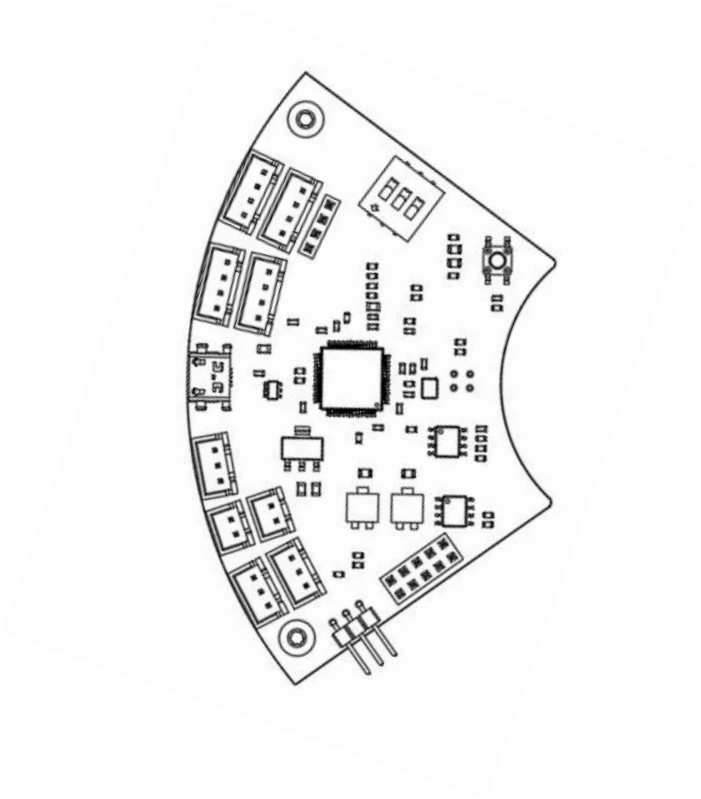
MINIPRO® DYNO BOARD V3.0

INSTALLATION GUIDE

REVISION 1.0



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SAFETY PRECAUTIONS

1. Make sure that dynamometers and motors under test are equipped with appropriate safety guards.
2. Make sure that all electronic products are earth grounded.
3. Do not exceed dynamometer and sensor specifications.

