

Problème Arduine R3 et Cytron MDD10

Bonjour,

Je me tire les cheveux pour trouver solution à mon problème, mais je n'y arrive pas. J'espère que vous pourrez m'aider. Je vais faire de mon mieux pour vous donner un maximum d'informations.

Je souhaite faire tourner des ventilateurs de PC pour simuler le vent. Tout fonctionne en dehors de Simhub. Les moteurs tournent correctement lorsque j'appuie sur les boutons "test" de la carte Cytron MDD10.

Comme lu sur le forum, j'ai coupé la connexion 5V sur la carte afin qu'elle soit alimentée par USB.

J'ai paramétré Simhub mais j'ai un gros doute sur la position des cavaliers sur la carte Cytron MDD10 et j'ai un doute aussi sur le PWM Output dans Simhub. Mon problème vient peut-être de là. J'ai donc besoin d'aide pour ce paramètre.

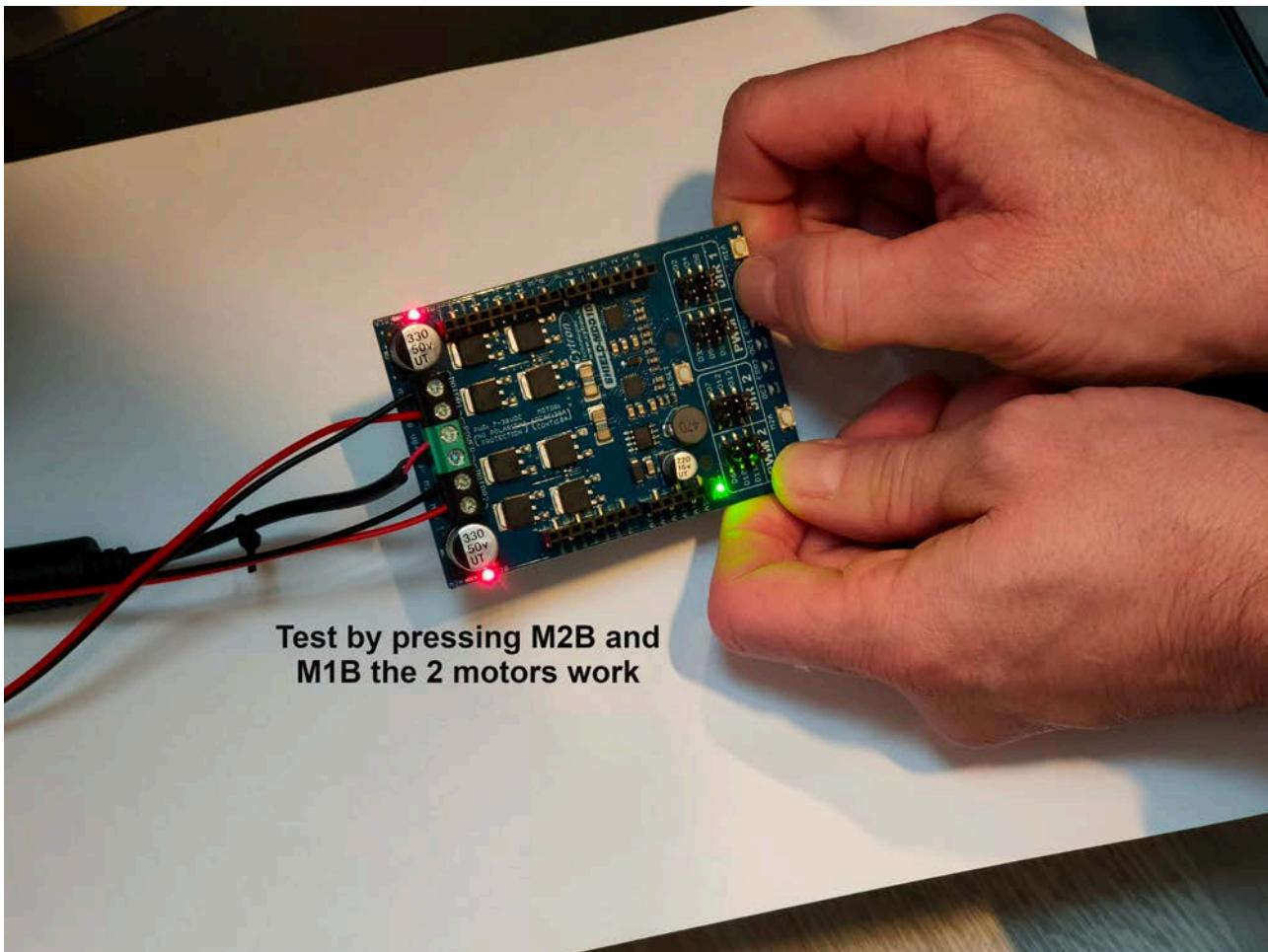
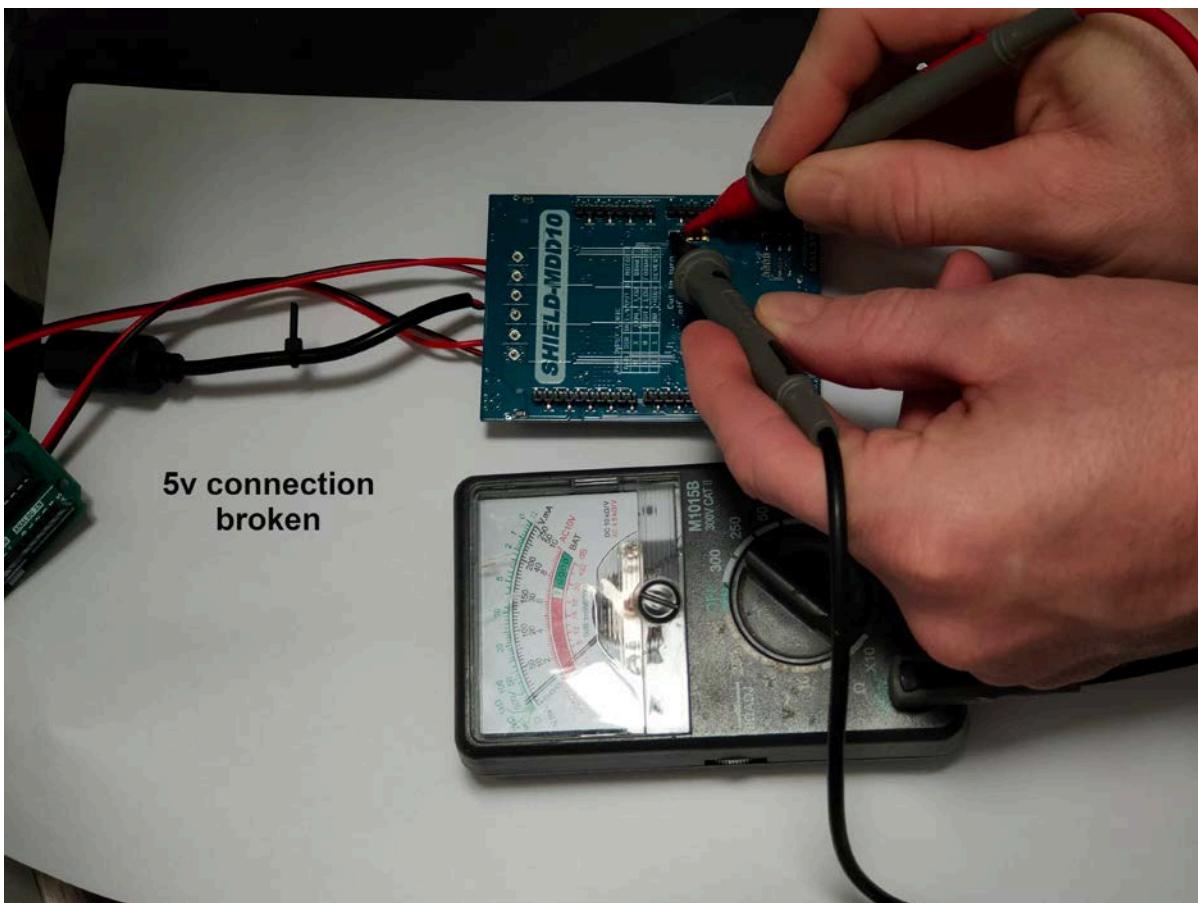
J'ai essayé de mettre les cavaliers PWM1 sur 3 et PWM2 sur 10 (vu sur ce forum) et donc la même chose dans Simhub mais ça ne donne rien. J'ai essayé d'autres combinaisons, mais toujours rien.

