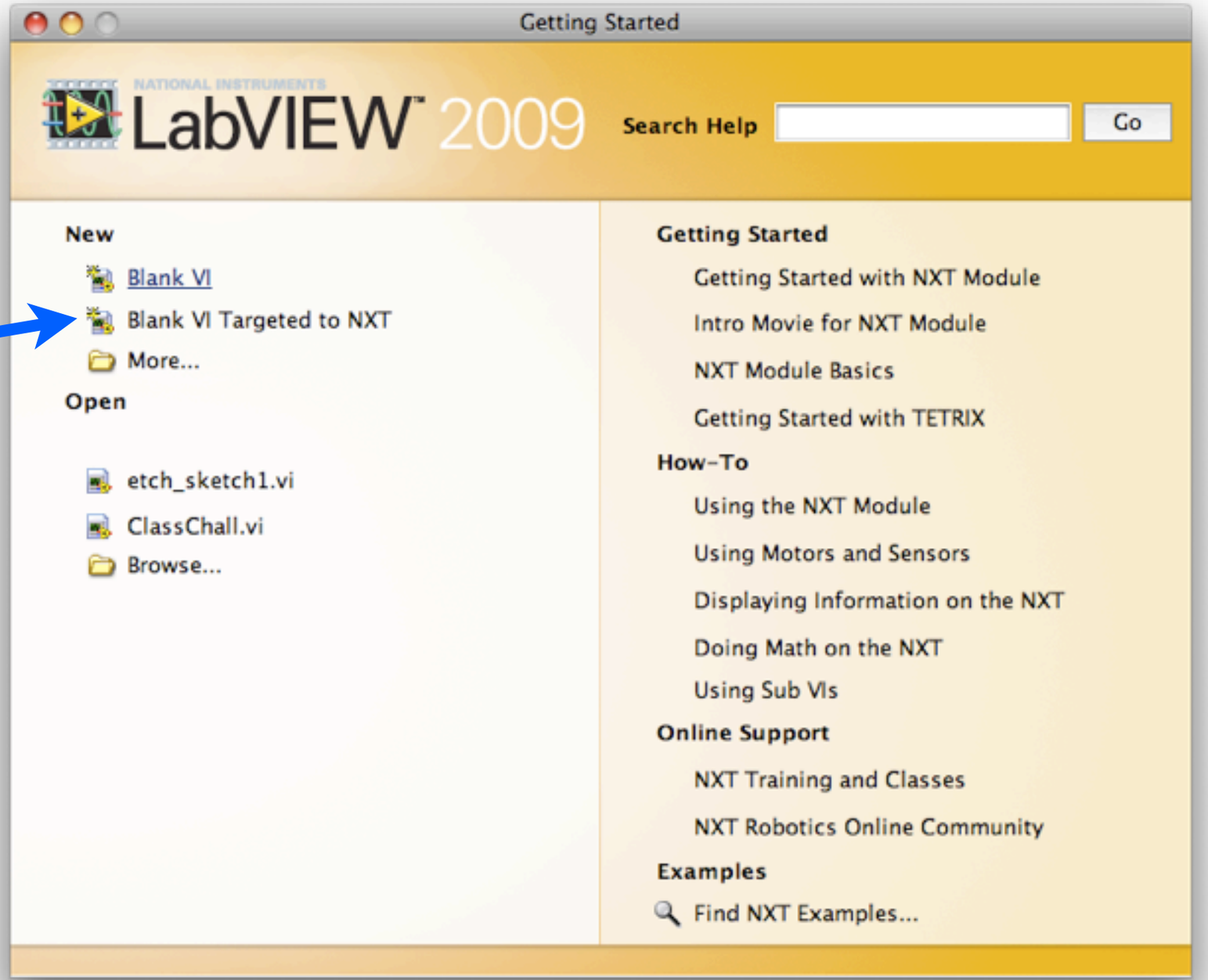
PREVIOUS ACTIVITY

RoboJackets

Make a New VI

Make a new **VI**
Targeted to **NXT**

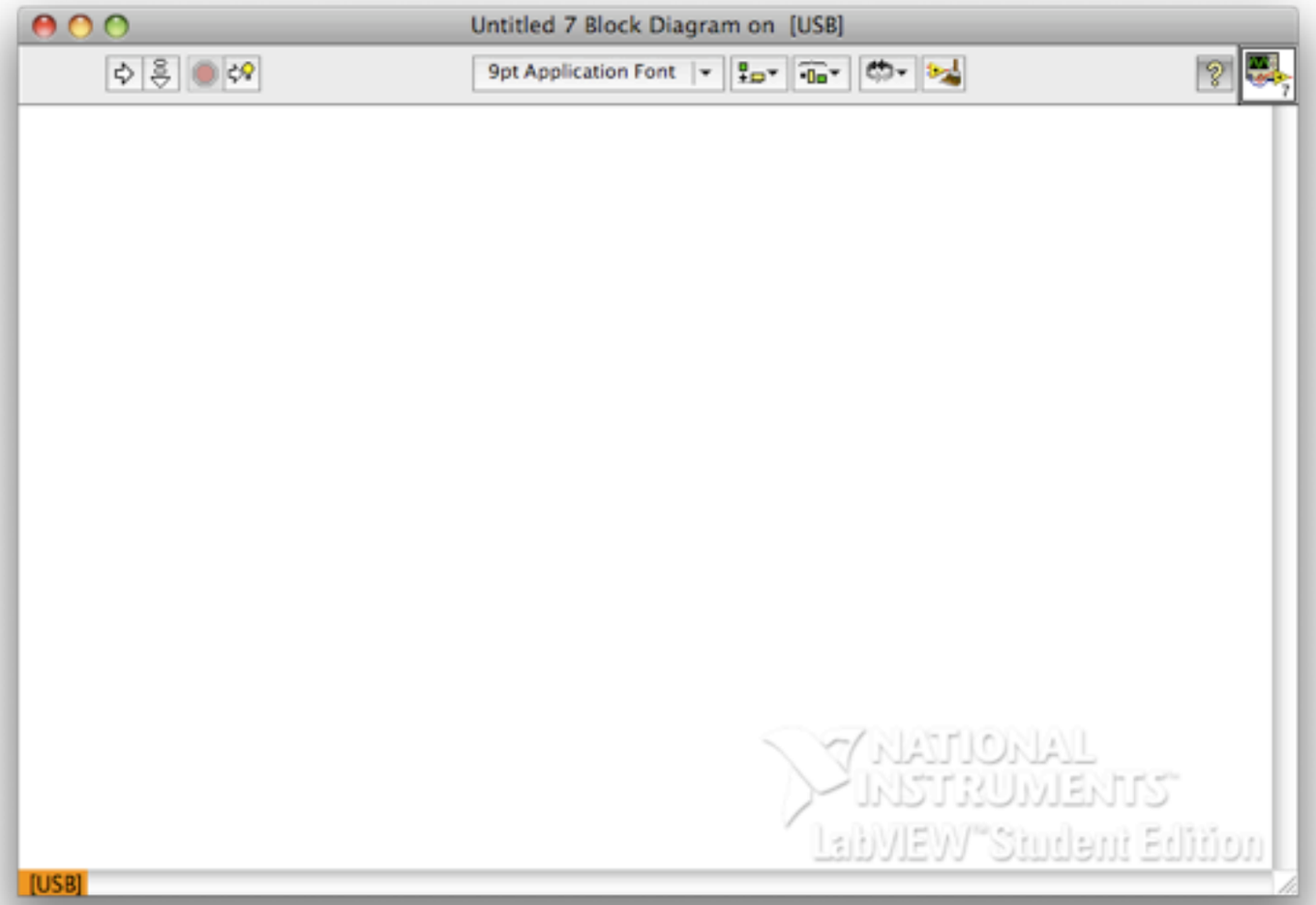


Open the Block Diagram

Bring up the **Block Diagram**

– Control-E

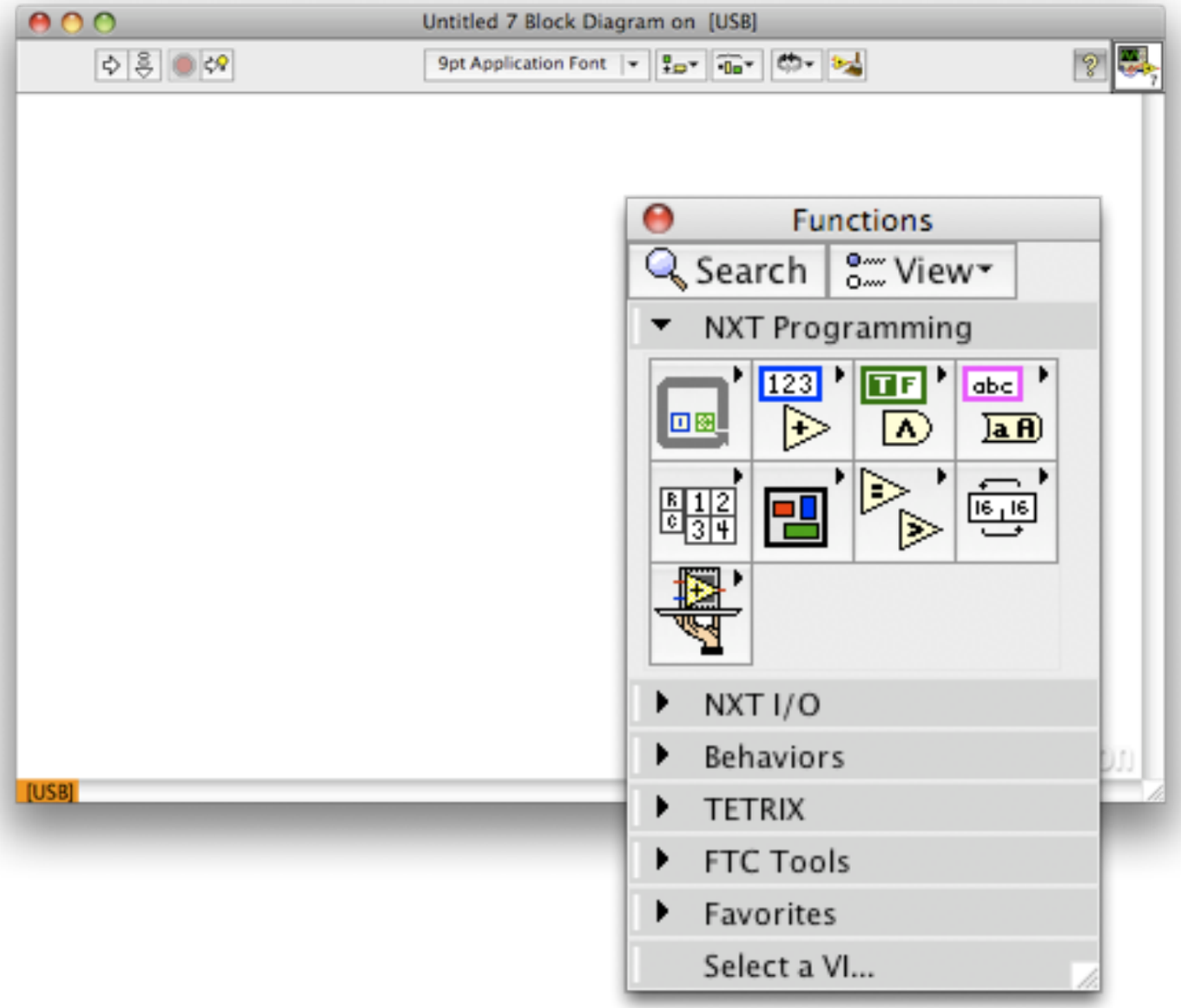
– Window >> Show Block Diagram



Functions Palette

Bring up the **Functions Palette**

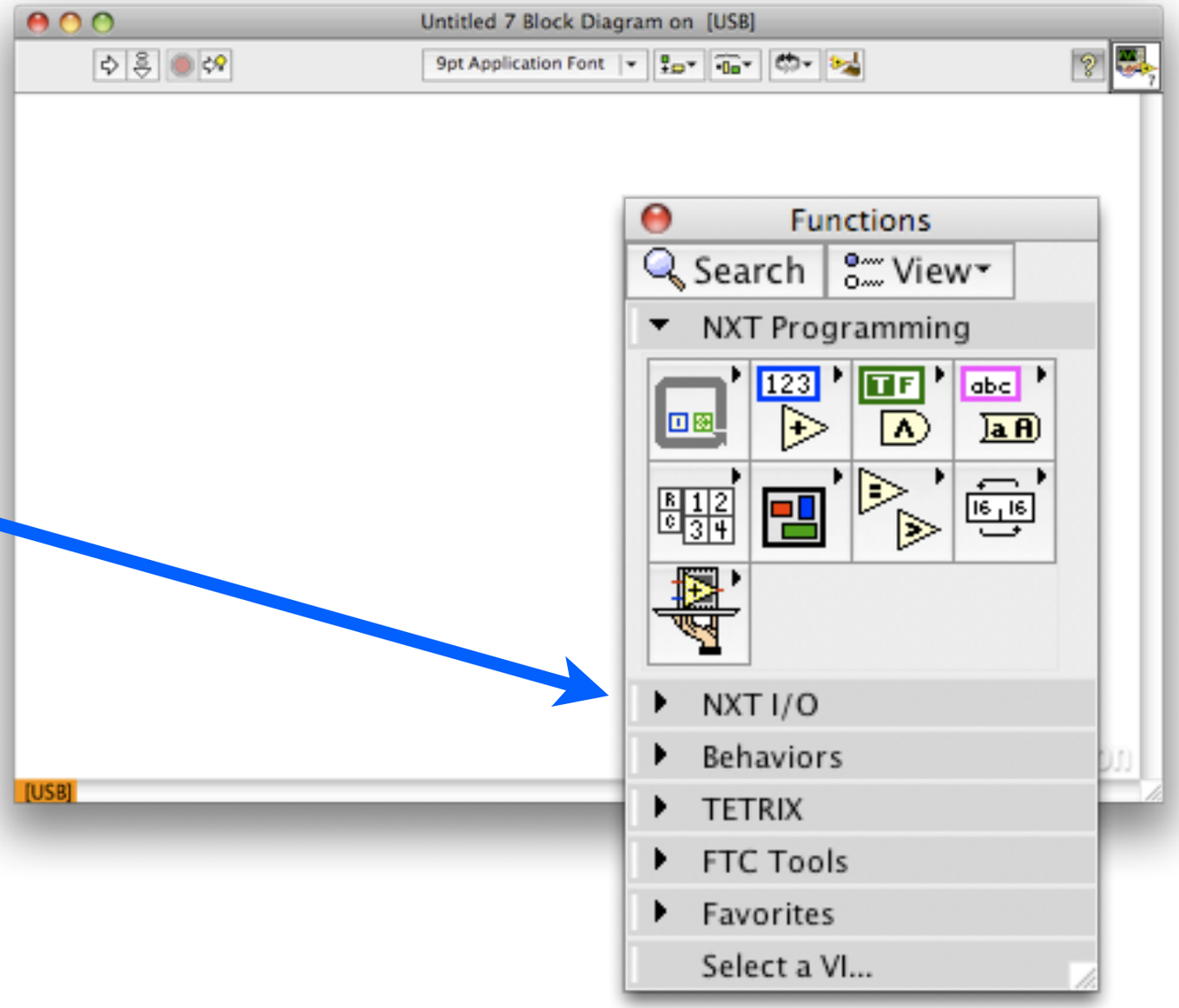
- Left Click
- View >> Functions Palette



