Controlling the JetCat P100-RX through a script on the computer.

6 messages

Atharva Aalok ae19b030 <ae19b030@smail.iitm.ac.in>   Tue, Jul 19, 2022 at 5:10 PM
To: markus.zipperer@onlinehome.de

Dear Mr. Zipperer,
I am Atharva, an undergraduate in aerospace engineering at IIT Madras, India.
I am working with the P100-RX for my research.

My current goal is to be able to receive information from the ECU (such as RPM, current throttle level, etc.) and also to give a throttle input through a script running on my computer.
(My ECU is the V12.0). For this purpose I am using an Arduino and connecting it to the Mini LED Board's Rx, Tx, and GnD pins.

I have received the Manual for the ECU from Mr. Marc and based on that and through several discussions on online forums, I have tried various things.
But none has worked properly yet.

Therefore, I sincerely request the email contact of an applications engineer at JetCat who could help me move forward by teaching me how to make the connections and transmit to and receive data from the ECU using an arduino or through any other means.

Thank you
Atharva

Markus.Zipperer@onlinehome.de <Markus.Zipperer@onlinehome.de>   Tue, Jul 19, 2022 at 6:00 PM
To: Atharva Aalok ae19b030 <ae19b030@smail.iitm.ac.in>

Dear Atharva,

I sent an email to you last week to this mail address:

'Atharva Aalok ae19b030' ae19b030@smail.iitm.ac.in

Haven't your received it?

Mit freundlichen Grüßen / best regards

Markus Zipperer

Ingenieurbüro CAT

M. Zipperer GmbH

Wettelbrunner Strasse 6, 79282 Ballrechten-Dottingen

Geschäftsführer: Markus Zipperer
VAT No.: DE 142212412
Handelsregister Freiburg HRB 108 St

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Fax:+49 (0)7634 / 5056 - 801

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Markus.Zipperer@onlinehome.de <Markus.Zipperer@onlinehome.de>   Tue, Jul 19, 2022 at 6:03 PM
To: Atharva Aalok ae19b030 <ae19b030@smail.iitm.ac.in>
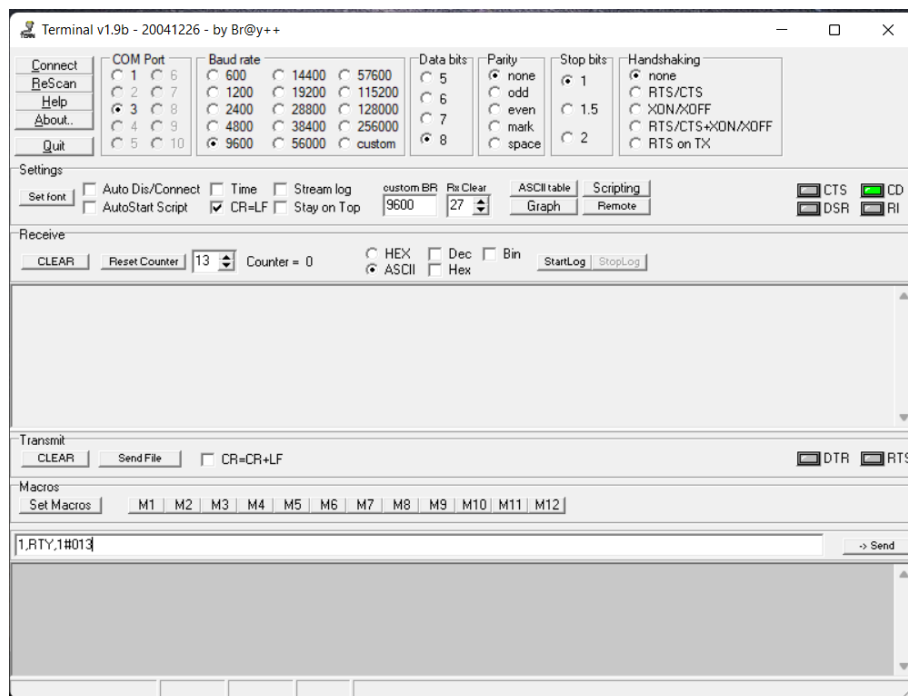
Resending mail:

Dear Atharva,

please find attached:

      1. JetCat-Standard serial protocol (default)

To test and get used with the serial interface (using the standard serial interface option 1) , I also included a simple terminal program to get you going easier.

To start with, please use these settings in the program:

For testing type the string "1,RTY,1#013" in the "send field" and press send.

The RTY command is just an example, and will acquire the engines type information

Info: The trailing #013 transmits ASCII code 13 on the end.

If the engine is connected you will see the responses in the receive window.

Hopefully these information's get you further…

If not, then can you please send pictures/videos of your setup/connections etc, so that I have an entry point of what might be going wrong?

Von: Atharva Aalok ae19b030 <ae19b030@smail.iitm.ac.in>
Gesendet: Dienstag, 19. Juli 2022 13:41
An: markus.zipperer@onlinehome.de
Betreff: Controlling the JetCat P100-RX through a script on the computer.

Dear Mr. Zipperer,

[Quoted text hidden]

📄 **JetCat-Serial-Interface-Command-Documentation-V22-1267A.pdf**
693K

Markus.Zipperer@onlinehome.de <Markus.Zipperer@onlinehome.de>   Tue, Jul 19, 2022 at 6:11 PM
To: Atharva Aalok ae19b030 <ae19b030@smail.iitm.ac.in>

Dear Atharva,

I guess I found the reason why you didn't get my email:

I attached a ZIP file containing the Terminal Program as .exe… and your system refused it!