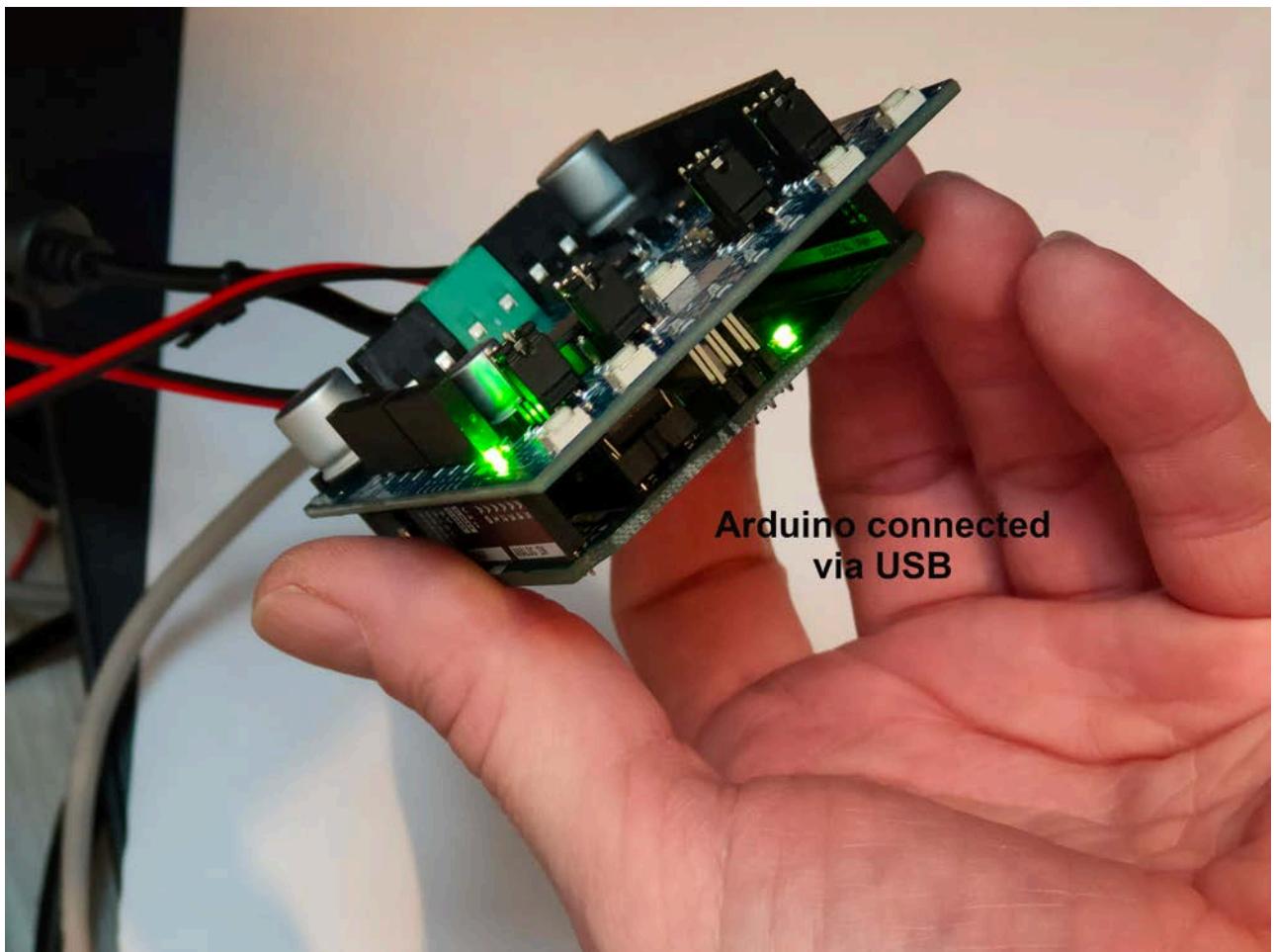
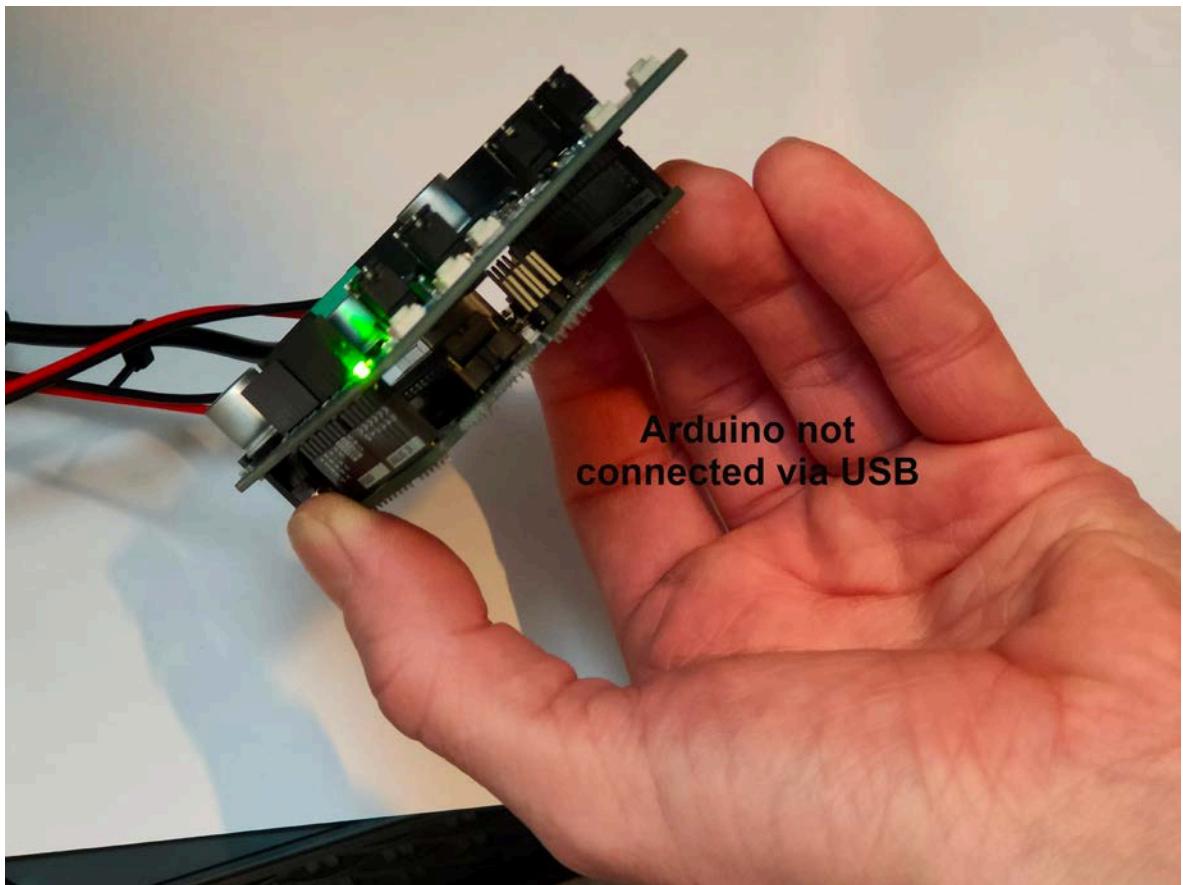
Je ne sais pas également ce que je dois faire des cavaliers DIR1 et DIR2.