NXT I/O

Select the
NXT I/O Menu

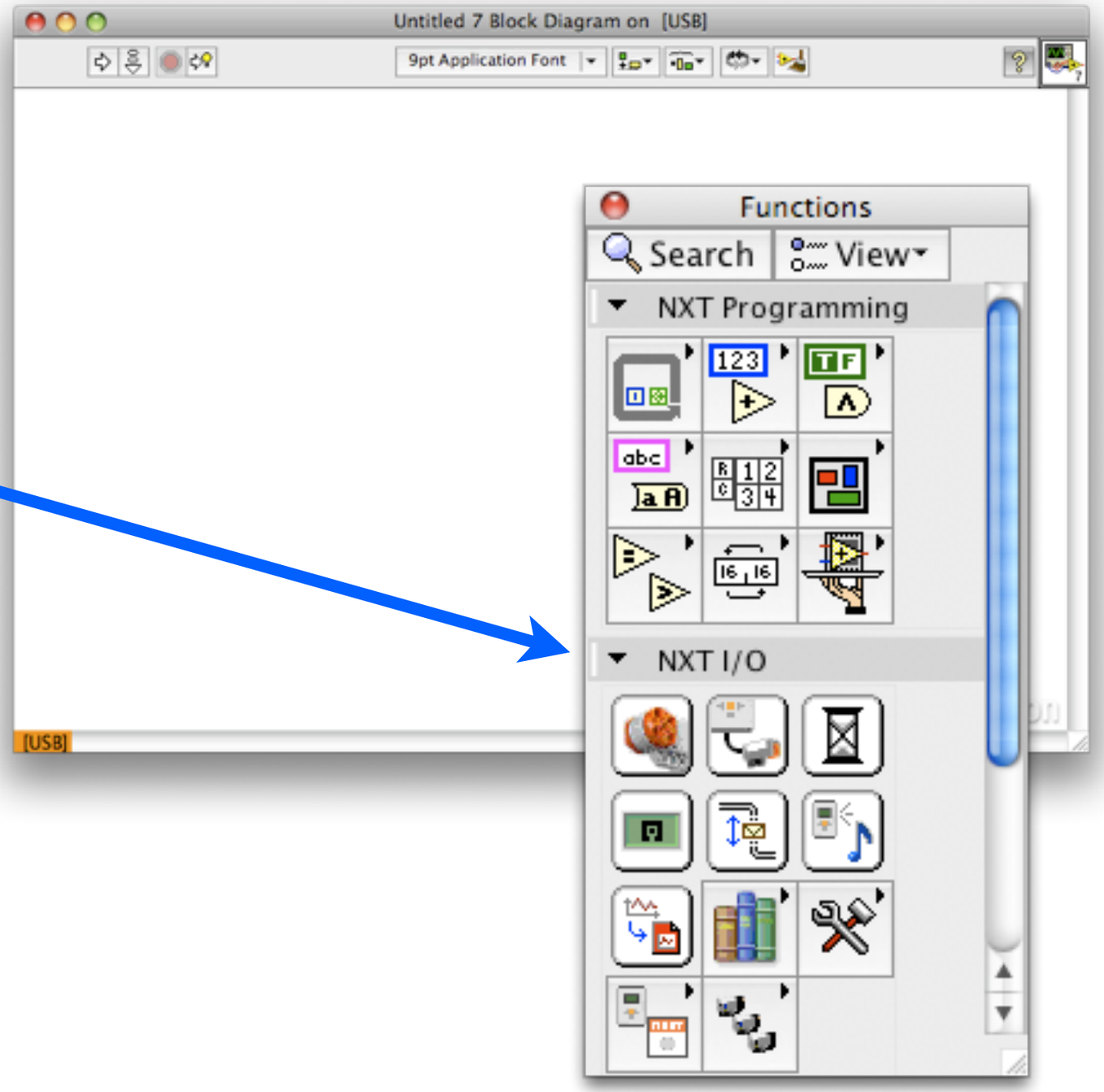
– Click NXT I/O



NXT I/O

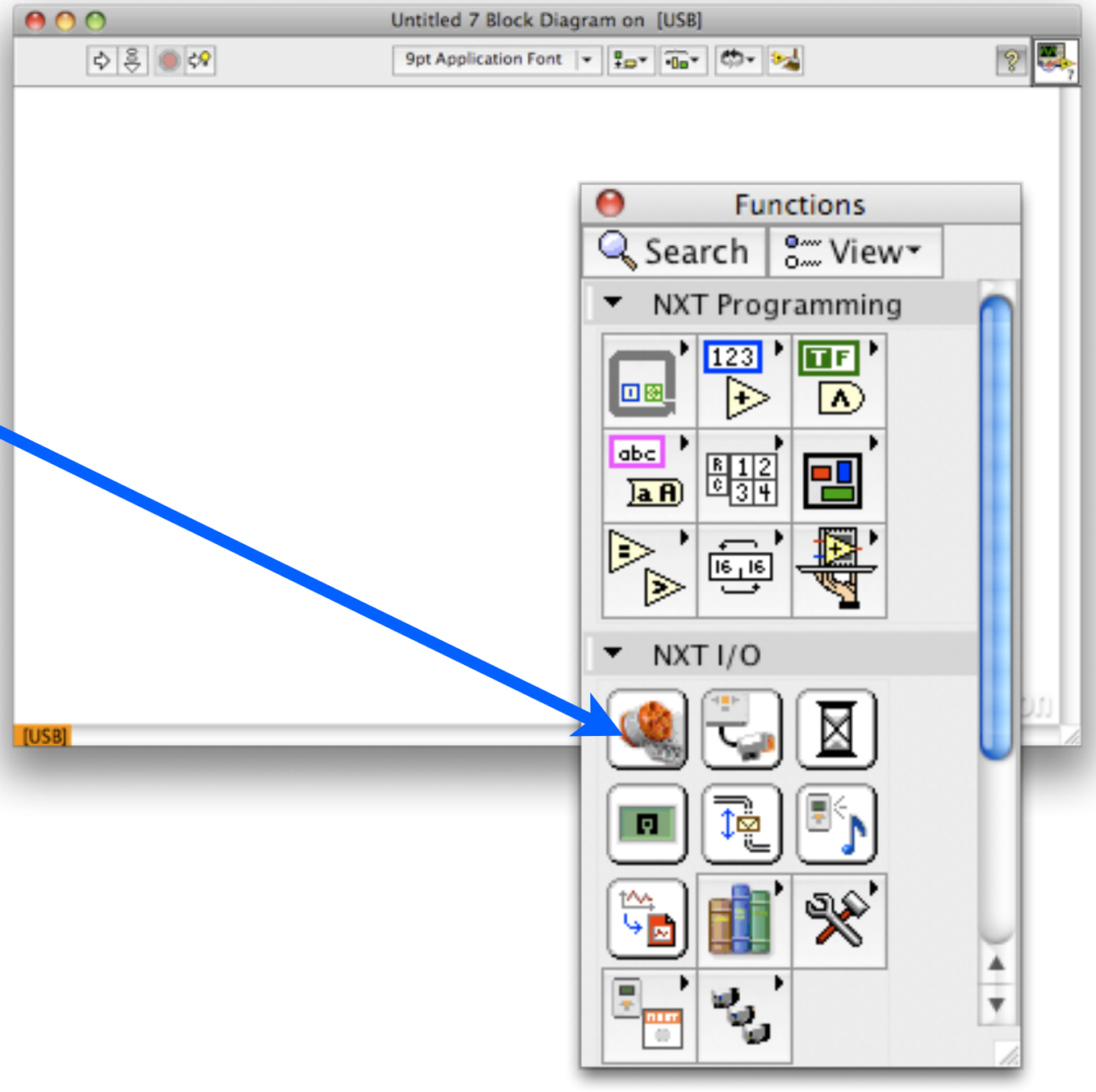
Select the
NXT I/O Menu

– Click NXT I/O



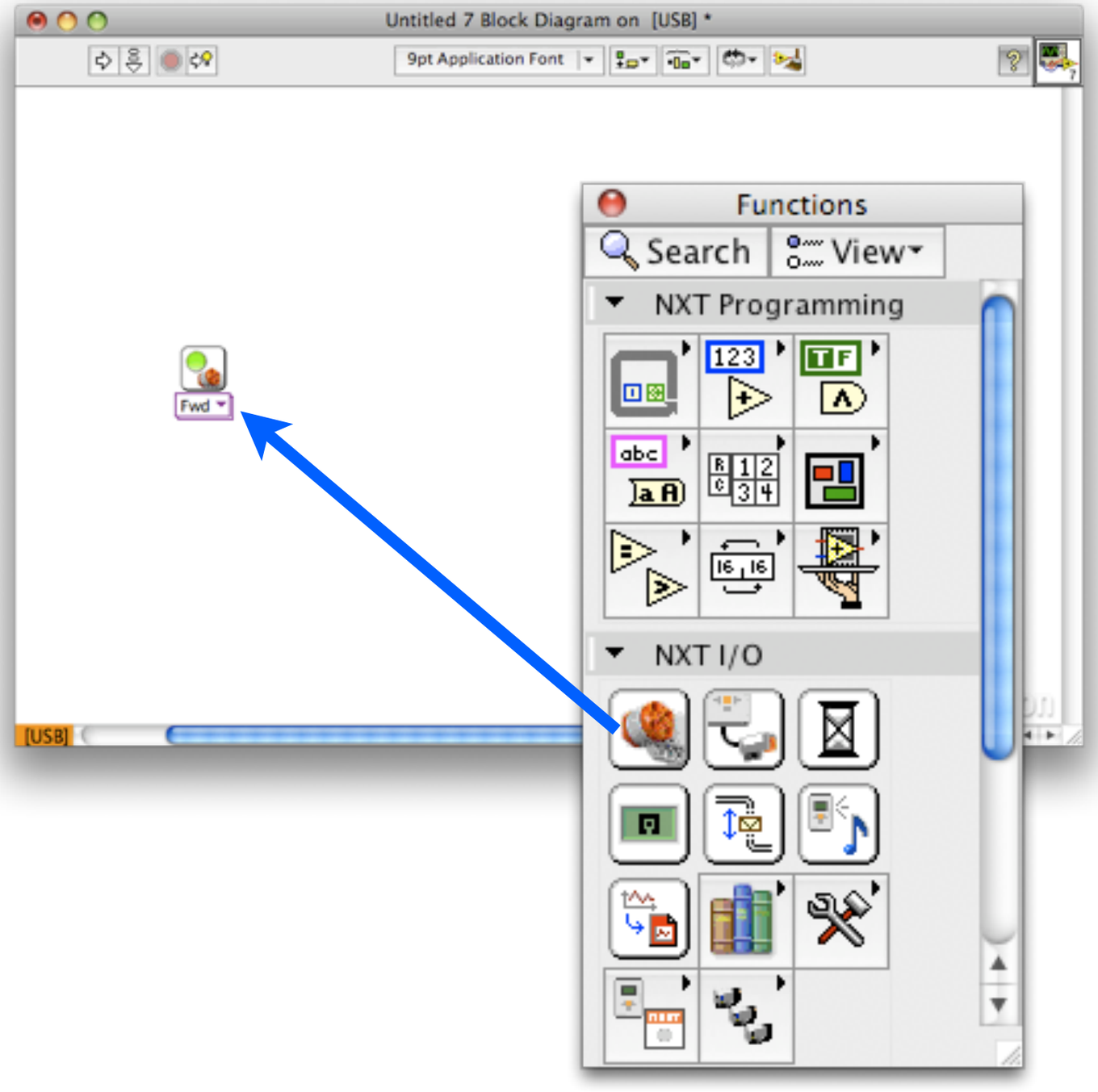
NXT Motors

Drag a **Motor** into the VI



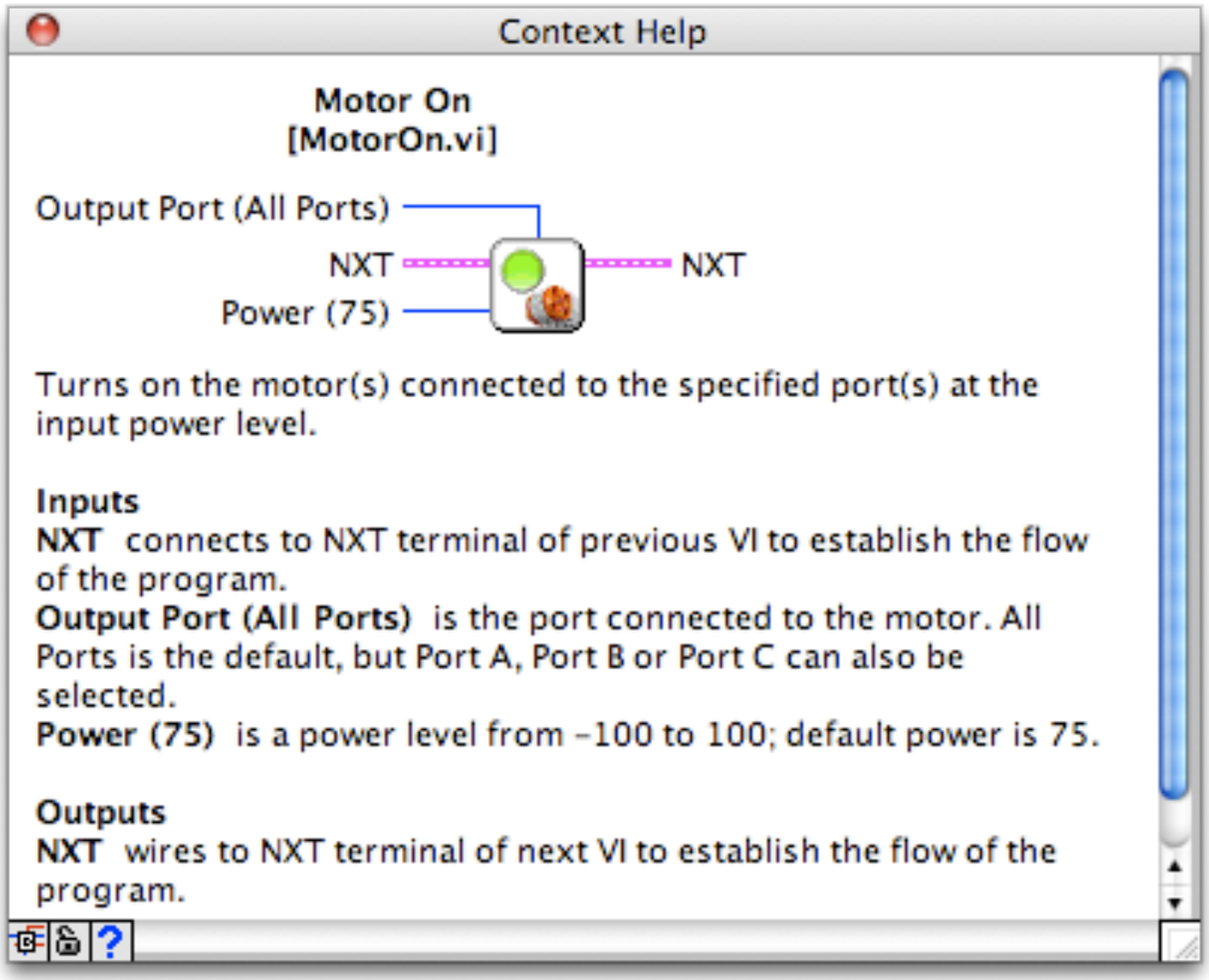
NXT Motors

Drag a **Motor** into the VI



RoboJackets

NXT Context Help

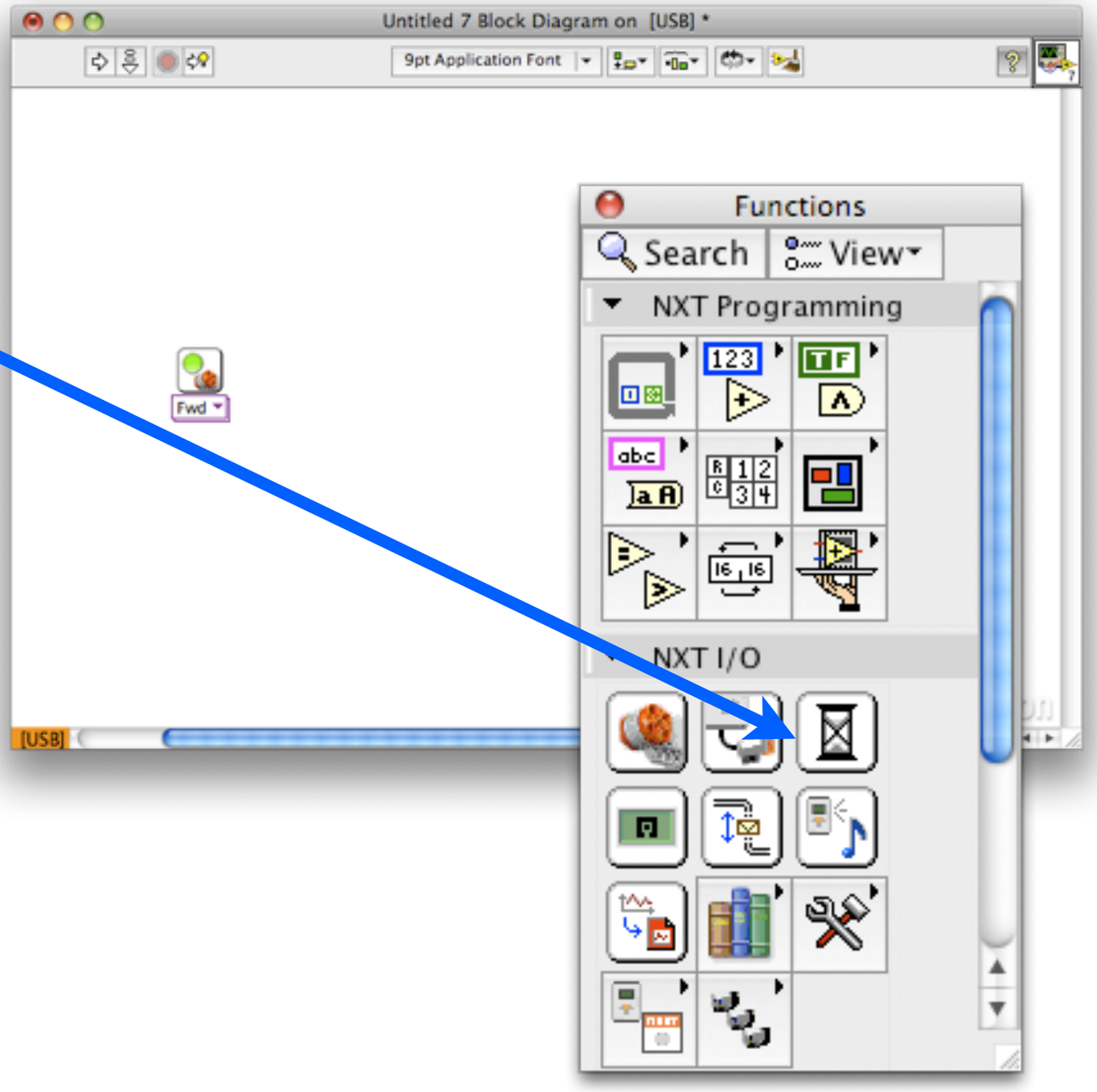