DYNO BOARD DIAGRAM – V3.0

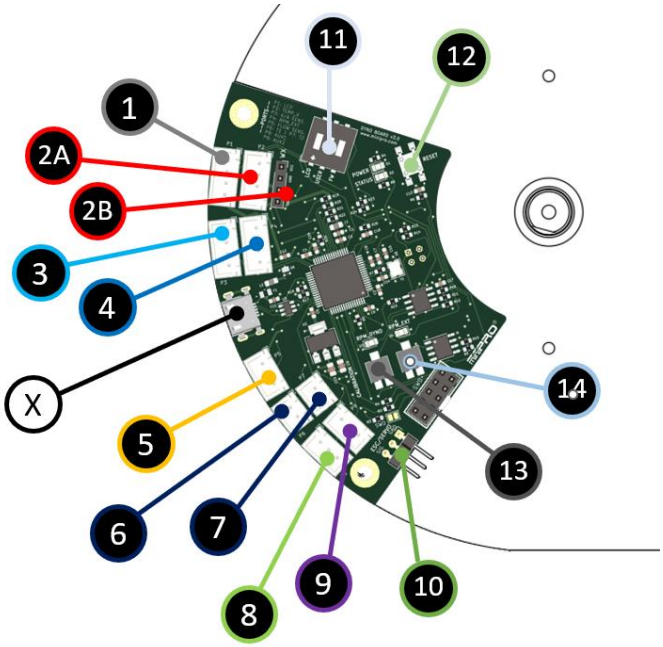

Figure 1: Dyno Controller Board V3.0 Diagram

ITEM	FUNCTION
1	Port #1 used for LCD Screen.
2A	Port #2A used for I.R. Temp. sensor. IMPORTANT: Only one sensor in Port #2 can be used at the time.
2B	Port #2B used for All-Weather Temp. sensor. IMPORTANT: Only one sensor in Port #2 can be used at the time.
3	Port #3 connects to the H1 or A1 Voltage and Current sensor. The Dyno controller board might be equipped with a 3 pin or 4 Pin connector.
4	Port #4 connects to External RPM sensor.
5	Port #5 connects to Flow sensor.
6	Port #6 connects to Motor Loop. Temp. sensor.
7	Port #7 connects to Motor Loop. Temp. sensor.
8	Port #8 is Auxiliary port used for custom sensor designed by MINIPRO.
9	Port #9 is Auxiliary port used for custom sensor designed by MINIPRO.
10	Servo or ESC connection. This feature is not enabled and is subject to license fee.
11	Programable Switches. Pin #1 is to enable LCD Screen; Pin #2 is for custom programing; Pin #3 is for Firmware Update.
12	Reset Button. Only used during Firmware Update
13	Dyno RPM Signal tuning.
14	External RPM Signal tuning.
X	Micro USB Cable connects to a Windows PC.

DYNO BOARD WIRING DIAGRAM – V3.0

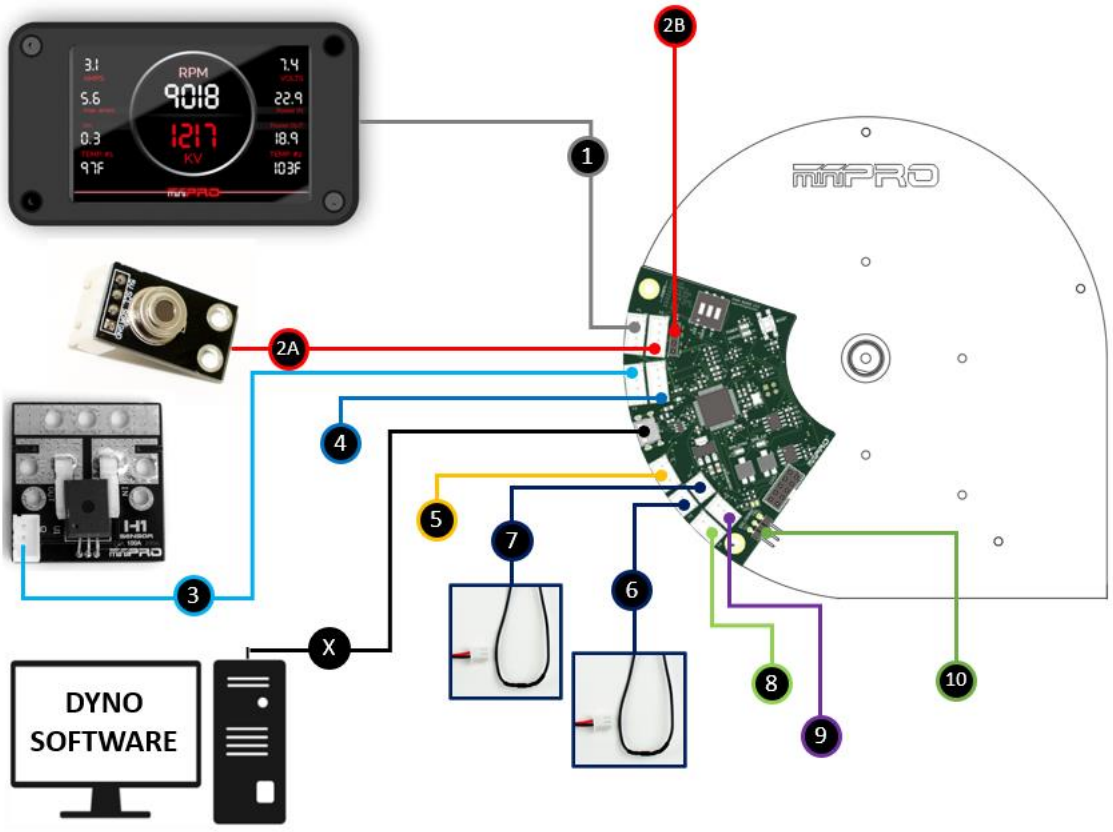

Figure 2: Dyno Controller Board V3.0 – Sensors Connection Diagram

ITEM	FUNCTION
1	Port #1 connects to LCD Screen.
2A	Port #2 connects to I.R. Temp. sensor *or* All-Weather Temp. sensor.
2B	
3	Port #3 connects to the H1 or A1 Voltage and Current sensor. The Dyno controller board might be equipped with a 3 pin or 4 Pin connector.
4	Port #4 connects to External RPM sensor.
5	Port #5 connects to Flow sensor.
6	Port #6 connects to Motor Loop. Temp. sensor.
7	Port #7 connects to Motor Loop. Temp. sensor.
8	Port #8 is Auxiliary port used for custom sensor designed by MINIPRO.
9	Port #9 is Auxiliary port used for custom sensor designed by MINIPRO.
10	Servo or ESC connection. This feature is not enabled and is subject to license fee.
X	Micro USB Cable connects to a Windows PC.