Here you can download the terminal program:

https://www.dropbox.com/s/8zbsv6i9zvqm6cl/Terminal%201.9b.exe?dl=0

Mit freundlichen Grüßen / best regards

Markus Zipperer

Ingenieurbüro CAT

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Von: Atharva Aalok ae19b030 <ae19b030@smail.iitm.ac.in>
Gesendet: Dienstag, 19. Juli 2022 13:41
An: markus.zipperer@onlinehome.de
**Betreff:** Controlling the JetCat P100-RX through a script on the computer.

Dear Mr. Zipperer,

[Quoted text hidden]

Atharva Aalok ae19b030 <ae19b030@smail.iitm.ac.in>   Wed, Jul 20, 2022 at 10:40 AM
To: Markus.Zipperer@onlinehome.de

Dear Mr. Zipperer,
Thank you for your email with the descriptions.
I believe my problem is with the connections (I am new to serial communication and am still learning).
I explain my present connections in as much detail as I can.
Here is my circuit diagram:
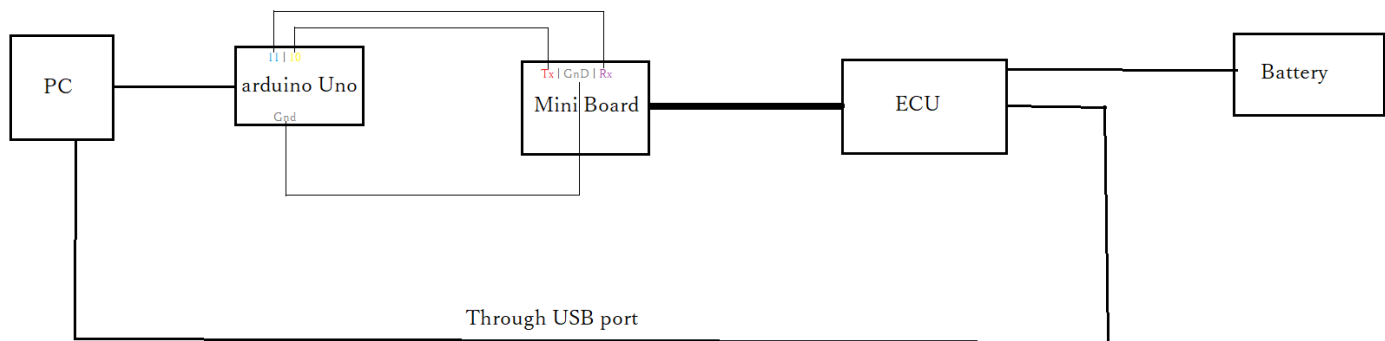
Here I am using a Software Serial Port on the Arduino Uno for communication (10 is Tx and 11 is Rx)
The following image shows (only part of the connections) in real image:
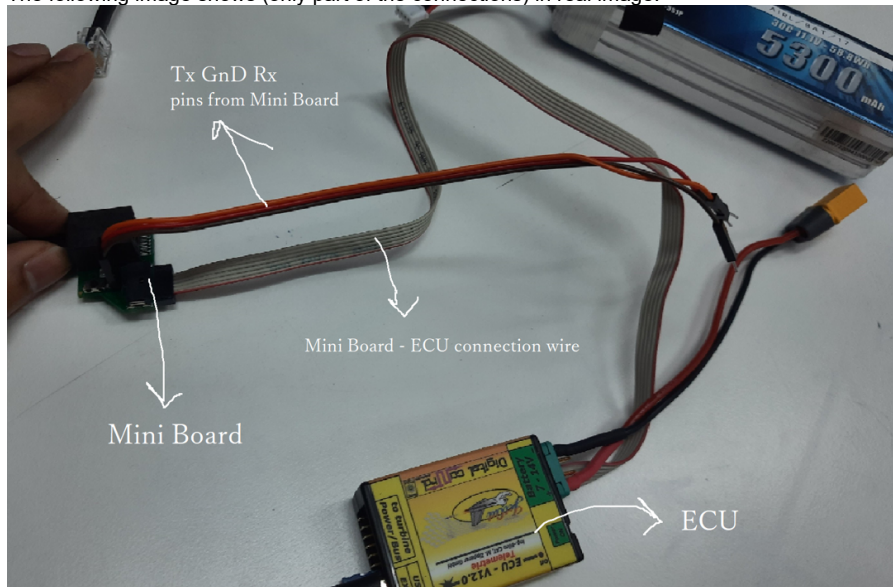
I have not connected the engine or the pump to the ECU yet as I am only experimenting with the communication.
Do I need to connect the engine to test communication? Or can I test out whether the communication is working without connecting the engine?

Questions:
1) Are these connections correct?
2) The Manual says that the solder pins on the Mini Board are 3.3V do I need a level converter (3.3V to 5V) between the arduino uno and the MiniBoard?
Arduino Uno pins are 5V as I understand.

Danke sehr
Atharva

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Atharva Aalok ae19b030 <ae19b030@smail.iitm.ac.in>   Wed, Jul 20, 2022 at 12:07 PM
To: Markus.Zipperer@onlinehome.de

Dear Mr. Zipperer,
I forgot to mention that it is not necessary for me to use an arduino.
I just started using it as I saw someone else use it for their project for giving PWM input.

My goal is to run a predetermined input script, a variation of throttle vs time execution script. Or it could be a live input during aircraft operation through a program that determines the input value.
If the arduino is unnecessary or a better option is available that would work great as well.

I would like to use the serial communication instead of PWM input as serial communication seems to offer more control than just throttle.

Thank you
Atharva
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