Context Help shows us how to connect to the motor VI

- CNTRL-H
- Help >> Context Help

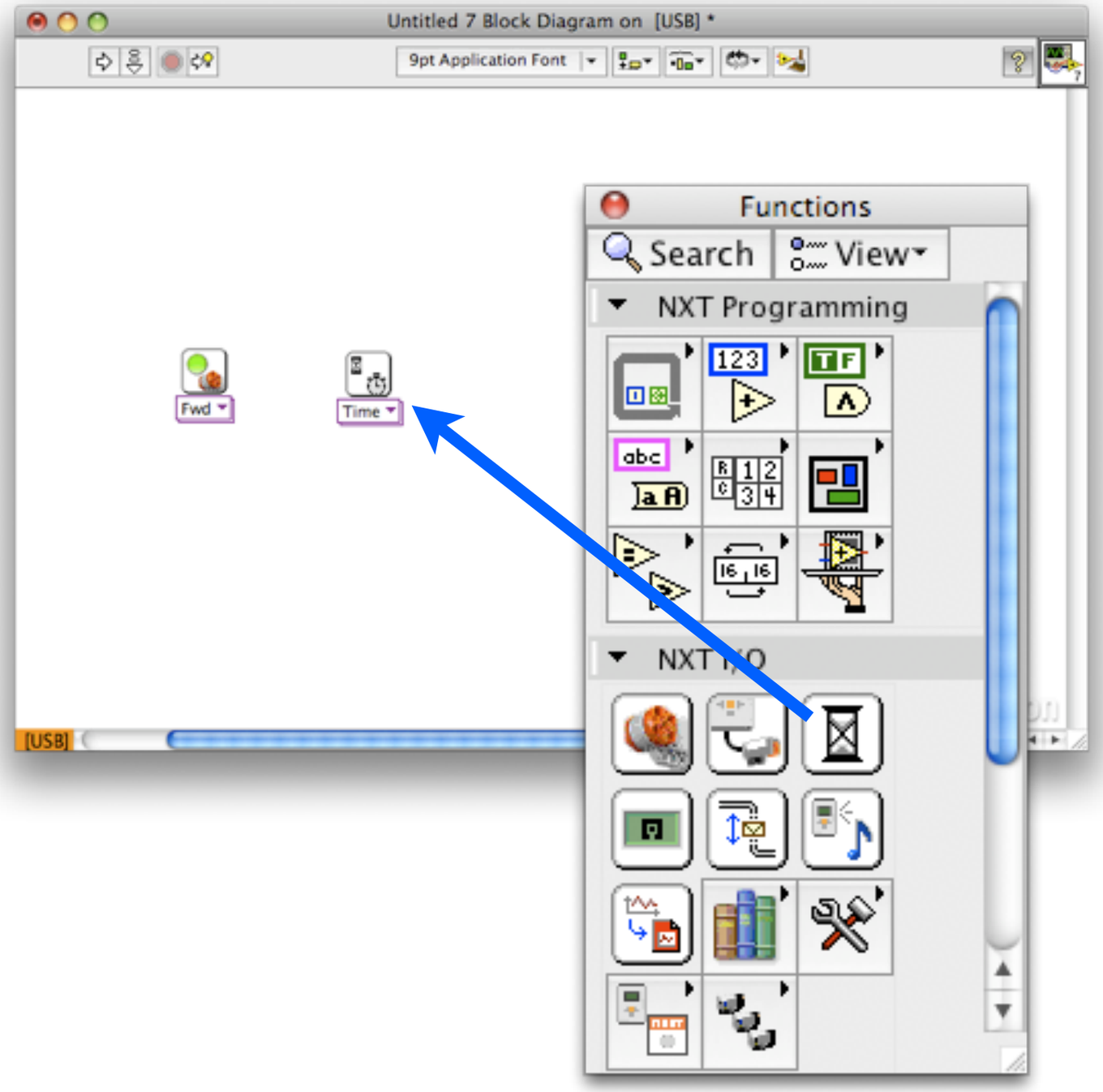
NXT Timers

Drag a **Timer** into the VI

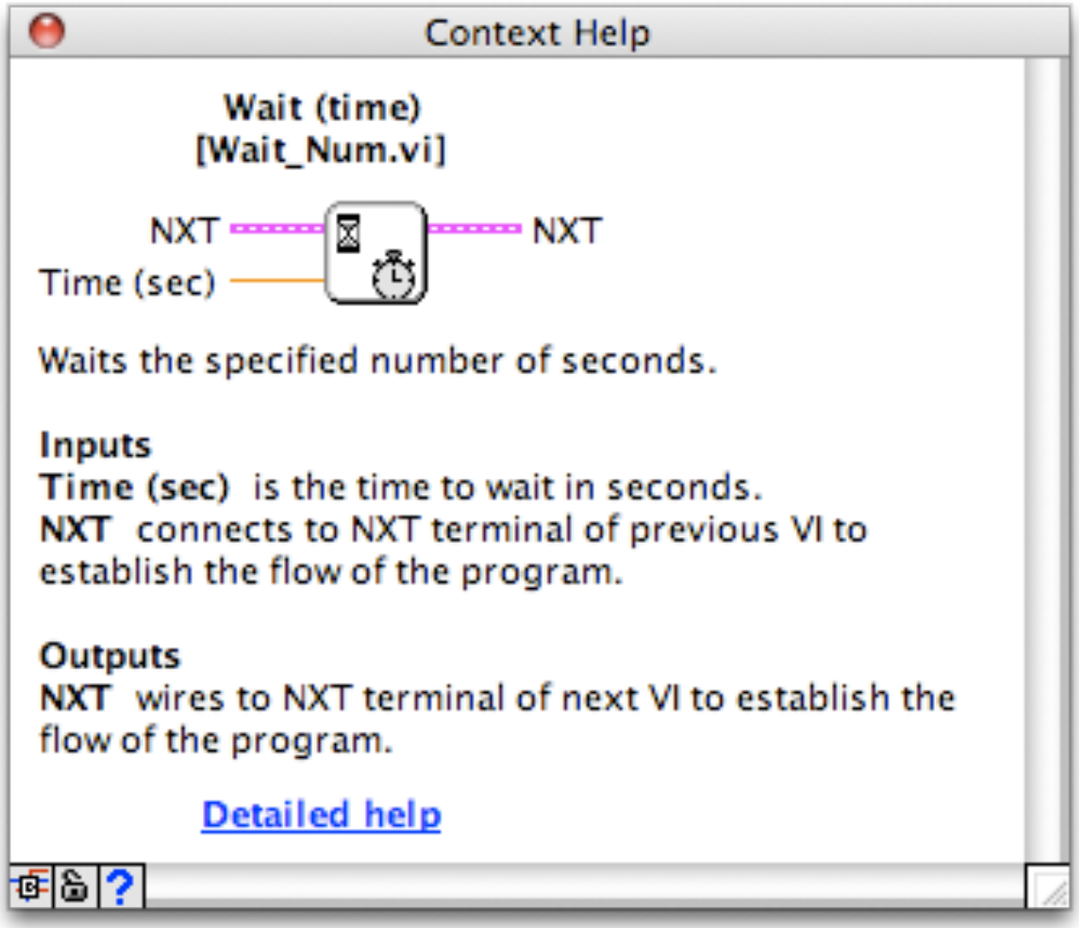


NXT Timers

Drag a **Timer** into the VI



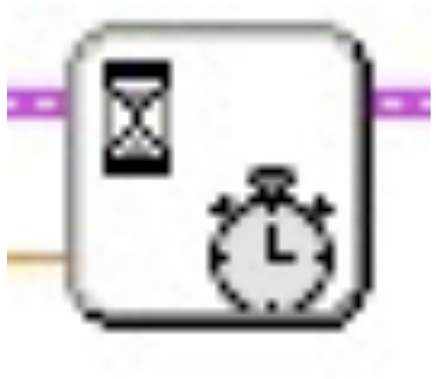
NXT Context Help



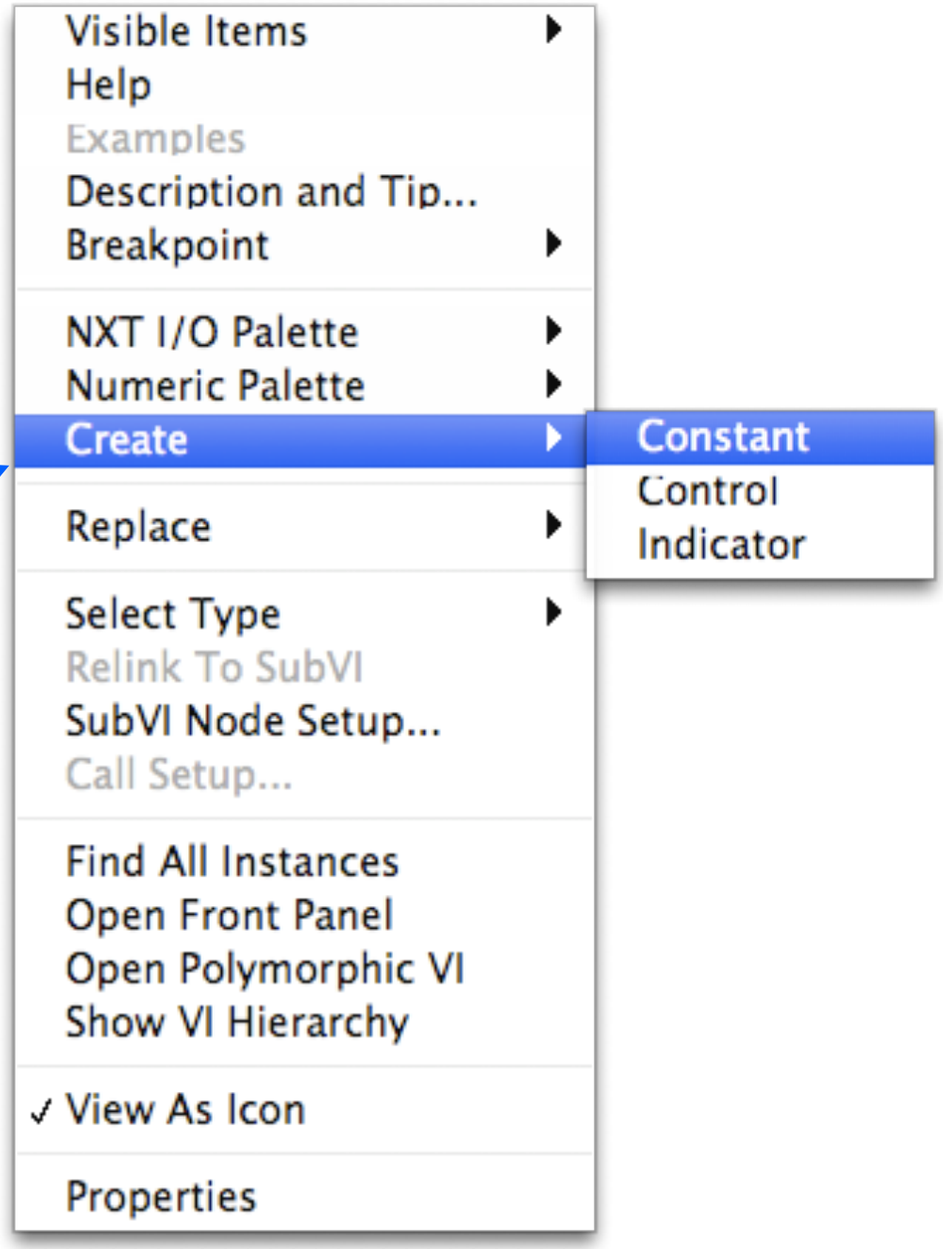
Examine the **Context Help** to **Specify the time**

