



## Setting Up the New Input Echo Tool

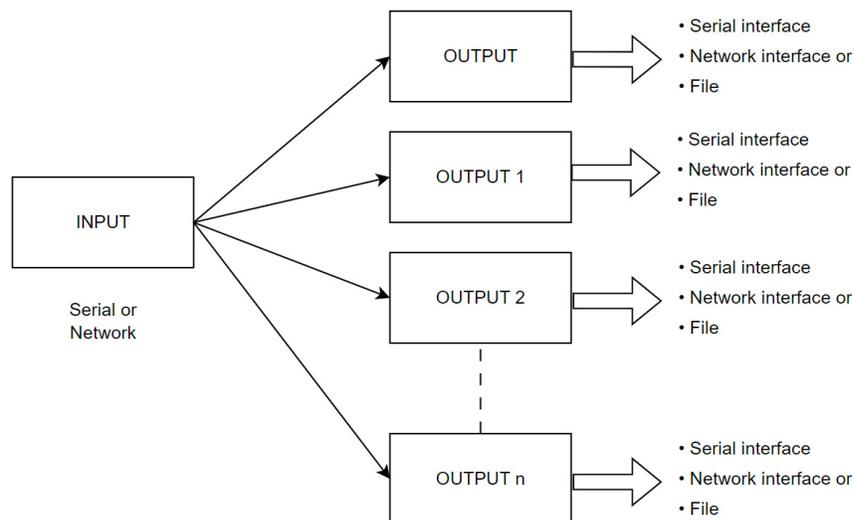
By Cristhian Bermudez

Some years ago, we developed Input Echo as a tool that allows the user to connect to a serial or network port, redirect the information, and store a file with all the data crossing. It was a useful tool to generate a file that was used for performing post-processing of certain inertial systems.

I have suggested this tool for some other applications, since it can redirect messages received on a serial port to UDP packets. We identify this is something useful on certain cases where the users need to share the information to different equipment on a setup.

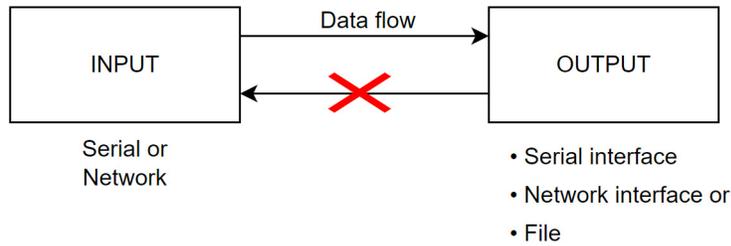
As you may know, a serial interface can be opened by one program at a time. Input Echo can open the serial interface and you will be able to have multiple outputs. In the same way, in certain cases with TCP connections it is only possible to have one client connected, in this case Input Echo will be able to open the TCP connection to keep the communication flowing and at the same time redirect the information to other interfaces or a file.

The new concept of Input Echo is simple, you can run the program and open a connection to a serial or network interface. Then you have to use at least one output. It will allow the user to open several outputs, I will describe that later in this article.