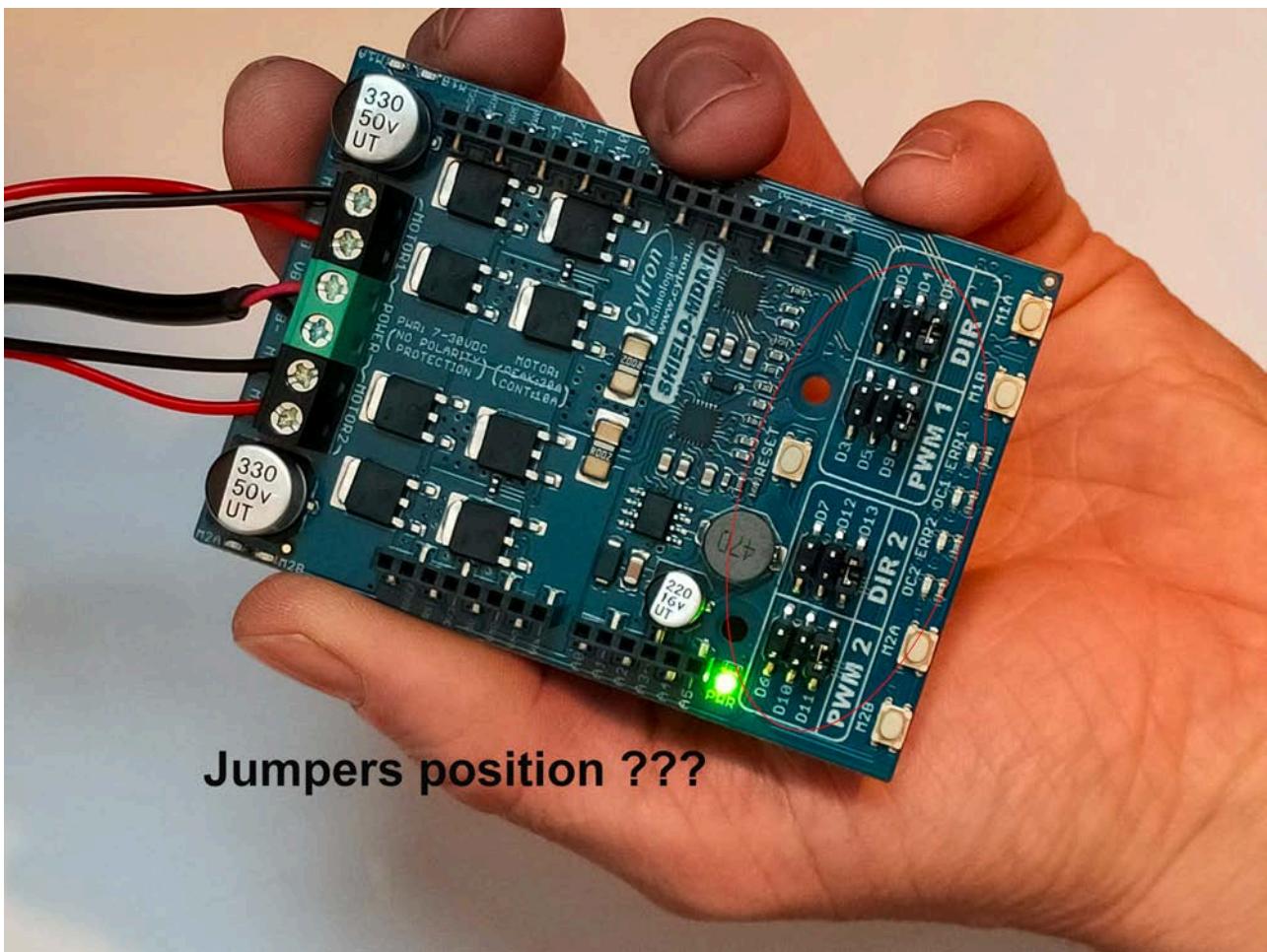
J'espère que vous pourrez m'aider et si vous avez besoin de plus d'informations, dites-le-moi.