NXT Timers

Right Click on the **Time** input

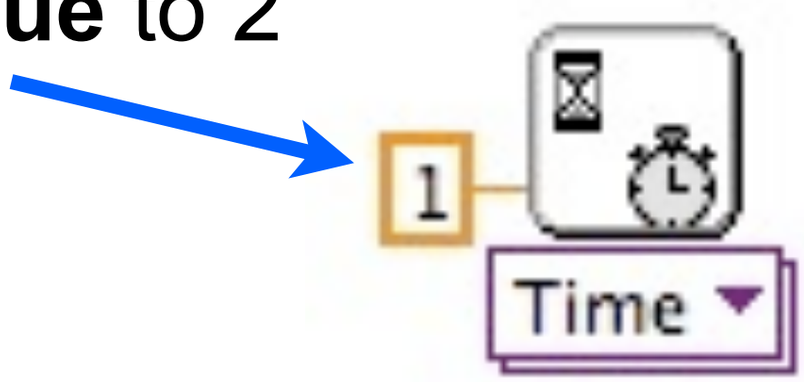


Select
Create >> Constant



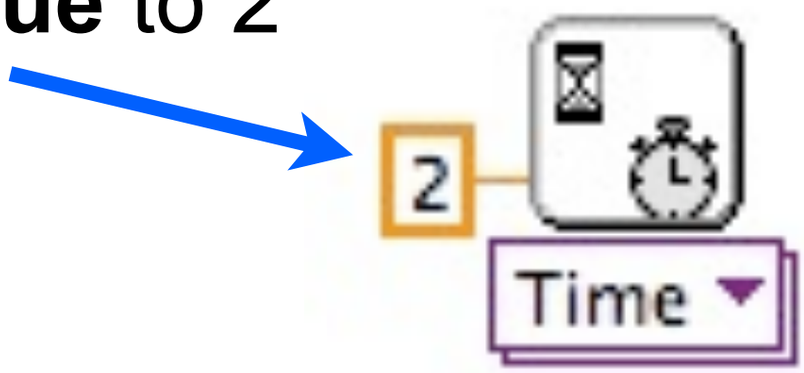
NXT Timers

Change **value** to 2



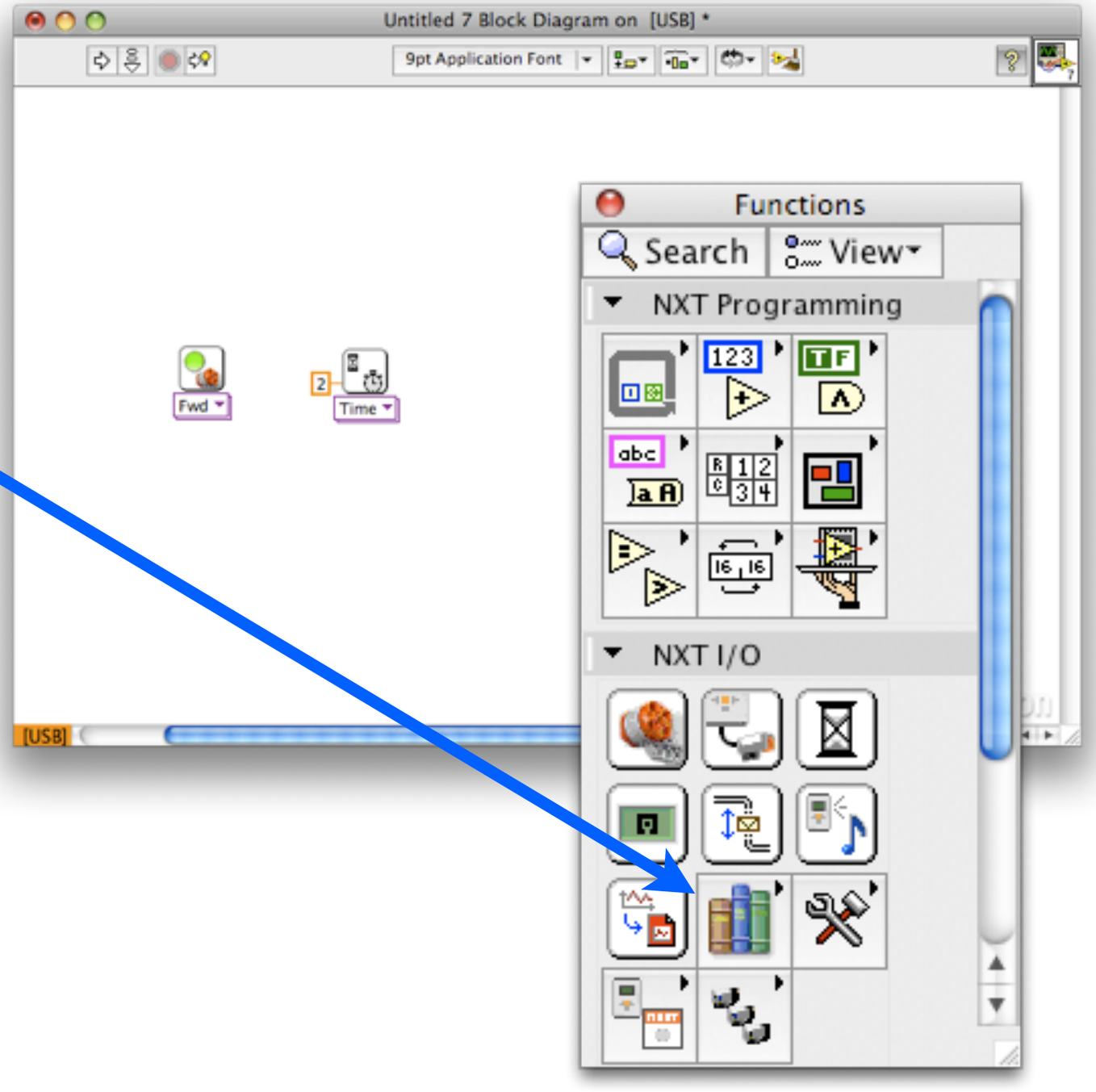
NXT Timers

Change **value** to 2



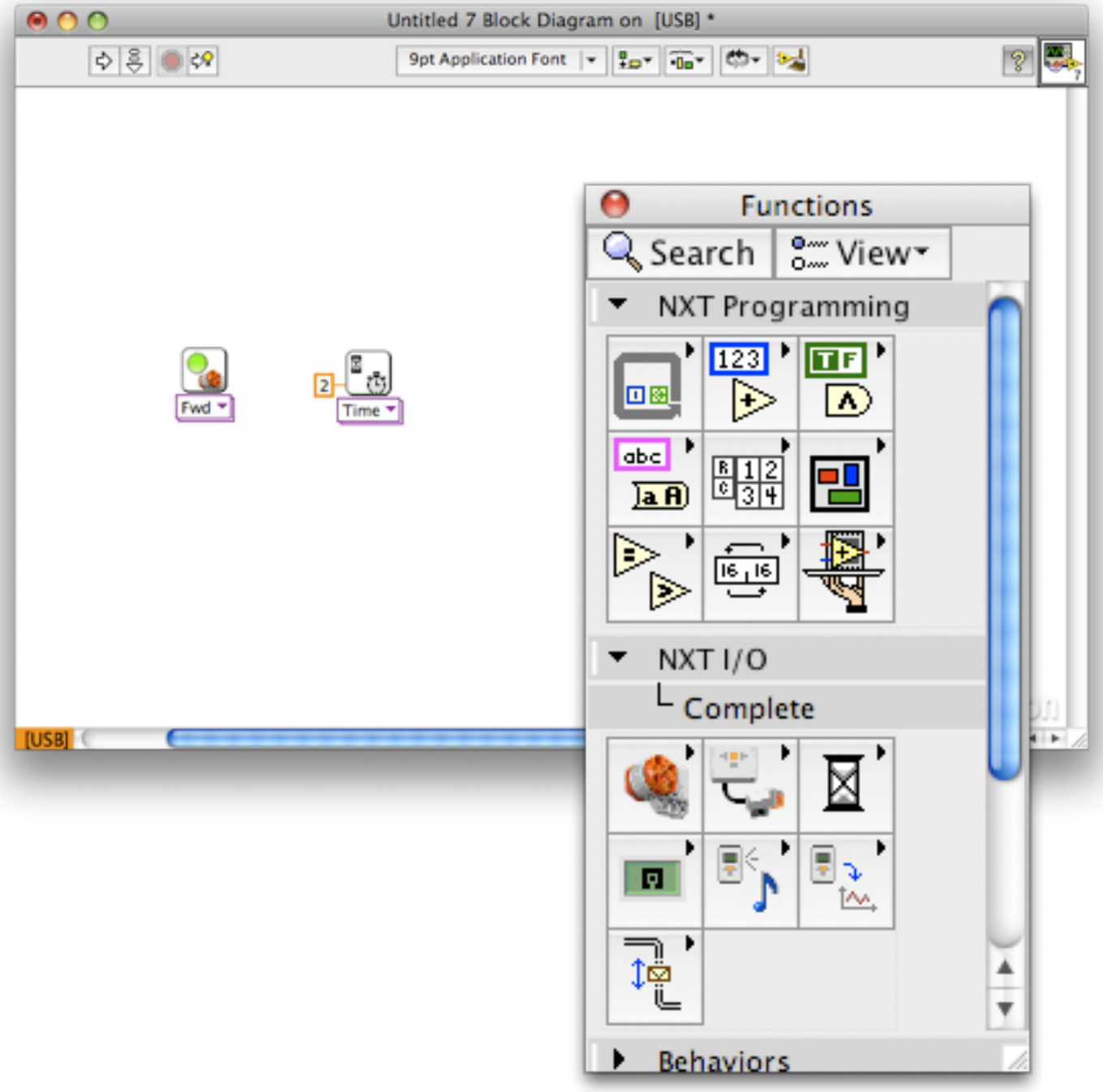
NXT Motor Coast

Click **Complete**



