— 12 V
— 5 V
— gnd
— data

the usb hub is mainly used for charging
compatible devices like the bluetooth speaker
eventough it has its own battery already.
can also be hooked up the upBoard.

the arduino gets its
power from the voltage
regulator in the md25
and the upBoard via
USB.

the data connections to
the arduino have been
simplified to increase
readability. refer to the
pinmappings in the code
for further info.
every RC channel needs
its own pin on the
arduino.

microphones

?

servo

RC receiver

USB
out

USB
hub

upBoard 2GB

step down
5 V | 1A

Arduino Uno

switch 1

step down
5 V | 12A

MD 25

motor 1

+ 12 V

wago
clamp

switch 2

motor 2

GND

wago
clamp

the power bank can be
charged via the same
connector we use to
draw power. so you will
have to unplug the
peripherals for charging.