Je vous joins une documentation pour la Cytron MDD10, si jamais ça peut aider.

Merci







SIMHUB - ASSETTO CORSA COMPETIZIONE - DÉCONNECTÉ

Arduino

SKETCH SETUP

- File Profiles
- SKETCH SETUP**
 - Search: Moto-Monitor board enabled
 - OFF []
- SHAKETT DK Motor Shield**
 - DK shield enabled DEPRECATED : See wiki
 - OFF []
- SHAKETT L298N Motors Board**
 - L298N motor board enabled
 - OFF []
- SHAKETT PWM Outputs**
 - Shakett direct PWM outputs enabled, for fans, TIP120 or any PWM driven custom boards
 - PWM Output 1 pin: 2 + -
 - PWM Output 1 min (lower values will disable output): 9 + -
 - PWM Output 1 max: 0 + -
 - PWM Output 2 pin: 255 + -
 - PWM Output 2 min (lower values will disable output): 11 + -
 - PWM Output 2 max: 0 + -
 - PWM Output 2 255 + -
- SHAKETT PWM FANS Outputs**
 - Shakett direct PWM fans enabled (25hz PWM)
 - Arduno Uno : pins 9 or 10
 - Arduno Leonardo pins 9, 10 or 11
 - Arduno Mega pins 11, 12 or 13
 - 0 + -
- Oled GLCD**
 - OLED LCD enabled
 - OFF []
- Nokia GLCD**
 - Nokia LCD enabled
 - OFF []
- 74HC595 Gear Display**
 - 74HC595 gear display enabled
 - OFF []

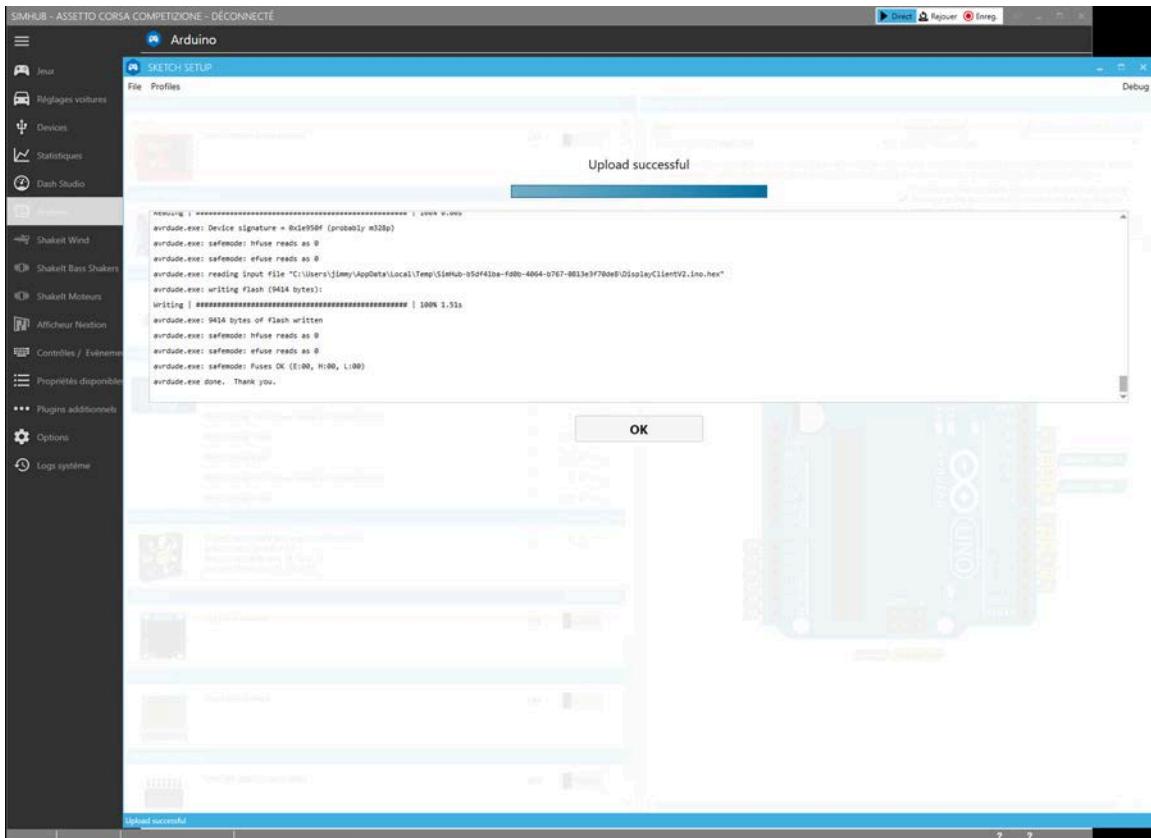
COMPILE AND UPLOAD

- Arduino serial port: Arduino UNO (ATmega328p)
- My arduino serial port is selected
- Safety first! Put your seatbelt to avoid uploading to the wrong device it's highly advised to unplug any arduino based device (motor, button box, window etc...) and only keep your target arduino plugged. By doing this you will be sure to upload using the correct serial port.
- I understand that uploading this sketch will replace any existing firmware on the arduino and I've made sure that I'm using the correct serial port.
- Firmware on the arduino and I've made sure that I'm using the correct serial port.
- UPLOAD TO ARDUINO**

Print wiring diagram

1: Circles the PWM output settings for the Shakett PWM Outputs section.