NXT Motor Coast

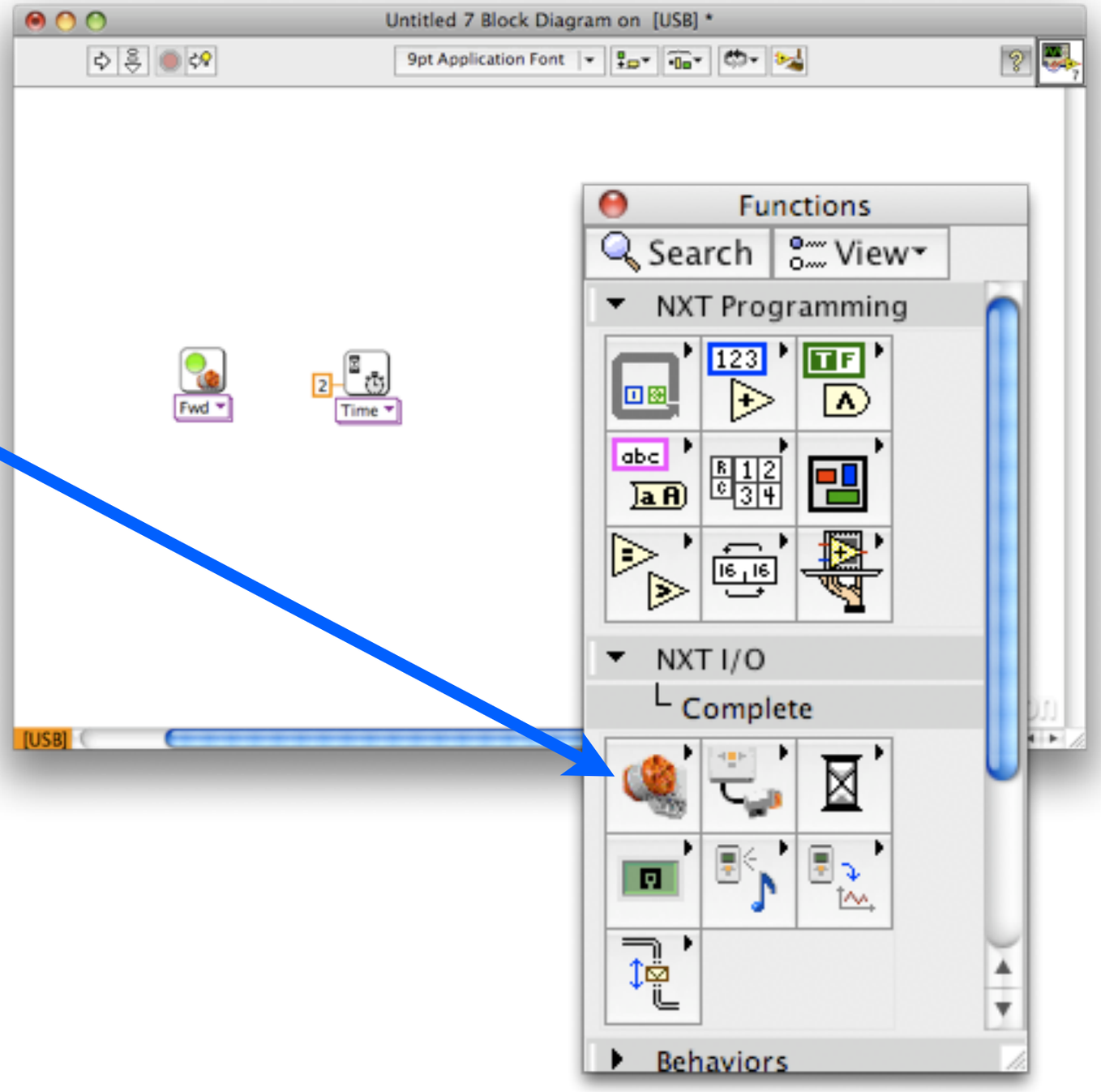
Click **Complete**



RoboJackets

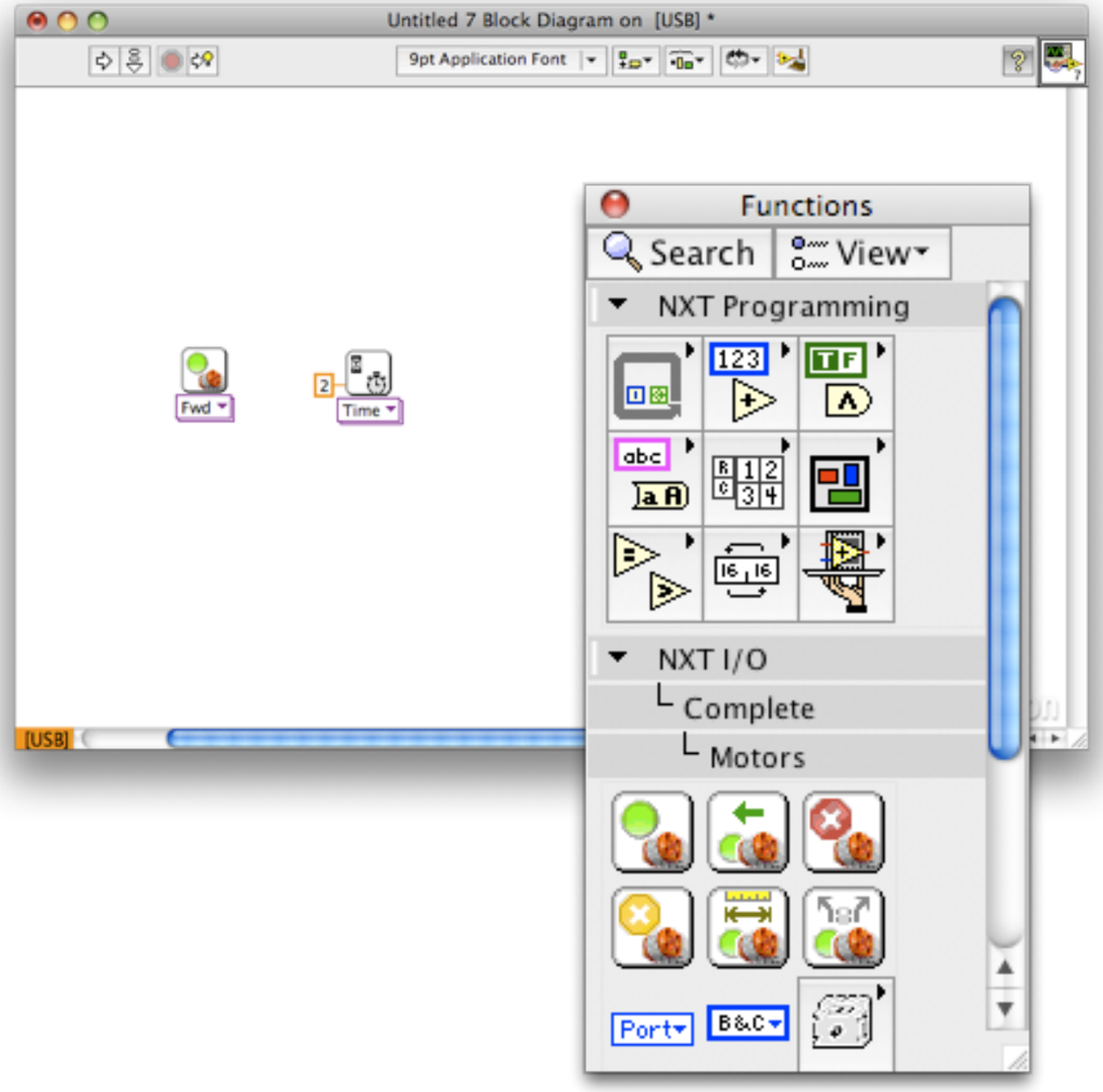
NXT Motor Coast

Click **Motors**



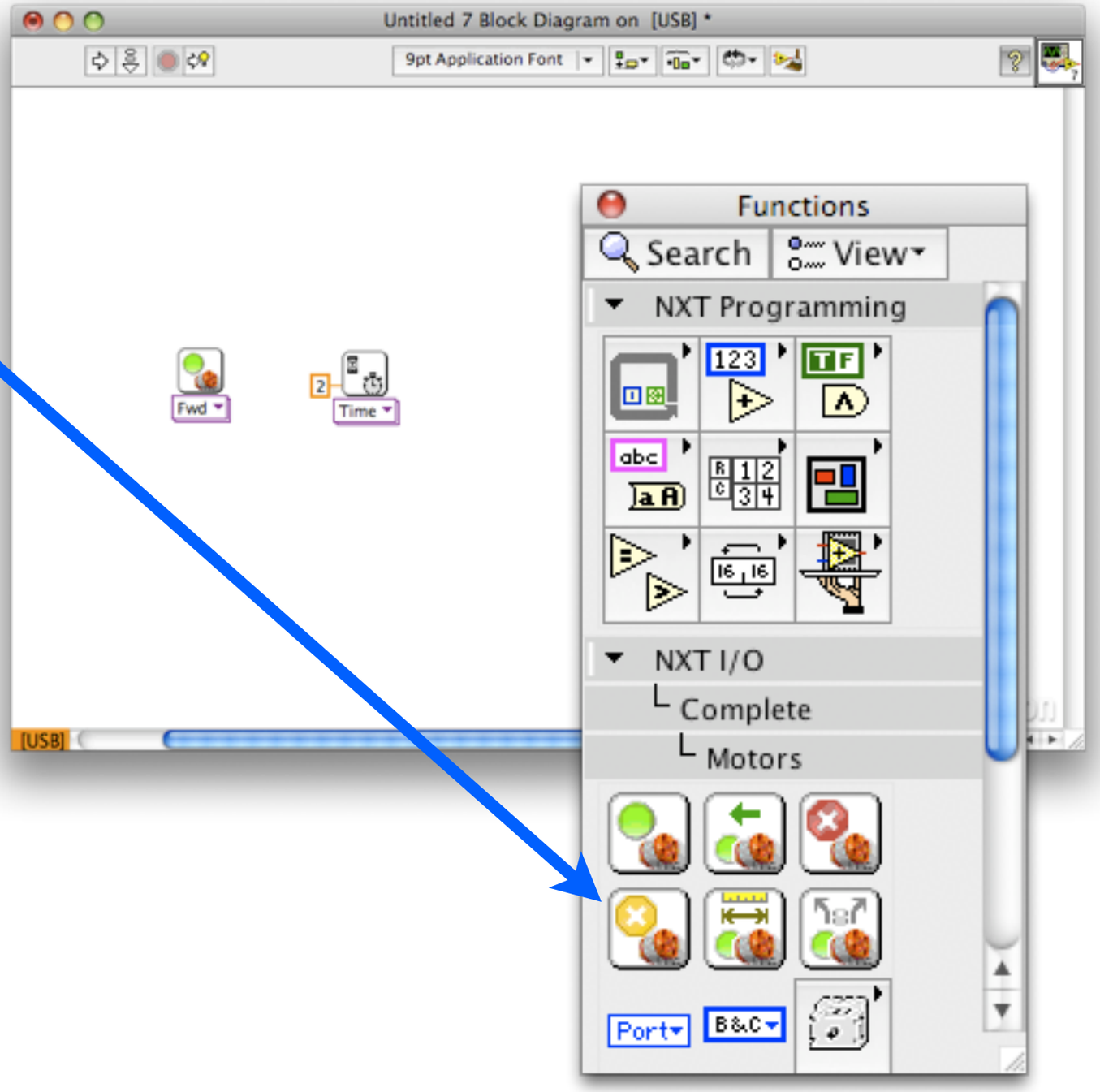
NXT Motor Coast

Click **Motors**



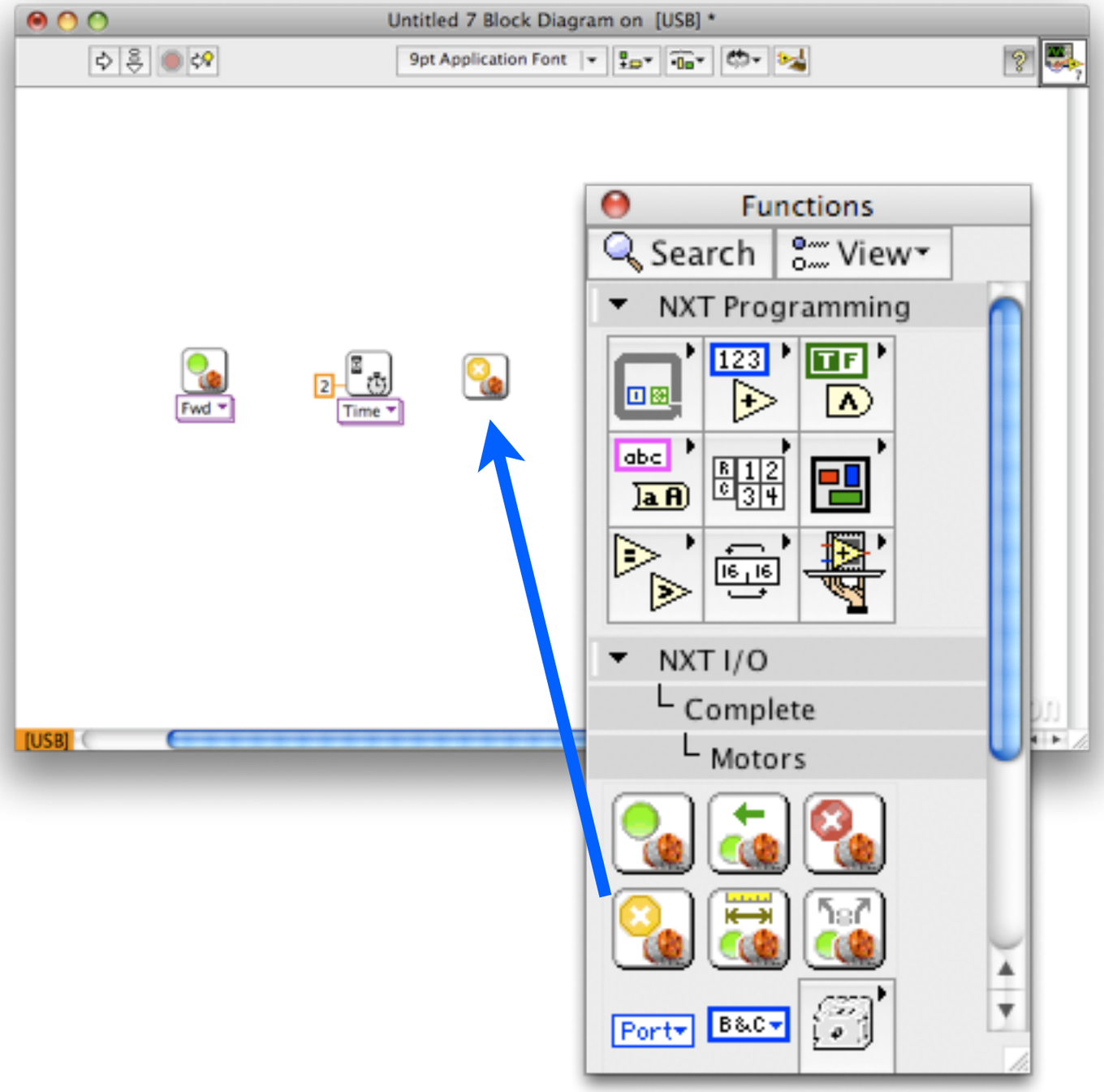
NXT Motor Coast

Drag **Motor Coast** onto the block diagram

