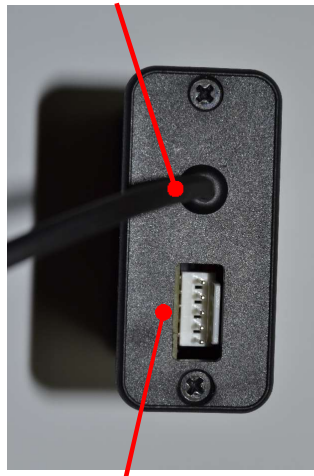


The Expansion Box provides you five (5) additional Analog Inputs, one (1) Exhaust Gas Temperature Sensor Input and two (2) additional Digital Inputs.

The EGT Input uses a special Semiconductor which provides the best accuracy with Junction Point Compensation. The data is forwarded directly Digital to eliminate any further error.

It's recommended only to use Sensors connected to the Expansion Box for Sensor logging or Table Switching. It's not recommended to use it for essential function or Timing critical function (i.e. Shift Input) because the Signal can be delayed or dropped due the Databus communication!

to Expansion Port of ECU



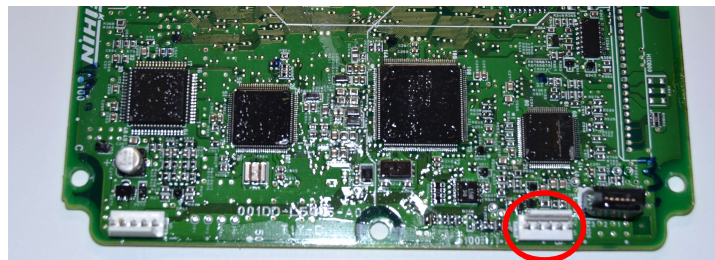
Passthrough Expansion Port

Digital  
Analog1  
Analog2  
Analog3  
Analog4  
Analog5  
EGT



## Connection to the ECU

Connect the Expansion Box to the ECUs Expansion Port.

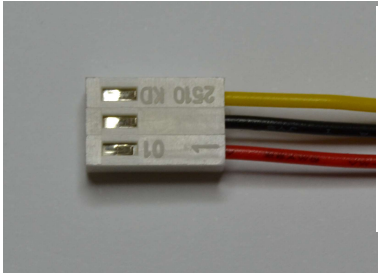


Expansion Port

On the Expansion Box you'll find a "Passthrough Expansion Port" to connect other devices like Displays or Interfaces.

## Connection of Sensors

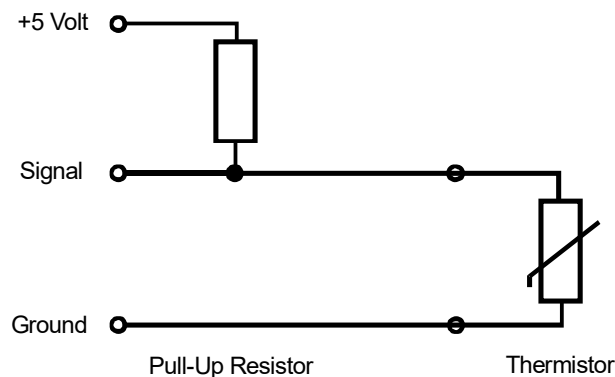
Here is the Pinout of the Connectors:



Pin	Analog Input	Digital Input	EGT Input
3	Signal	DI2	+
2	Ground	DI1	
1	+5 Volt	Ground	-

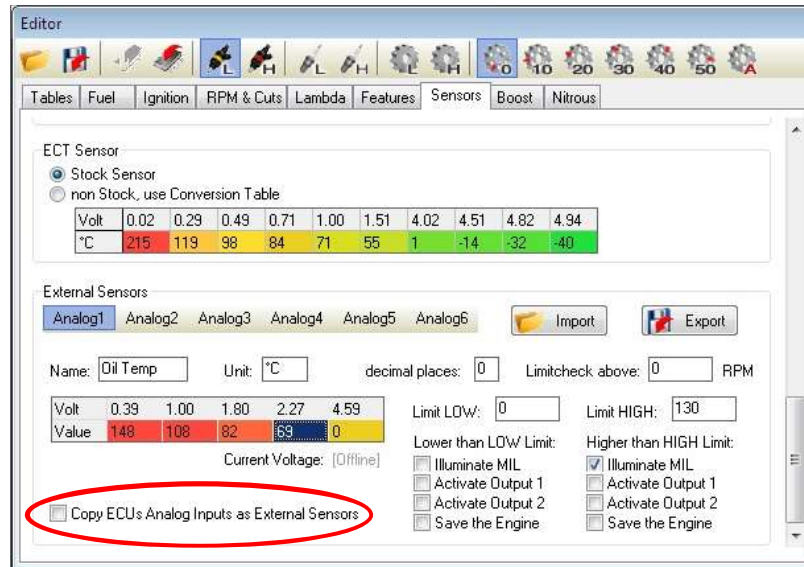
When installing a Thermistor (Temperature Sensor) with just two leads, you need to install a Pull-Up Resistor. The Pull-Up is connected between Signal and +5 Volts. The value for the Pull-Up Resistor needs to be calculated depending on the resistance curve of the sensor. The goal is to get a wide voltage range out of the unloaded voltage divider build of the Pull-Up and the Sensor but with the lowest possible current. It should be not lower than 390 Ohms and not higher than 10kOhms. Please use our recommendations or contact us for the calculation or the matching resistor.

For the Fluid Temperature Sensor we sell, we use a 390 Ohms Pull-Up Resistor.



## Configuration in ProECU-K

Open the Sensor Tab in Editor Window, scroll down to "External Sensors"



Make sure that the "Copy ECUs Analog Inputs as External Sensor" checkbox is UNCHECKED!

Analog1 to Analog5 Represents the Analog 1-5 Channels of the Expansion Box.

Analog6 is the EGT Input of the Expansion Box.

The Digital Inputs can be chosen where Digital Inputs available (i.e. Activation of the Nitrous function, Boost Tables, etc.) as "Ext. DI1" and "Ext. DI2".

Hint: When configuring the Sensor, use the "Import" Function. For the Sensor we sell we already stored the Sensor Configuration in the "Add-On" Directory of the ProECU-K Directory (under the User's Data Directory)