2: Circles the "Upload to Arduino" button.



SIMHUB - ASSETTO CORSA COMPETIZIONE - DÉCONNECTÉ

Arduino

File Profiles

Upload successful

```
avrduude: Device signature = 0x0e950f (probably m328p)
avrduude: safemode: hfuse reads as 0
avrduude: safemode: efuse reads as 0
avrduude: exec: reading input file "C:\Users\Jimmy\AppData\Local\Temp\SimHub-55df41ba-f800-4064-b767-0013e3f78de0\Display\ClientV2.ino.hex"
avrduude: exec: writing Flash (9404 bytes):
writing | ****| 100% 1.5s
avrduude: exec: 9404 bytes of flash written
avrduude: safemode: hfuse reads as 0
avrduude: safemode: efuse reads as 0
avrduude: exec: safemode: Fuses OK (E:00, H:00, L:00)
avrduude: exec done. Thank you.
```

OK

Arduino

Ecrans Leds RGB Leds TM1638 Matrice RGB Affichage et alertes Jauges Contrôles Mon matériel

Arduino désactivé Une arduino Plusieurs Arduinos

Le mode multiple agrègera plusieurs arduinos en un seul dash, vérifiez bien les paramètres dessous.

Avant d'utiliser votre Arduino vous devez charger le sketch [Plus d'infos ...](#) Ouvrir l'outil de configuration de l'Arduino

PARAMÈTRES MULTIPLE ARDUINOS

Vibre et Wind Unique ID: 1a97fa20-6fde-4175-8dc1-14172ea35c7d Motors from 1 to 6

SimVent01 Unique ID: 1a97fa20-6fde-4175-8dc1-14172ea35c7d Motors from 5 to 6

Connecté

Réglages de l'appareil

Vitesse port série: 115200 Bauds Vitesse de rafraîchissement LCD: 1 + → Contenu de la matrice RGB: 1 + → Rotation de la matrice RGB: Portrait Protocole perso: Cliquez sur [ENTRER] Line les boutons: [Oublier cet appareil]

Connected device informations

Device name	SimVent01
Serial port	COM5
Beautrate	115200
Firmware Revision	j
MCU	ATmega328P
Unique id	dad052ed-f56b-47f5-97b4-ffcc3e8faac3
Features list	GNUPKV
Shakelt Motors	2
Shakelt Motor board	PWM

Communication statistics

FPS	60.0
Buffer	16x1
Sent	1822
Received	1849
Reemited	0
Corrupted	0
Reemited at wait	0

PARAMÈTRES DE RECHERCHE

Scanner tous les ports série Scanner seulement les ports sélectionnés Ne jamais scanner les ports sélectionnés COMS - Arduino Uno

RECHERCHE DE PÉRIPHÉRIQUES

110807 COM5 Already in use

Appliquer

SIMHUB - ASSETTO CORSA COMPETIZIONE - DÉCONNECTÉ

Shakelt Moteurs

- Profil Sortie Moteurs Contrôles

SÉLECTION DES SORTIES

ARDUINO MOTORS AND FANS

	Channel 1	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7	Channel 8	Channel 9	Channel 10	Channel 11	Channel 12
Headsight	OFF	OFF	ON (83%)	OFF	OFF	OFF						
RPMs	All	OFF	OFF	OFF	ON (100%)	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Simulated road texture	All	OFF	OFF	OFF								
Speed	All	OFF	OFF	OFF	ON (100%)	ON (100%)	OFF	OFF	OFF	OFF	OFF	OFF
Speed with curving	Left	OFF	OFF	OFF								
	Right	OFF	OFF	OFF								
Static wind	All	OFF	OFF	OFF								

FANATEC PEDALS (USB ONLY)

- FORCEFEEL PAD
- GAMETRIX PAD
- GAMETRIX JETPAD
- HSMRACING RFUN PRO V2

Options

Logs système

SIMHub 8.1.1 | Status : Écouteur | En écoute sur le port UDP 9000 | Nouvelle version disponible : 8.1.3 | ? Wiki | ? Serveur Discard

SIMHUB - ASSETTO CORSA COMPETIZIONE - DÉCONNECTÉ

Shakelt Moteurs

- Profil Sortie Moteurs Contrôles

Default profile

Gestionnaire de profils [Éditer le profil](#)

CUSTOM EFFECT Provides ability to create your own effect based on game data

DECELERATION G-FORCE Provide deceleration feedback based on G-Force

GEAR GRINDING Provides feedback for grinding gears (friction only)

GEAR SHIFT Provides a pulse effect for gear shifting

JUMP LANDING Provides localized feedback for jump landings

LATERAL G-FORCE Provide lateral acceleration feedback based on G-Force

MISSED GEAR Provides feedback for missed gears (manual cars only, based on H-Pattern controller)

ROAD IMPACTS Provides localized feedback for bumps and other wheels impact on road

ROAD RUMBLE Provides localized rumble for herbs, grass ...