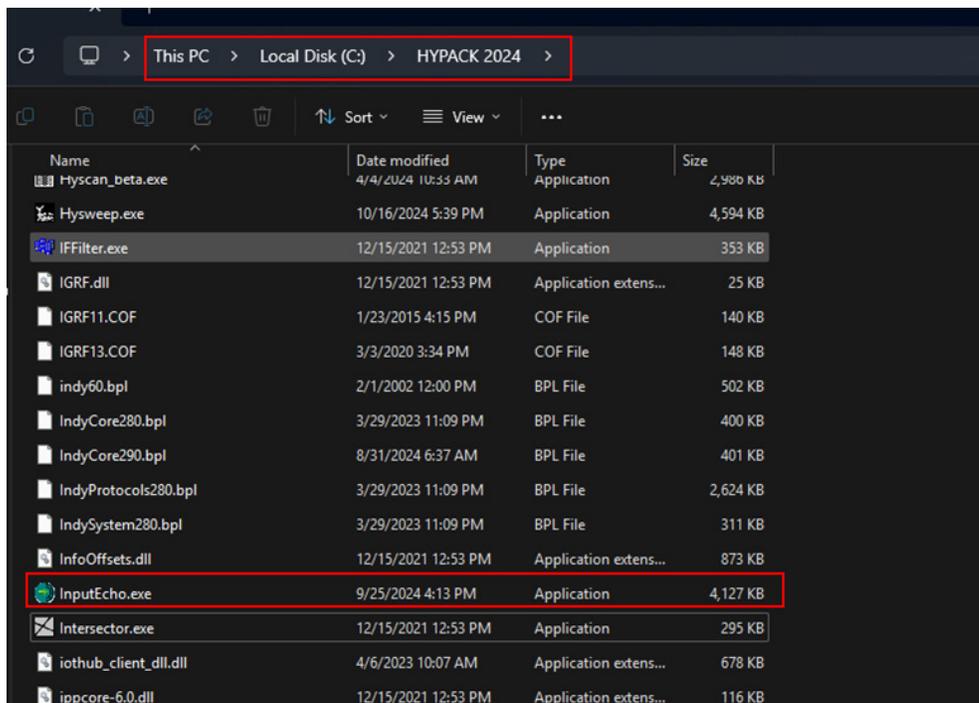


Disclaimer: This cannot be used on every case, there are some devices that require to receive a message to start sending data. It is pretty much like a request of data, if the request is not received the sensor or device doesn't start sending information.

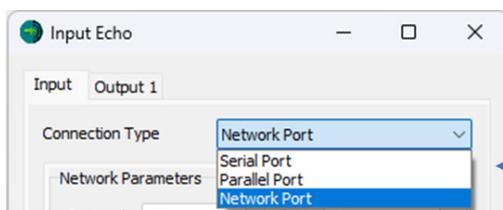
The data only flows in one direction, from the input to the output.



Now, let's see how we can start using Input Echo. The first step is opening the program, to do so, you have to go to the HYPACK installation folder, in this case I am using HYPACK 2024.

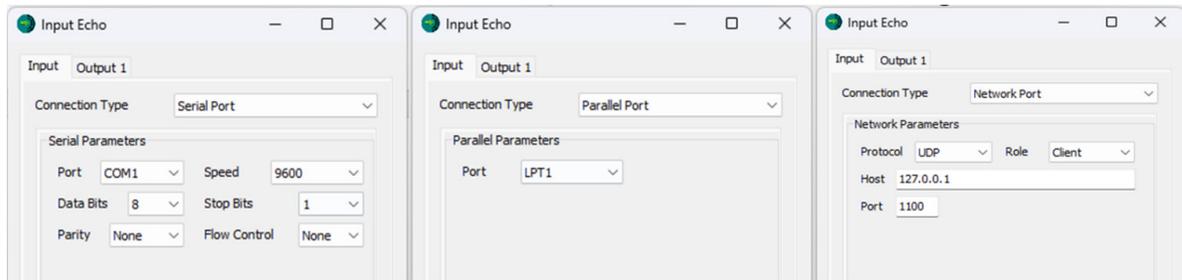


You can pin the program to the taskbar and create a shortcut, but don't copy the file, it needs to be used from the HYPACK installation folder.

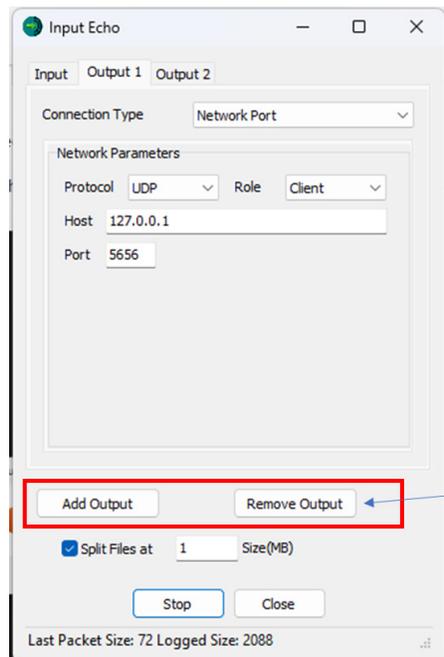


The first step is selecting the interface

Depending on the connection type selected, you need to configure different parameters, I am not going to cover specifics for each connection type, there are some articles and the manual where that is covered with more detail.



The program by default opens an output, if you want to open more than one, you have to press the “Add Output” button.