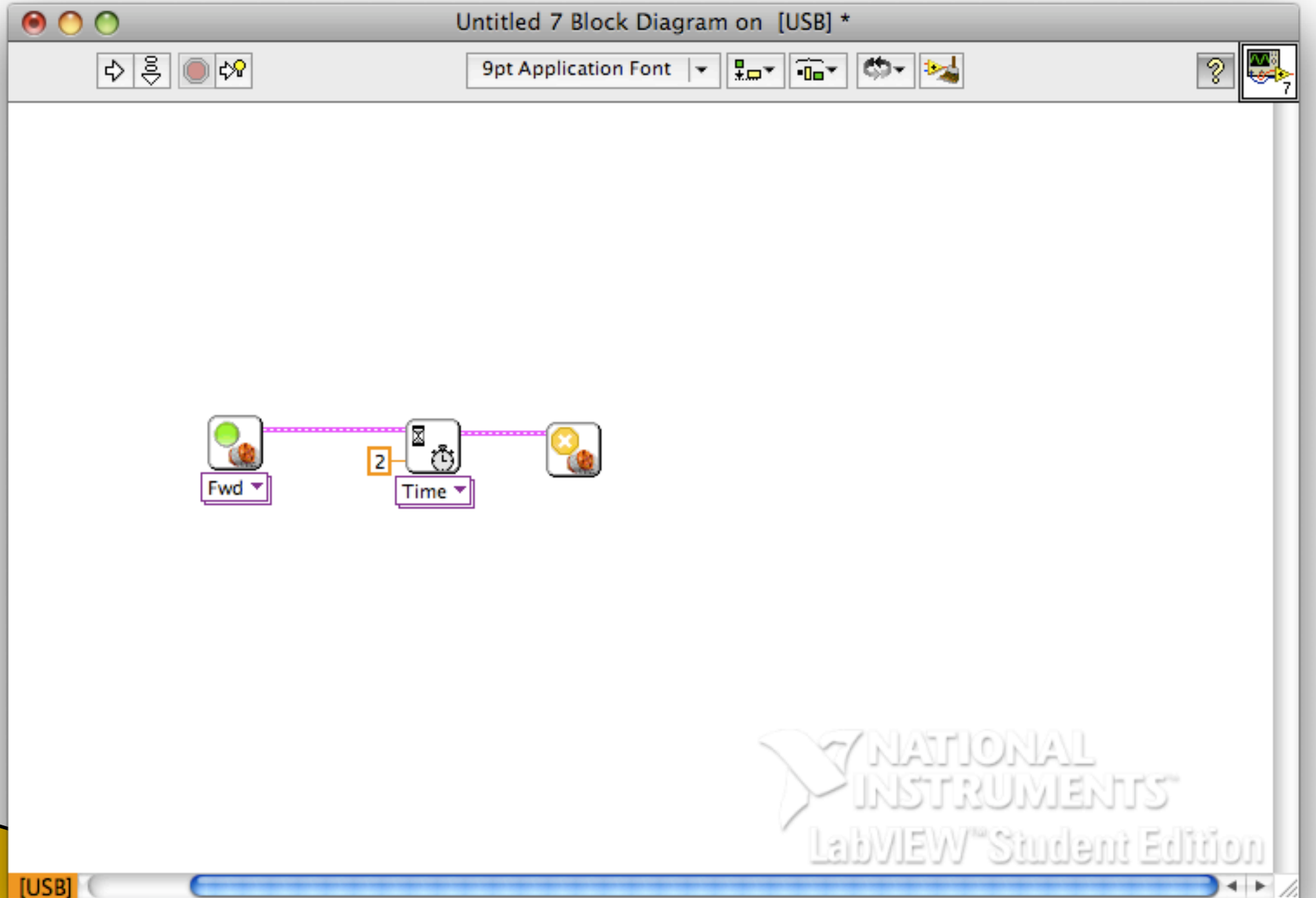


NXT Motor Coast

Drag **Motor Coast** onto the block diagram

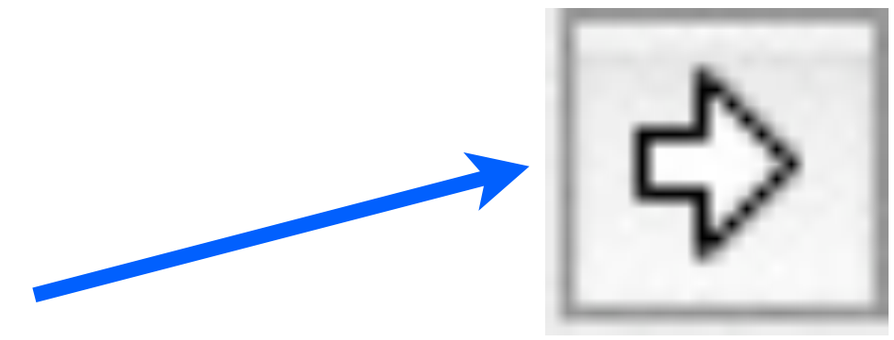


Wire the Blocks Together



Running and Deploying the VI

- Connect the **NXT**
- Run the VI by pressing the **Run** button



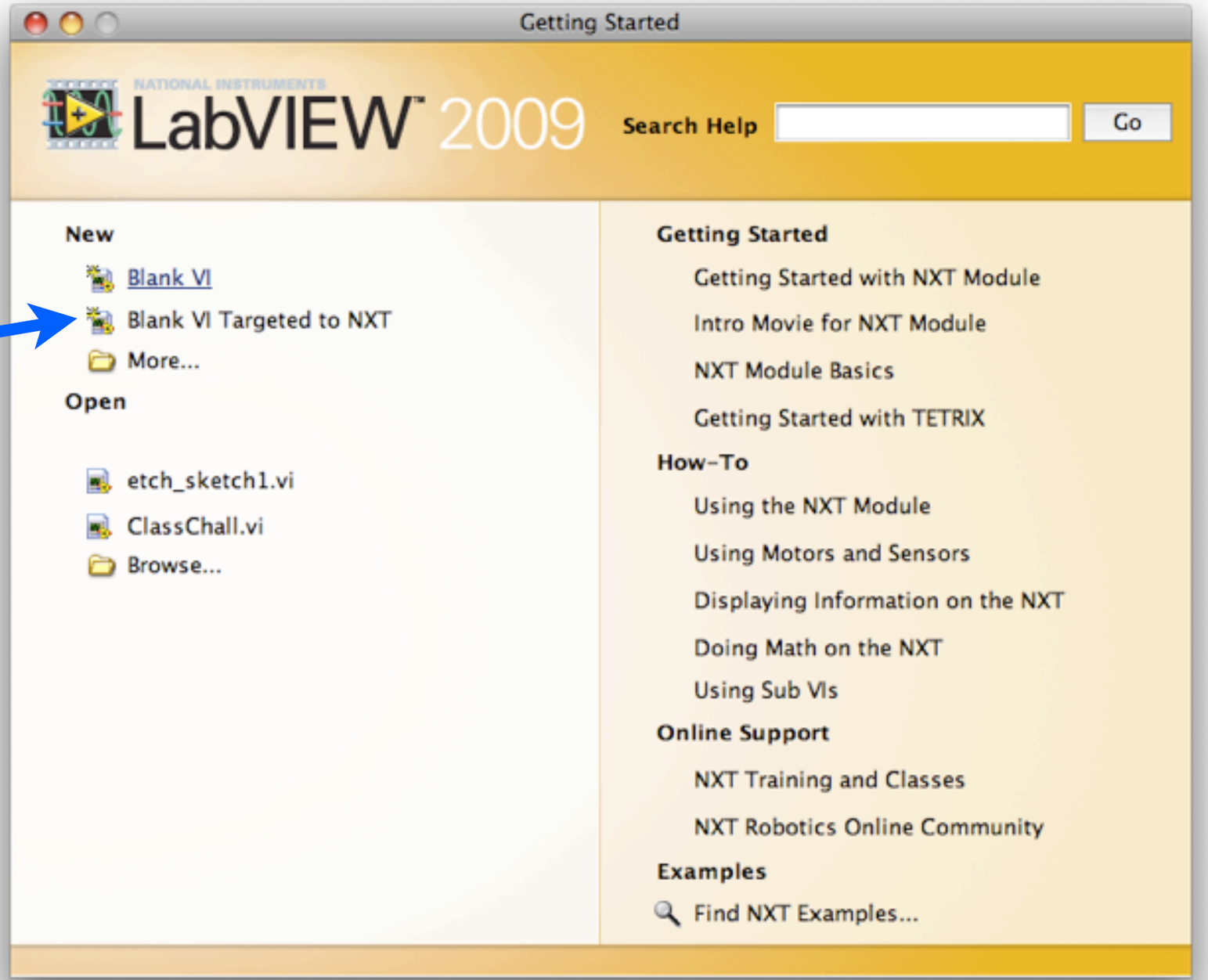
- Load the VI onto the NXT with the **Deploy** button