ROAD VIBRATION Provides localized road vibration based on suspension telemetry

RPMs Simulates engine RPMs with a full customizable RPM/response curve

SIMULATED ROAD TEXTURE Simulate the road texture based on speed

SPEED Provide simple speed proportional feedback

PARAMÈTRES D'EFFET

Mode	Auto	Effets en direct	Sortie
Force minimale (km/h)	1	100	<input type="checkbox"/> Utiliser des paramètres de canaux de sortie séparés
Force maximale (km/h)	160	60%	<input type="checkbox"/> Exporter la valeur de sortie en tant que propriété
Fibre de réponse		100%	<input type="checkbox"/> Désactiver la sortie
Facteur gamma	500		

SPEED WITH CURVING Provide curved proportional feedback with left/right motion

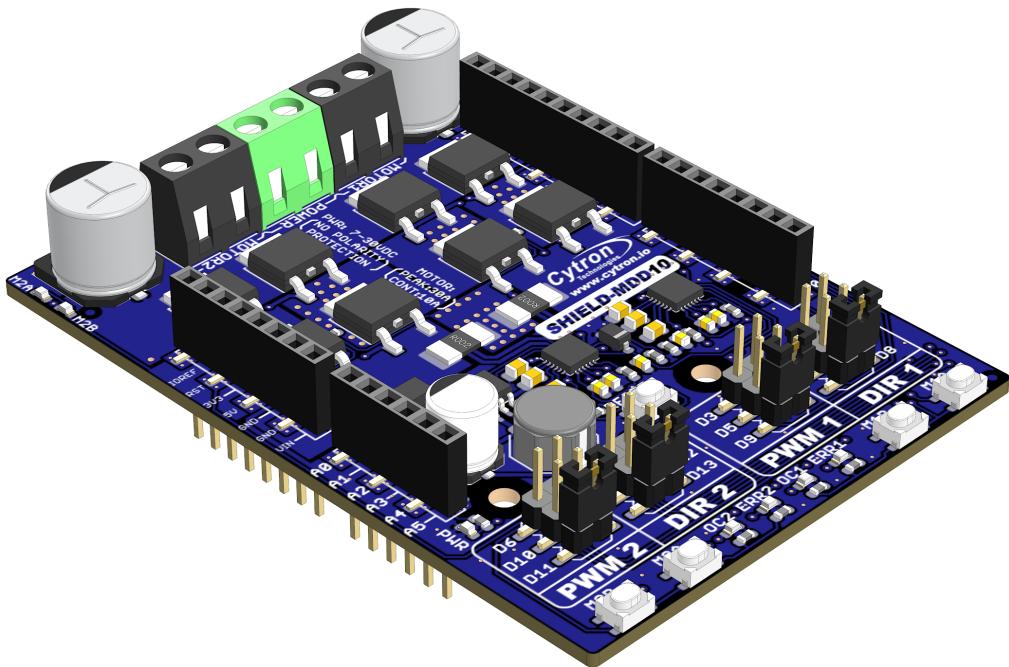
SIMHub 8.1.1 | Status : Écouteur | En écoute sur le port UDP 9000 | Nouvelle version disponible : 8.1.3 | ? Wiki | ? Serveur Discard



SHIELD-MDD10

10Amp 7V-30V DC Motor Driver

Shield for Arduino (2 Channels)



Datasheet

Rev 1.0
May 2019

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1. BOARD LAYOUT & FUNCTION

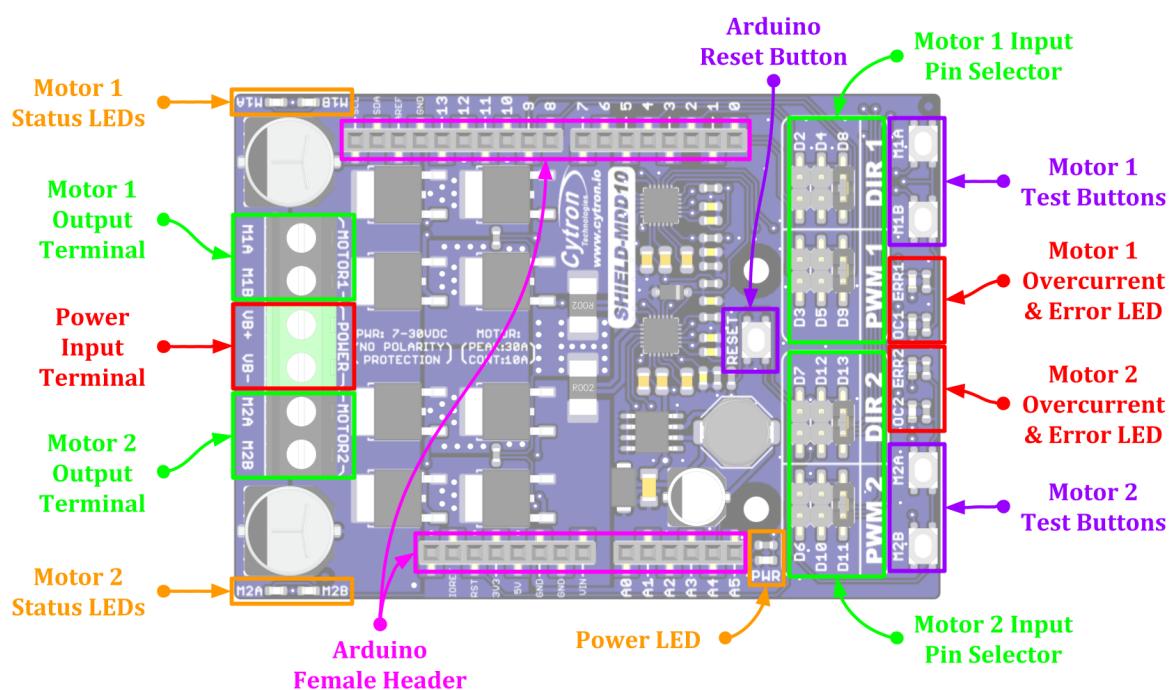


Figure 1: SHIELD-MDD10 Board Functions (Top)

Function	Description
Power Input Terminal	Connect to battery. <ul style="list-style-type: none"> ● VB+ : Positive ● VB- : Negative <i>Warning : Connecting in reverse polarity will damage the motor driver instantaneously.</i>
Motor Output Terminal	Connect to motor terminal. Motor direction is depending on the polarity.
Power LED	Turn on when power up.
Motor Status LEDs	Turn on when the motor is running. <ul style="list-style-type: none"> ● MA : Forward* ● MB : Backward*
Error LED	Turn on during undervoltage shutdown or hardware fault. Please contact support@cytron.io for more information.
OC (Overcurrent) LED	Turn on when current limiting is in action. Current limit threshold is depending on the board temperature.
Arduino Reset Button	Press to reset the Arduino.
Test Buttons	Press to test the functionality of the motor driver. Motor will run at full speed. <ul style="list-style-type: none"> ● MA : Forward* ● MB : Backward*

Function	Description
PWM/DIR Input Pin Selector	Select the Arduino pin for PWM & DIR signal. <ul style="list-style-type: none"> • DIR : Direction input. • PWM : PWM input for motor speed control.
Arduino Female Header	Connect to other shield.

