objecty Pressure © Record/Transmit Variable Units © CAN Bus Transmit psi © Noise Filter © © © Special A © Special B V/O Type Multpiler 5- Analog © 0.255106600 1 3700.00000000 1 3700.00000000 Write Vars File E.D.T 6 Write Vars File 6 Offeet 7 Pressure 6 Offeet 7 Pressure 7 Pressure 8 Write Vars File 6 Write Vars File 7 File 7 Diffeet 7 Write Vars File 8 D.T 8 Write Vars File 9 Write Vars File 1 0	Varable Name	UCD Directary	192.168.0.5	Find Rapidlogger	1. Pressure E.D.T +	
Variable Units CAN Bus Transmit Read All from Unit Write Alt to Unit 5 B ump Rate E.D.T psi Noise Filter Special A System Setup Sync Time 6 Hump Rate E.T 0 Image: Special A Copy Variable Paste Variable 10 Howmeter R.E.T 10 Howmeter R.E.T 1 Special B Local Computer Disk Read Vars File E.D.T 6 Hwp DTatal E.D.T 5- Analog 0.256106600 Image: Read Vars File File E.D.T 6 How DTatal E.D.T 1 3750.00000000 Image: Read Vars File Staterbury Dr.E.D.T 5 Muterbury Dr.E.D.T 5 Muterbury Dr.E.D.T Keep Undo Write Vars File E.D.T 5 Muterbury Dr.E.D.T	Pressure	Record/Transmit	Read One from Unit	Write One to Unit	3. TotalVolume E.D.T 4. TotalBate E.T	
psi Decimal Places Decimal Places	Variable Units		Read All from Unit	Write All to Unit	5. Pump1Rate E.D.T	
0 ⊕ Special A 0 ⊕ <	psi Decimal Places	🗐 Noise Filter	System Setup	System Setup Sync Time S, funger Setup C, T R, Fung Total E, D, T Sopy Variable Paste Variable 10, Powmeter R, E, T	7. Pressure2 E,T 8. Pump1Total E,D,T	
VO Type Multiplier 5- Analog 0.25610600 1 3750.000000000 4 Merchan Keep Undo	0 💠	Special A	Copy Variable		9. Pump2Total E.D.T 10. Rowmeter-R E.T	
UO Type Multipler Read Vars File 61. Mot TrickLV E.D.T 5- Analog hput Number 0.25610600	10 Tes		Local Computer Disk		12, Rowneter-T E,T	
S- Analog 0.28105600 Image Read CSV 62, Bulk VuPos E.D. T Analog hout Number Offset Image	I/O Type	Multiplier		Read Vars File	61. MxTnkLvI E.D.T	
Analog Input Number Offset 51, Index Wr05, ED, T 1 3750.00000000 Write Vans File 53, WaterBigRo, ED, T Keep Undo Write CSV 67, Buk/WSP, ED, T Keep Undo Data Uto E for the formation of the formatio of the formation of the formatio of the formation of	5- Analog 🔹	0.236106600		Read CSV	62, Bulk WyPos E.D.T	
1	Analog Input Number	Offset			64, MoxFlow E.D.T	
Keep Undo Write CSV 67 BuckWoSP E.D.T 63. DensitySP E.D.T 63. DensitySP E.D.T	1	-3750.000000000		Write Vars Hie	65. WaterBigRo E.D.T	
Bi, DenstysP E.D.1	Кеер	Undo		Write CSV	66. WaterFlow E.D.T 67. Bulk MvSP E.D.T	
Variable Apply OK 63. Mix TrikLVISP E.D.T	Variable Apply OK		Rapidlogger Unit Filesystem Copy File to Rapidlogger Unit		bb. Uerlarysy E.D.T 68. McTrku/SP E.D.T 70. Water/WSP E.D.T 71. SturyOlk E.D.T 72. Buk/OpenSP E.D.T 73. Buk/VtvPoSM E.D.T 81. Buk/VtvPoSM E.D.T	
Copy File to Rapidlogger Unit Copy File to Rapidlogger Unit 81. Bulk/UvPoSM E.D.T 81. Bulk/UvPoSM E.D.T						

Figure 1. Variable numbers in red outline

- 5. For example, if the last number is 81 we will be creating a new variable as 82.
- 6. Enter your new variable number in box located under Variable Number.
- 7. Enter HHP under Variable Name.
- 8. Enter HP under Variable Units.
- 9. Enter in desired decimal places in Decimal Places.
- 10. Under I/O Type there is a drop box. Click it and scroll down to **I-Calculated Multiply**.

The formula for Hydraulic Horse Power is:

- 11. Input variable 1 should be your variable number of pressure (number is found next to name of variable seen in figure 1).
- 12. Input variable 2 is the variable number for TotalRate.
- 13. Scale will be your multiplier. $\frac{1}{40.8}=0.0245098$. Input 0.0245098 into scale.
- 14. Under Toggles check mark Enable, LCD Display, and Record/Transmit.
- 15. Your screen should look like figure 2.

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Rapidlogger System U	tility			
Variable Data Variable Number	Toggles	Rapidlogger Unit Rapidlogger Unit Network Address Variables Defined:		
82 🖨 Move	Enable	192.168.0.5	Find Rapidlogger	1, Pressure E.D.T
Variable Name HHP	LCD <u>D</u> isplay Record/Transmit	Read One from Unit	Write One to Unit	3, TotalVolume E,D,T
Variable Units	CAN Bus Transmit	Read All from Unit	Write Al to Unit	5, Pump1Rate E,D,T 6, Pump2Rate E,T
HP Decimal Places 2	Noise Filter Special A Special R	System Setup Copy Variable	Sync Time	7. Pressure2 E.T 8. Pump1Total E.D.T
			Paste Variable	9. Pump2Total E.D.T 10. Rowmeter-R E.T
1/0 Type	Input Variable 2	Local Computer Disk Read Vare File		12, Flowmeter-T E,T 60, MixDensity E,D,T
I- Calculated Multiply -	4	1	Devd COV	61. MixTnkLvI E.D.T 62. Bulk VivPos E.D.T
Input Variable 1	Scale		Read CSV	63. WaterVivPos E.D.T
1	0.024509800	[Write Vars File	64. MixFlow E,D,T 65. WaterBigFlo E,D,T
Keep	Undo		Write CSV	66, WaterFlow E,D,T 67, Bulk/VivSP E,D,T
		Rapidlogger Unit Filesyste	m	68. DensitySP E.D.T 69. MixTnkLvISP E.D.T
Rapidlogger-RLC2: Connected A Variable Load Ok Network Write Done				70, WaterWvSP E.D.T 71, SlumyQlt E.D.T
		Copy File to	Rapidlogger Unit	72, BulkOpenSP E,D,T 73, BulkCloseSP E,D,T 81, BulkVivPoSM E,D,T

Figure 2. Variable Setup

- 16. After this we will click **Write One to Unit** located under Find Rapidlogger
- 17. Variable should appear at the bottom of Variables Defined.
- 18. Turn off and on Rapidlogger.
- 19. Once you open RapidVu software and connect to Rapidlogger, variable HHP will appear there as well.