USING TETRIX MOTORS

RoboJackets

Make a New VI

Make a new **VI**
Targeted to **NXT**

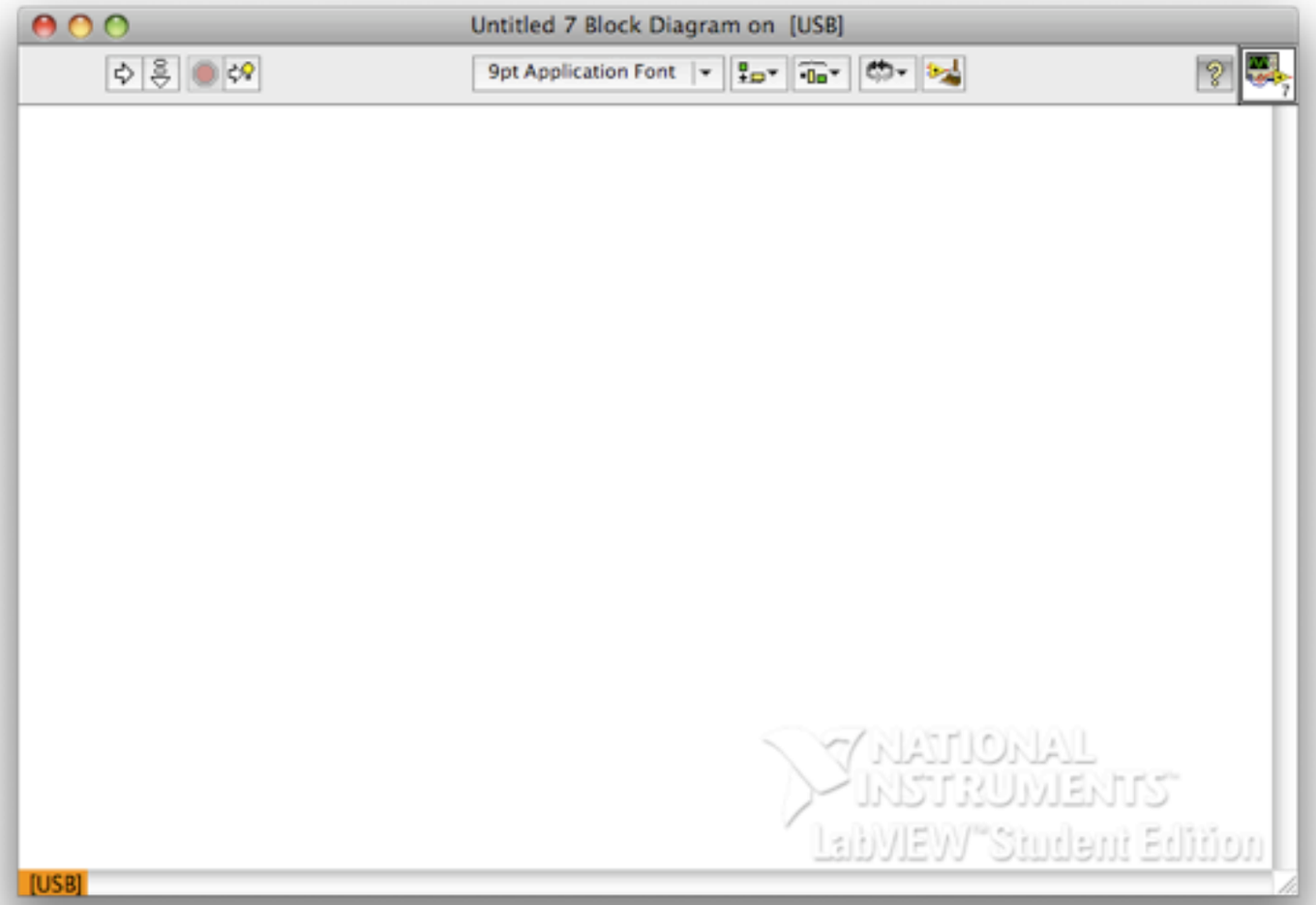


Open the Block Diagram

Bring up the **Block Diagram**

– Control-E

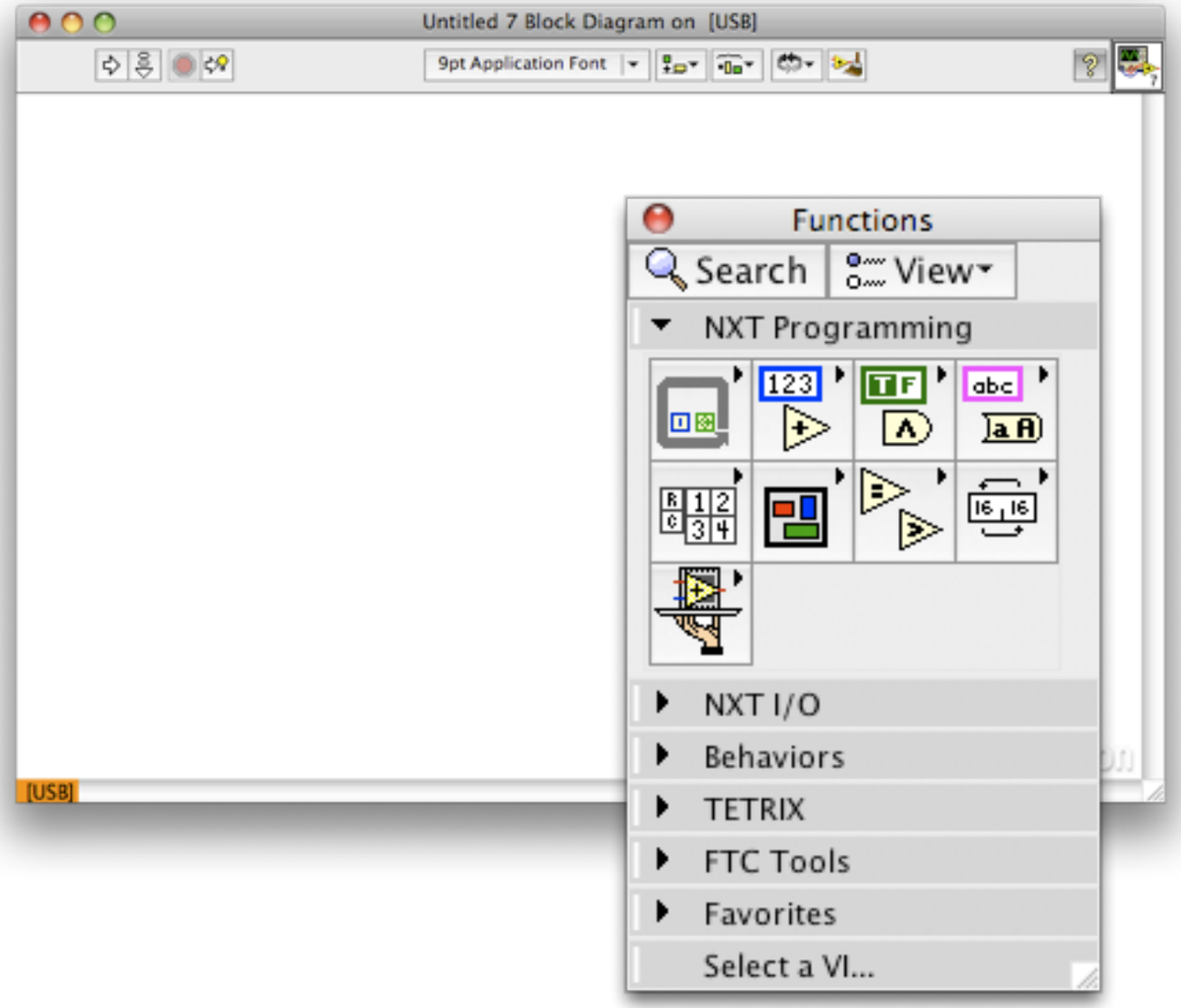
– Window >> Show Block Diagram



Functions Palette

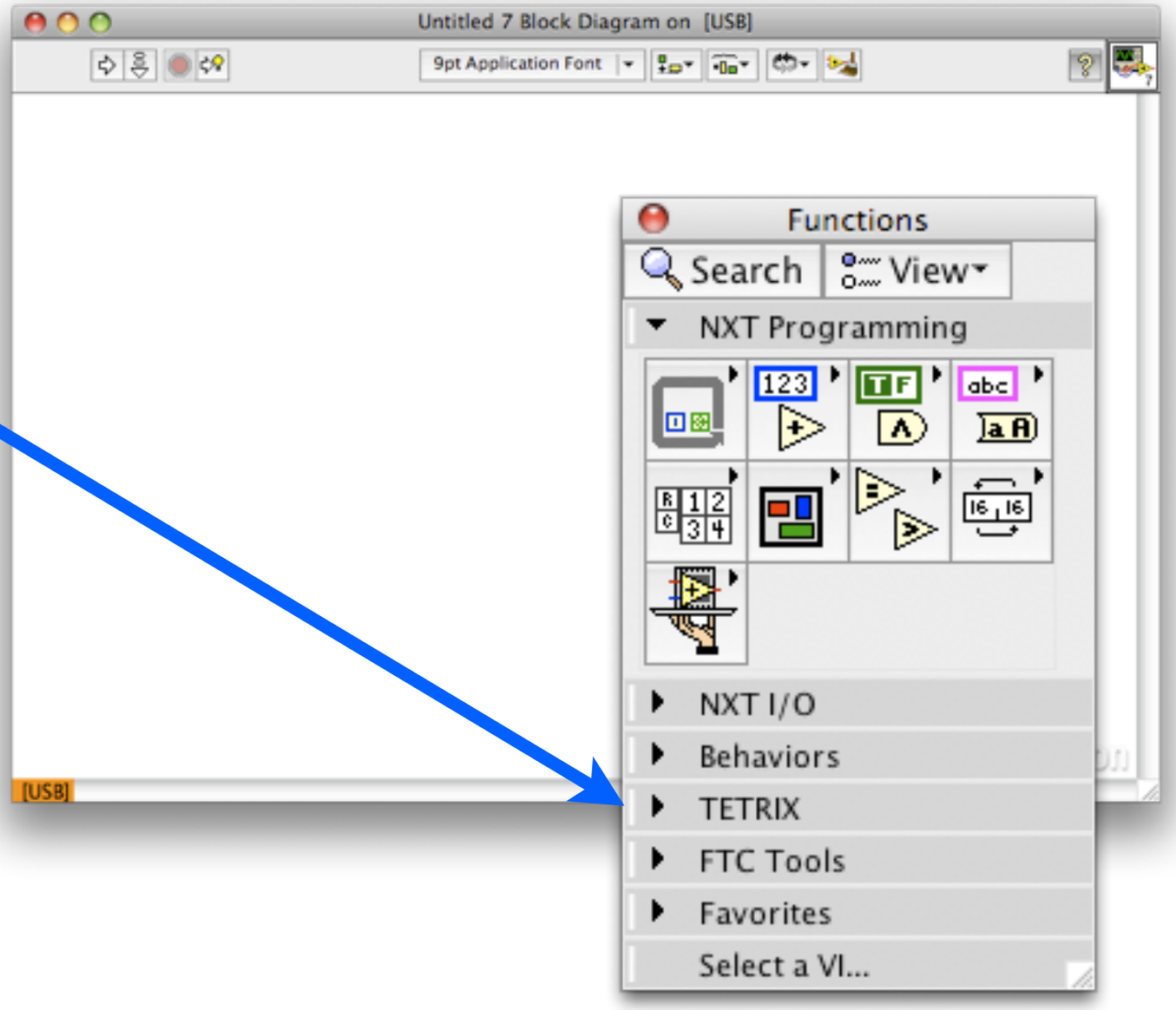
Bring up the **Functions Palette**

- Left Click
- View >> Functions Palette



