

# The C . I .Thornburg Co ., Inc .

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## WHAT TO DO ABOUT NTU ?

In the past few months I have been installing the new Hach turbidity monitoring system .The Hach MOD I/O computer interfacer allows our customers to log their filter turbidity readings at the new 15 minute rate that most state government agencies are requiring. The MOD I/O unit from the Hach manufacturing company allows the customer to interface various input devices to the Hach Company's Aquatrend monitor .Some of our Customers have been requesting new Hach 1720D turbidity meters , while others would like to keep their existing Hach 1720C turbidity meters.



Either way we can assist you with the best application to fit your needs.

### Application

Without going into great details here , The Hach Company has designed the new monitoring equipment with the older 1720C turbidity meters in mind . Most Manufacturers force any up-grading with all new equipment , but not Hach.

I tip my "test meter leads" up to you Hach for keeping the Customers with perfectly good working 1720C 's in mind, with the new technology advancements that you have made available today.

The Hach Company has what they call an "S I M" or signal input module. This device allows us to install ( 2 ) 4-20ma input signals , one from the 1720C , maybe a EC 310 pH meter, or the CI 17 chlorine analyzer ; the list goes on , but you get the idea.

Your plant has 2 or more filters with 1720C's , an older version EC 310 pH meter , and your CL 17 analyzer . All of these equipment signals are sent to the ( 2 ) channel S I M unit's and then out via digital signal to the AquaTrend Network Manager. There, I finally said it again. AquaTrend , the brain child of the Hach Company. This device allows us to monitor ( 8 ) eight separate devices from Hach . The S I M unit is a device with 2 inputs, no big deal for the Aquatrend it will display 16 separate channel readings. We assign each input signal to a channel and the Aquatrend displays your readings from the plant meters . Since the S I M uses a digital signal output this unit can be installed down stairs in your pipe gallery to the Hach PS 1201 ( power supply ) and ( 1 ) 2 wire signal cable ran upstairs, not 16 separate 4-20 ma shielded cables. Thank you again Hach. Not only is this less time consuming to install, it provides better resolution on the readings and it is definitely more cost efficient to run ( 1 ) signal cable wire than ( 16 ) .

### Installation steps

Four simple steps are all that are required to communicate digitally with AquaTrend sensors.

1. Connect the AquaTrend network to the MOD I/O
2. Connect the MOD I/O to the computer
3. Select ADD DEVICE in the AquaTrend menu
4. Configure the computer software

That's it .

### Computer software

The configuration of the computer is the final step.

HMI ( Human machine interfacing ) software is helping operator's in the Water and Wastewater Industry ,by allowing them to control and data log plant operations.

Hach has stepped forward again by offering a low cost means of HMI data logging with the MOD I/O Explorer / OPC ( \_object linking and embedding for process control ) DataLogger CD program. For those of us that didn't take rocket science 101 , the OPC DataLogger retrieves the data from the MOD I/O Explorer , and stores the data in CSV text files " logging at a 15 minute interval " . The CSV text files can be opened with Excel for further editing , graphing , etc.

### Conclusion

In conclusion ,The C.I.Thornburg Co.,Inc. and Hach offer a complete solution from Sensor reading to Scada logging. Contact me at : The C . I . Thornburg Company / Herb Vaughn for your Instrumentation requirements. Thanks....

*The C . I .Thornburg Co ., Inc .*