Table 1: SHIELD-MDD10 Board Functions (Top)

- * Actual motor direction is depending on the motor connection.
Swapping the connection (MA & MB) will reverse the direction.

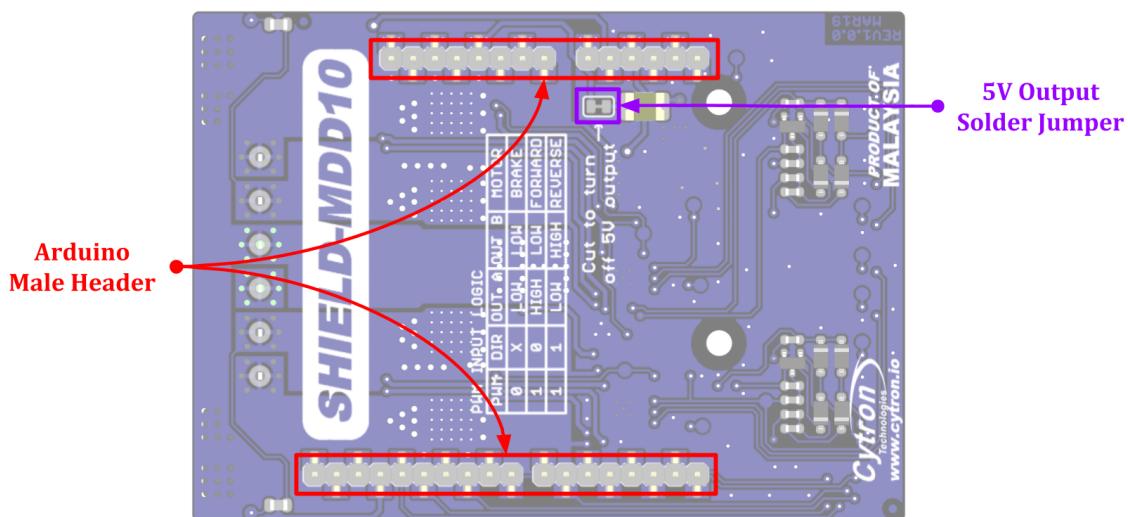


Figure 2: SHIELD-MDD10 Board Functions (Bottom)

Function	Description
5V Output Solder Jumper	SHIELD-MDD10 has a built-in 5V buck regulator to power the Arduino by default. If you want to power the Arduino from the other source, cut the track to disconnect the regulator from the Arduino 5V pin.
Arduino Male Header	Connect to Arduino or on top of other shield.

Table 2: SHIELD-MDD10 Board Functions (Bottom)

2. SPECIFICATIONS

No	Parameters	Min	Max	Unit
1	Power Input Voltage	7	30	V
2	Maximum Motor Current (Per Channel)	Continuous	-	10 A
		Peak *1	-	30 A
3	Logic Input Voltage (PWM & DIR)	Low Level	0	0.8 V
		High Level	1.5	5.5 V
4	PWM Frequency (Output frequency is same as input frequency)	Standard	DC	20 KHz
		Extended *2	20	40 KHz
5	DC +5V Output Maximum Current	-	500	mA

Table 3: SHIELD-MDD10 Absolute Maximum Ratings

*1 Peak current is limited by the overcurrent protection circuit. Actual current limit is depending on board temperature. Value shown is at room temperature (25 - 30 degree Celsius).

*2 When the PWM operates in extended frequency range, continuous motor current will be reduced.

