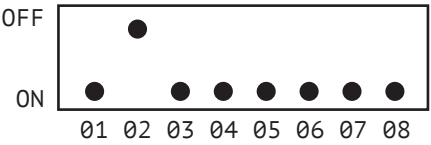
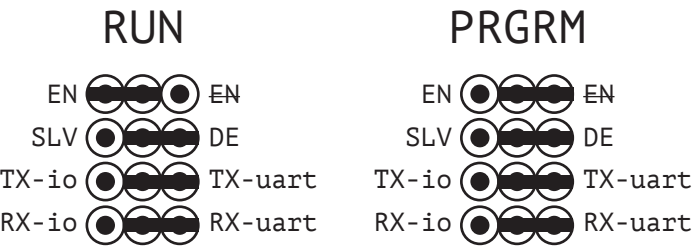


CTC-DRA-10-R2

DIP SETTINGS ST-M5045



SETUP ST-M5045 & 23HS45-4204S

DMX MOTOR COMBINED

CH1 = DIRECTION (GO), CH2 = SPEED (ENERGY)

```
// MOTOR GLOBALS -----
#include <AccelStepper.h>
int motorDirPin = 9; //digital pin 6
int motorStepPin = 8; //digital pin 3
AccelStepper stepper(1, motorStepPin, motorDirPin);
int energy = 1000;    // The current speed in steps/second
int topSpeed = 750;  // The max speed in the energy mapping
int go = 1;          // Either 1, 0 or -1

// DMX GLOBALS -----
#include <Conceptinetics.h>
#define DMX_SLAVE_CHANNELS 2
DMX_Slave dmx_slave ( DMX_SLAVE_CHANNELS );
const int ledPin = 13;
void setup()
{
    // MOTOR SETUP
    stepper.setMaxSpeed(1000);
    stepper.setSpeed(1000);

    // DMX SETUP
    dmx_slave.enable ();
    dmx_slave.setStartAddress (1);
    pinMode ( ledPin, OUTPUT );
}

void loop()
{
    energy = dmx_slave.getChannelValue (2);
    energy = map(energy, 0, 255, 0, topSpeed);

    if ( dmx_slave.getChannelValue (1) > 127 ) {
        digitalWrite ( ledPin, HIGH );
        go = 1;
    }

    if ( dmx_slave.getChannelValue (1) < 127 ) {
        digitalWrite ( ledPin, LOW );
        go = -1;
    }

    stepper.setSpeed(go * energy);
    stepper.runSpeed();
}
```

STEPPER - SERIAL MONITOR CONTROL

```
#include <AccelStepper.h>

int motorDirPin = 9; //digital pin 6
int motorStepPin = 8; //digital pin 3
AccelStepper stepper(1, motorStepPin, motorDirPin);

int spd = 1000;    // The current speed in steps/second
int sign = 1;      // Either 1, 0 or -1

void setup()
{
  Serial.begin(9600);
  stepper.setMaxSpeed(1000);
  stepper.setSpeed(1000);
}

void loop()
{
  char c;
  if(Serial.available()) {
    c = Serial.read();
    if (c == 'f') { // forward
      sign = 1;
    }
    if (c == 'r') { // reverse
      sign = -1;
    }
    if (c == 's') { // stop
      sign = 0;
    }
    if (c == '1') { // super slow
      spd = 10;
    }
    if (c == '2') { // medium
      spd = 100;
    }
    if (c == '3') { // fast
      spd = 1000;
    }
    stepper.setSpeed(sign * spd);
  }
  stepper.runSpeed();
}
```

DMX - SLAVE MODE

```
#include <Conceptinetics.h>
#define DMX_SLAVE_CHANNELS 10

DMX_Slave dmx_slave ( DMX_SLAVE_CHANNELS );

const int ledPin = 13;

void setup() {
  dmx_slave.enable ();
  dmx_slave.setStartAddress (1);
  pinMode ( ledPin, OUTPUT );
}

void loop()
{
  if ( dmx_slave.getChannelValue (1) > 127 )
    digitalWrite ( ledPin, HIGH );
  else
    digitalWrite ( ledPin, LOW );
}
```