Warranty voided if it's not installed according to Figure 2.

SOFTWARE CONFIGURATION – V5.0 and later

INSTRUCTIONS:

1. Open the MINIPRO Testing Software and Connect the dynamometer to the program.
2. Go-to *Configure Hardware -> I/O Hobby Grade* tab.
3. Connect all necessary sensors.
4. Select the installed sensors from the drop-down (i.e. for voltage and current sensor see *Figure 3*).
5. Press the Apply Settings button. If the software cursor stays busy for longer than 1 min; press Apply again.
6. Press the Save Setup button, and your configuration is completed.

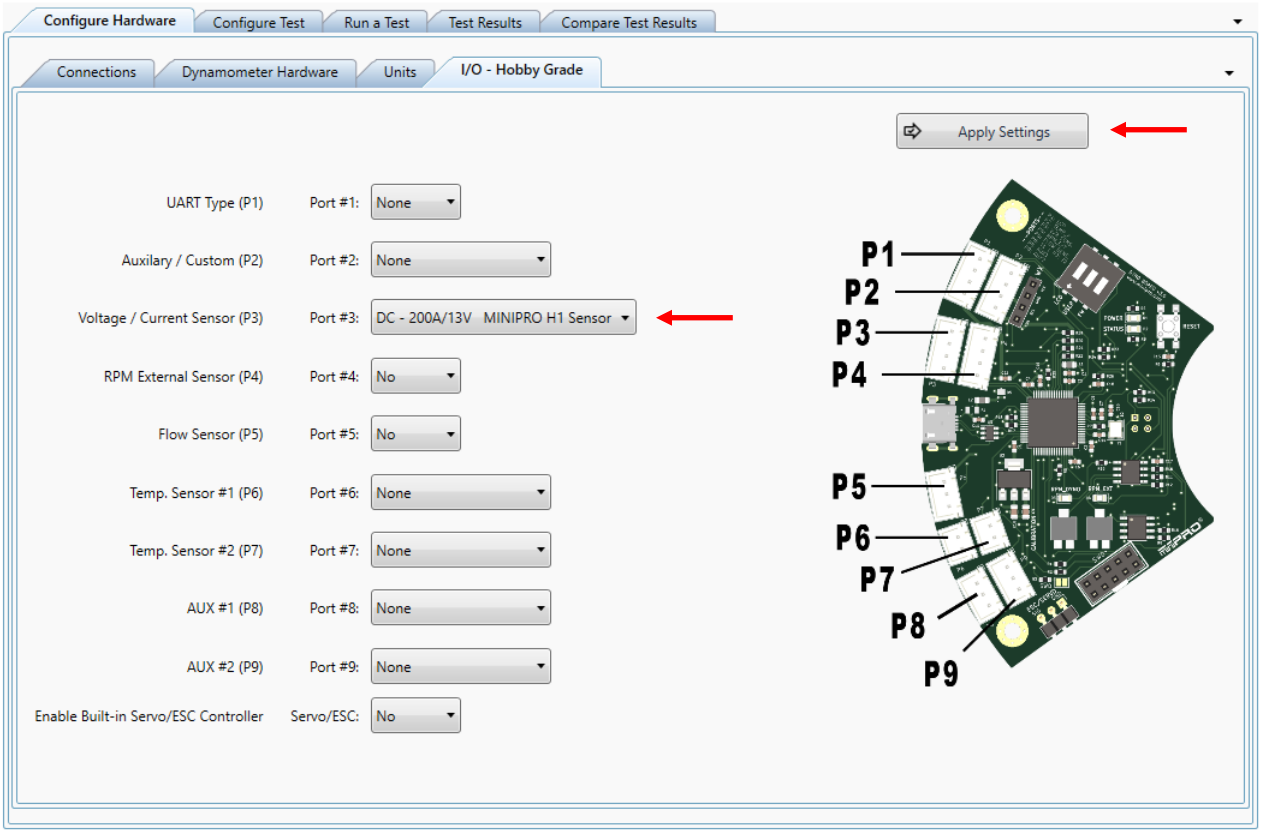

Figure 3: I/O Configuration