3. DIMENSION

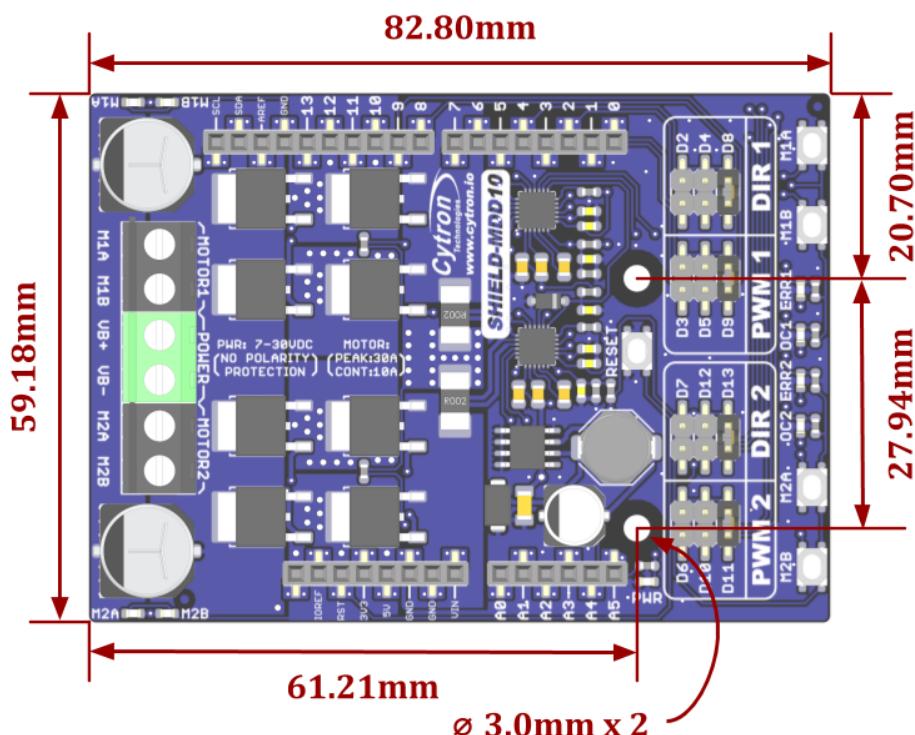


Figure 3: SHIELD-MDD10 Dimension

4. INTERFACE

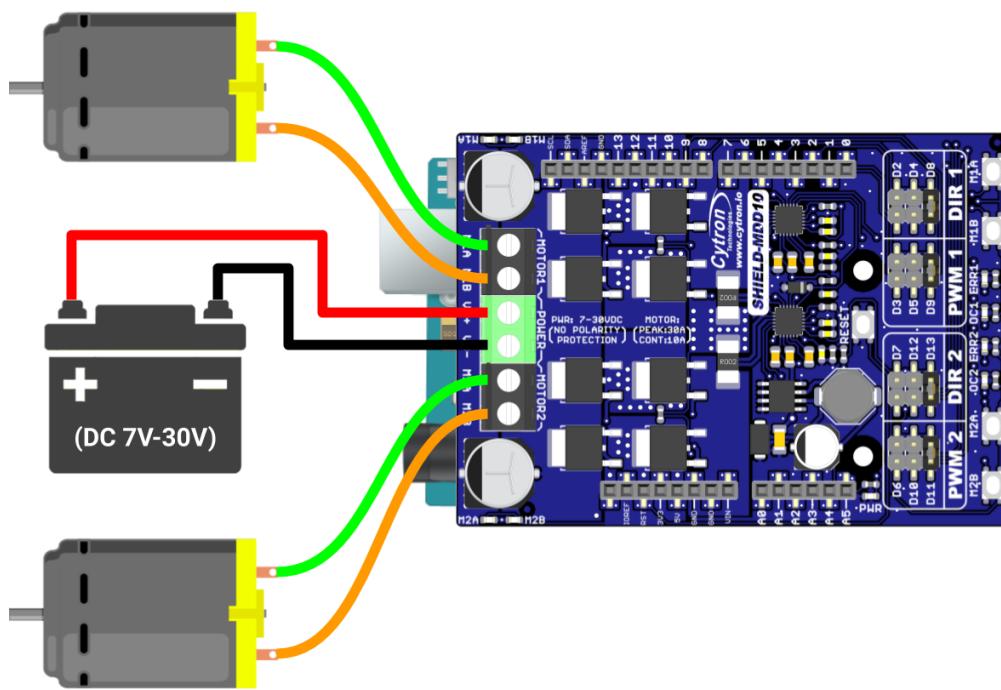


Figure 4: Battery and Motors Connection Diagram

PWMx	DIRx	Output A (MxA)	Output B (MxB)	Motor x
Low	X (Don't Care)	Low	Low	Brake
High	Low	High	Low	Forward*
High	High	Low	High	Backward*

Table 4: PWM/DIR Input Truth Table

* Actual motor direction is depending on the motor connection.
Swapping the connection (MA & MB) will reverse the direction.

5. PROTECTION FEATURES

- **Overcurrent Protection with Active Current Limiting**

When the motor is trying to draw more current than what the motor driver can supply, the PWM to the motor will be chopped off and the motor current will be maintained at maximum current limit. This prevents the motor driver from damage when the motor stalls or an oversized motor is hooked up. OC LED will turn on when current limiting is in action.

- **Temperature Protection**

The maximum current limiting threshold is determined by the board temperature. The higher the board temperature, the lower the current limiting threshold. This way, SHIELD-MDD10 is able to deliver its full potential depending on the actual condition without damaging the MOSFETs.

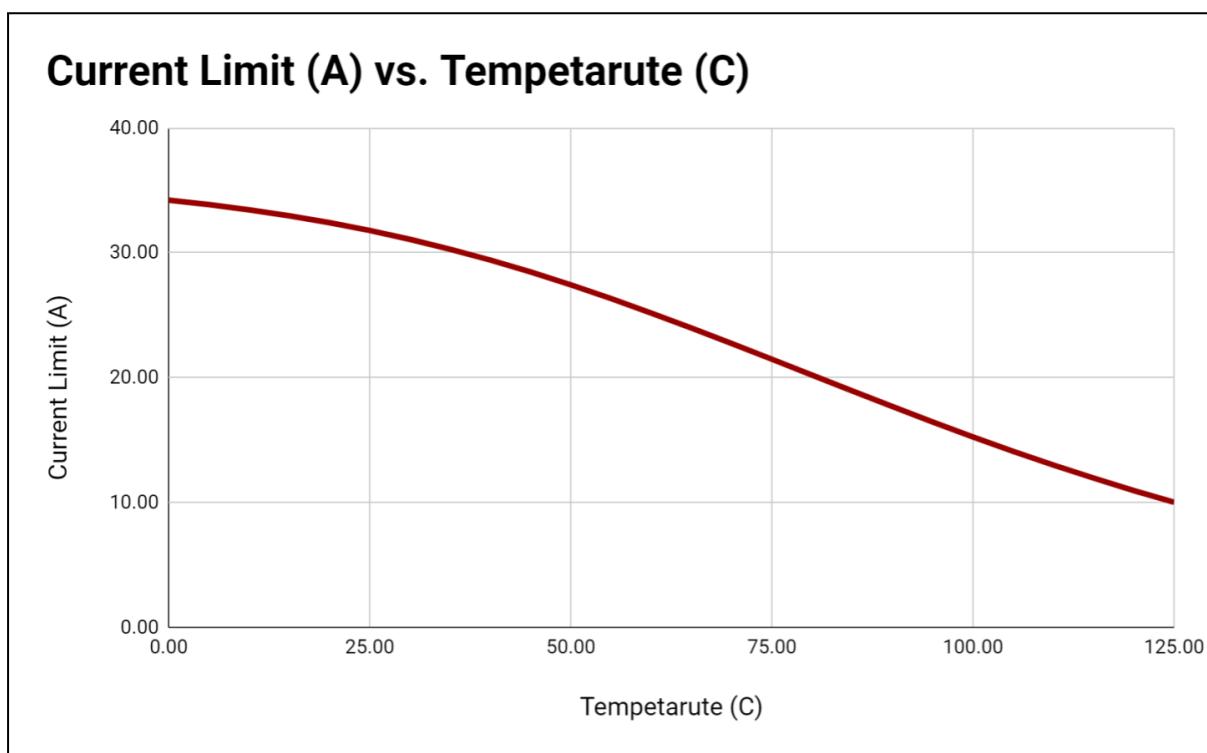


Figure 5: Maximum Current Limit vs Temperature Graph

- **Undervoltage Shutdown**

The motor driver output will be shut down when the power input voltage drops below the lower limit. This is to make sure the MOSFETs have sufficient voltage to fully turn on and do not overheat. ERR LED will turn on during undervoltage shutdown.

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