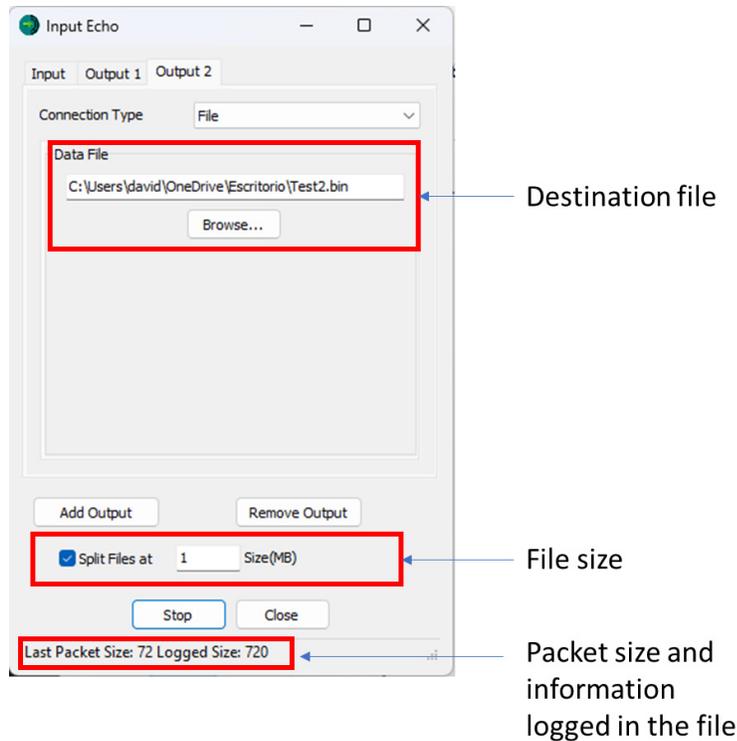


Removing an output only Works when the output tab is open

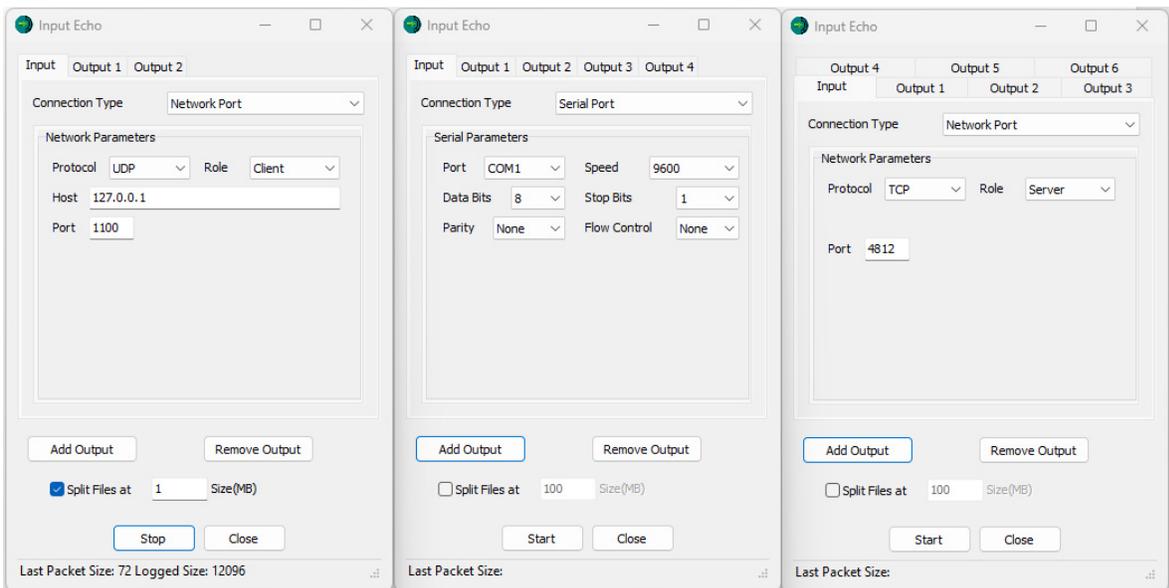
Having a serial or network interface as an output it will require to enter the specific parameters, like baud rate, port, protocol, IP address, etc.

Input Echo also brings the possibility to save the data into a binary file, as the connection type, “File” needs to be selected, the using the dialog it is necessary to select the folder where the file is going to be stored.

It is possible to split the file using the file size option, it will create a new file with a suffix at the end.



As you can see in the following image it is possible to have multiple instances of Input Echo. Yes, what I am saying you can open several Input Echo windows that also can have multiple outputs. It makes it very useful for different applications.



The last step is pressing "Start" button to send the data to the configured outputs.