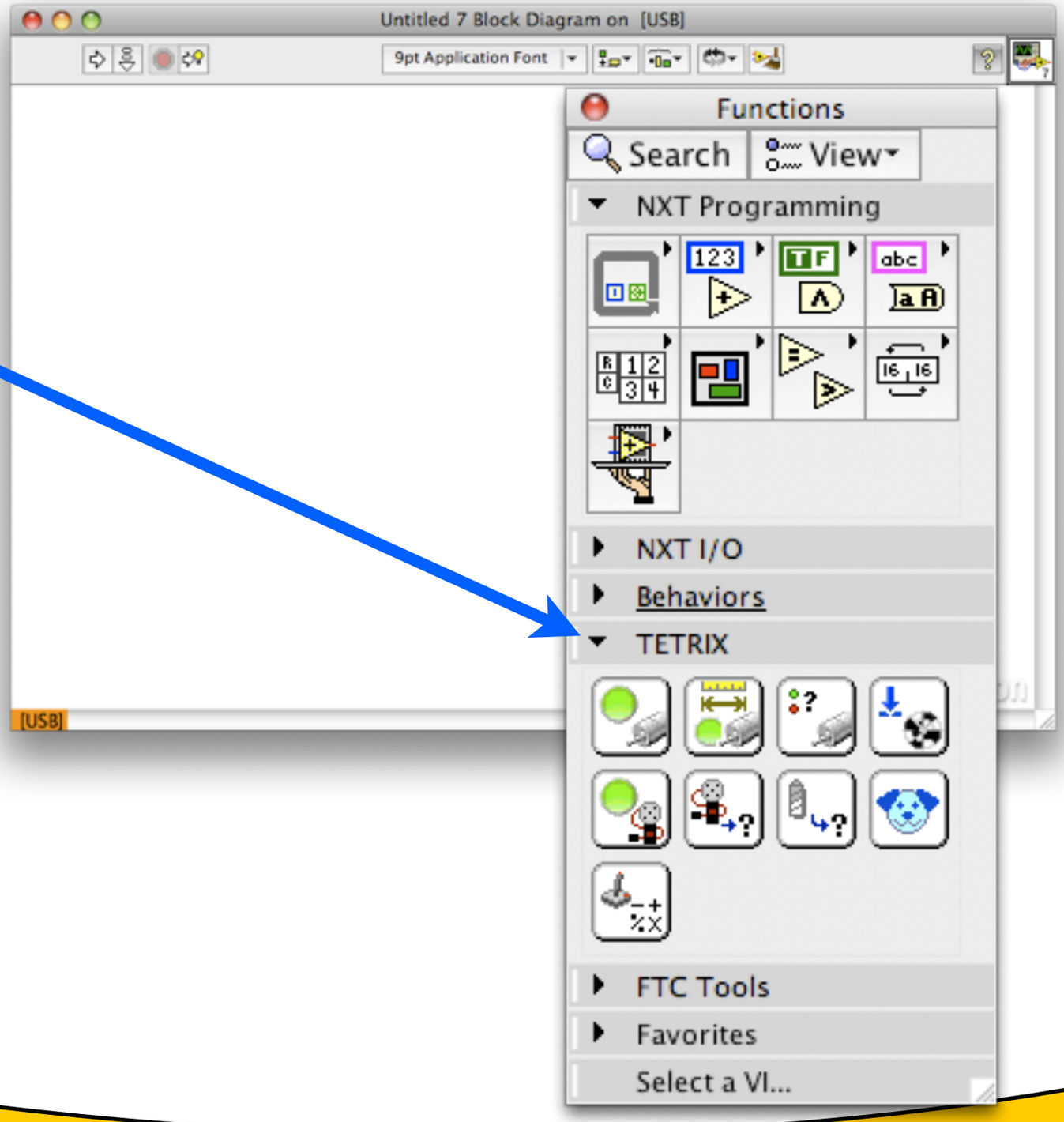
TETRIX Palette

Select the
TETRIX Palette



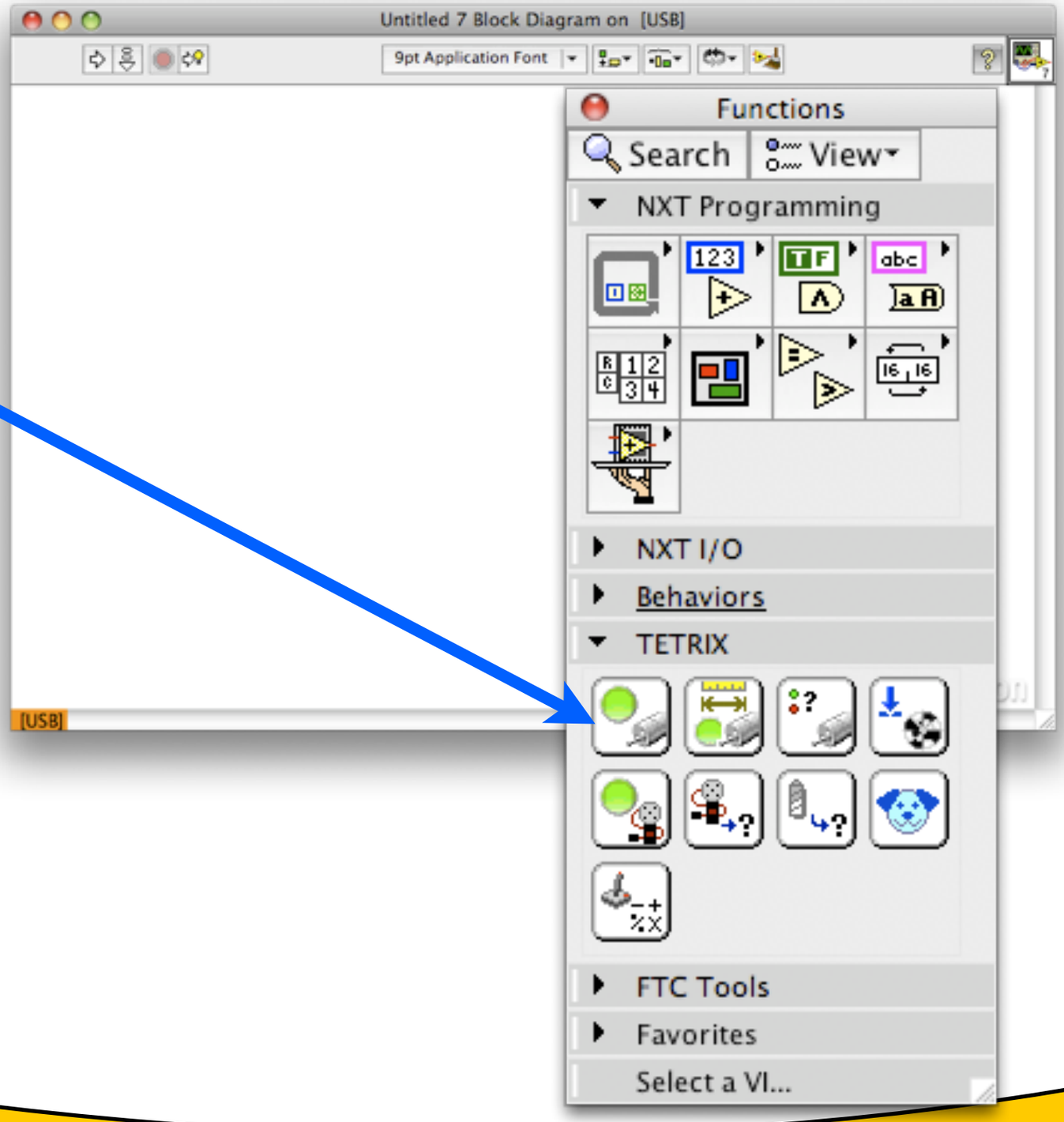
TETRIX Palette

Select the
TETRIX Palette



TETRIX Motor

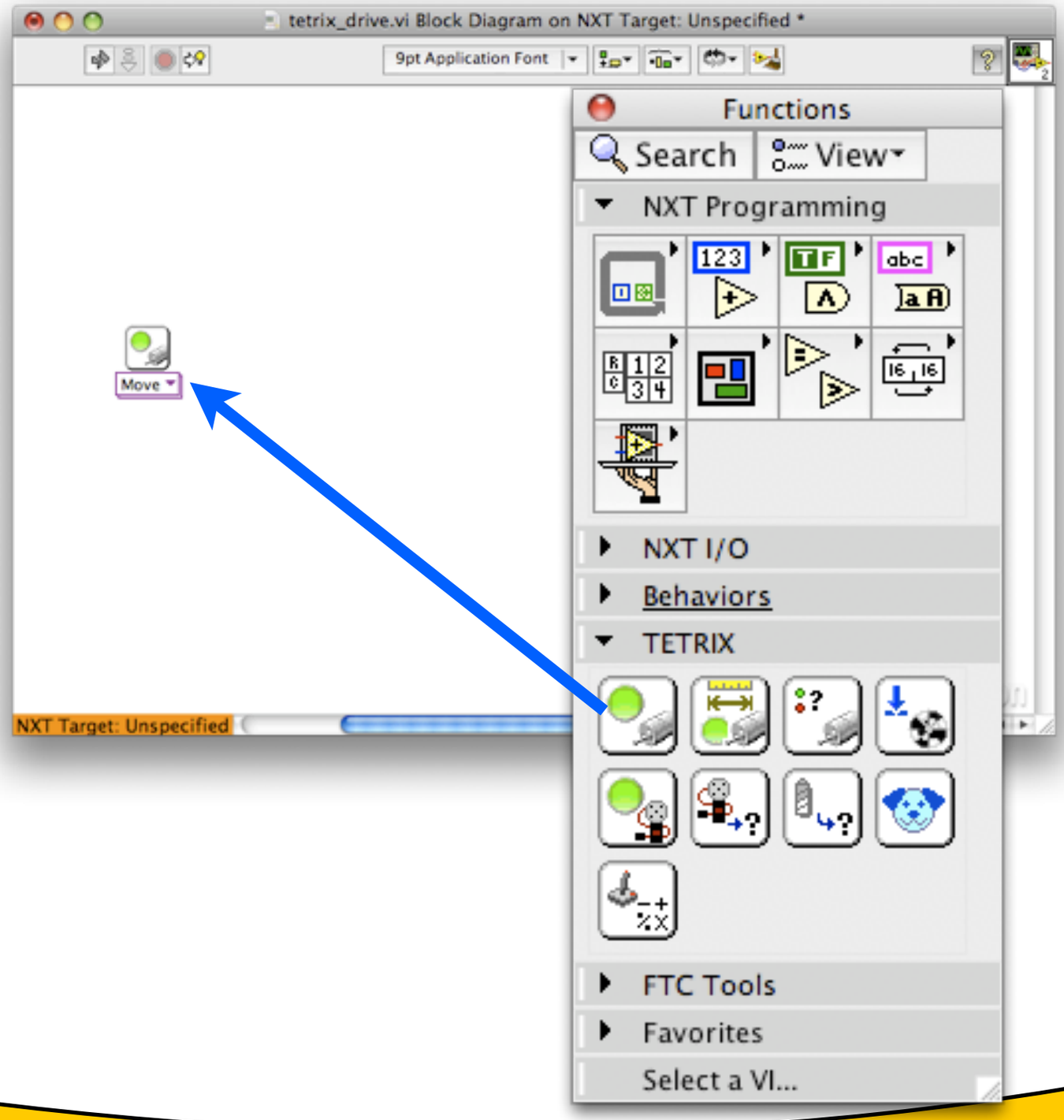
Drag on a
TETRIX Motor



RoboJackets

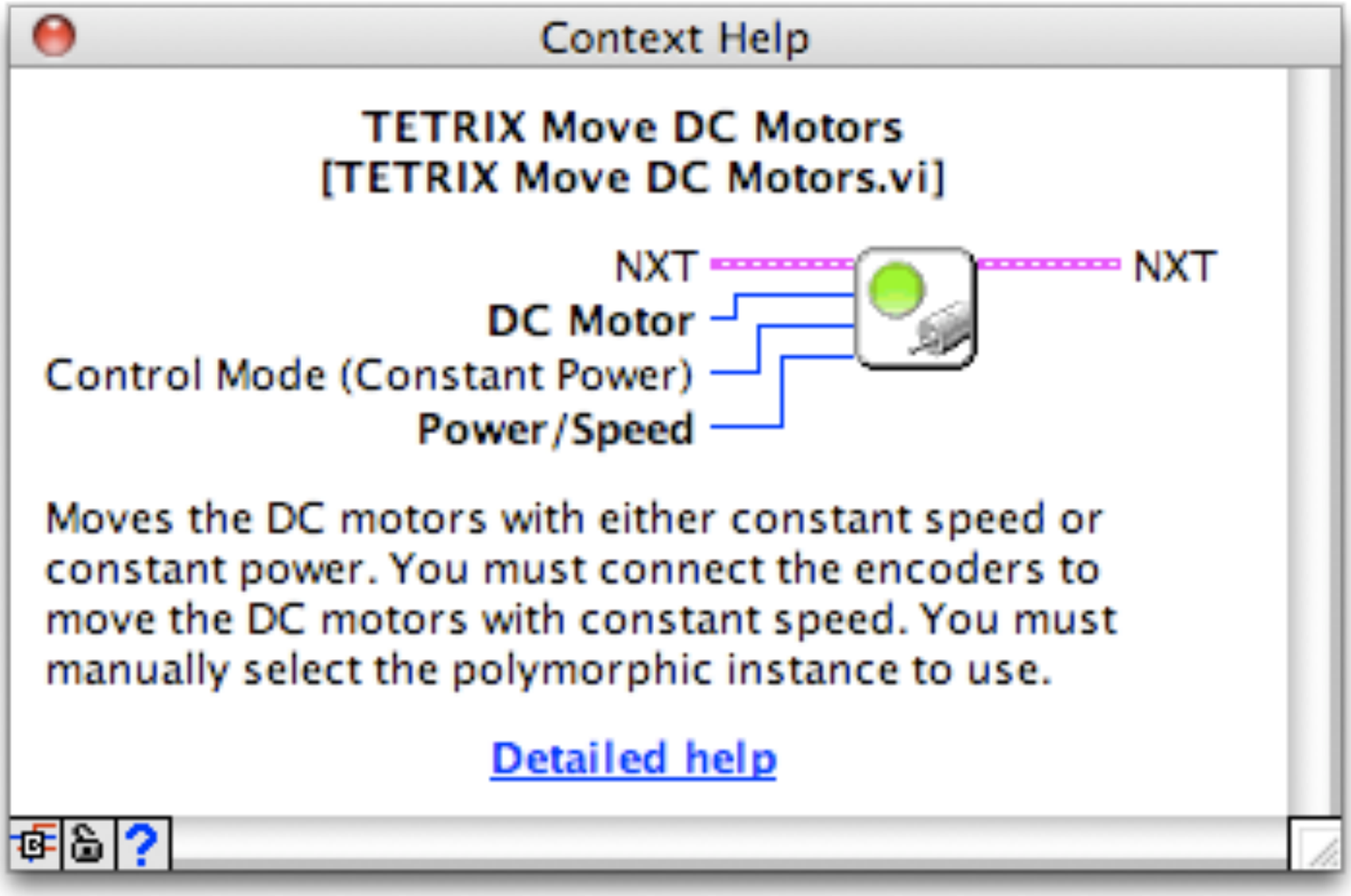
TETRIX Motor

Drag on a
TETRIX Motor



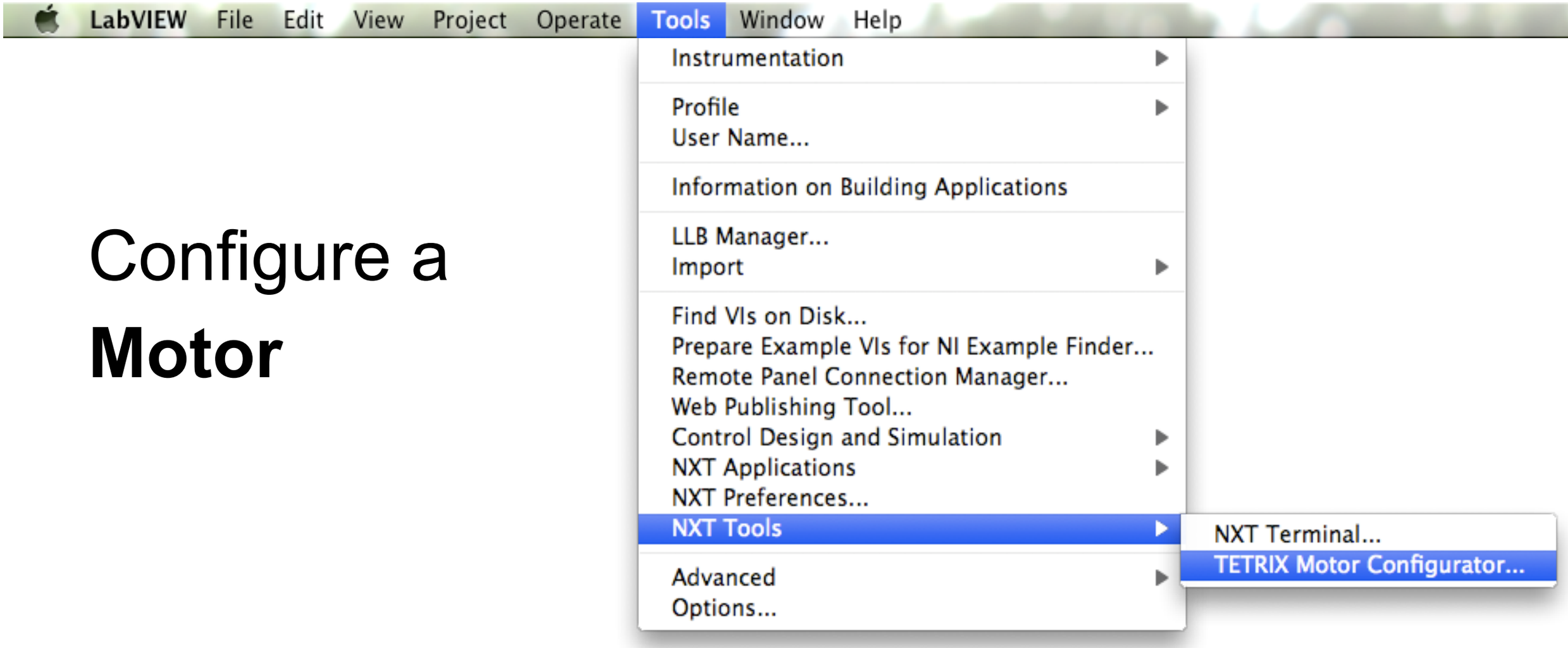
Context Help

Open
Context Help
and check out
TETRIX Motor

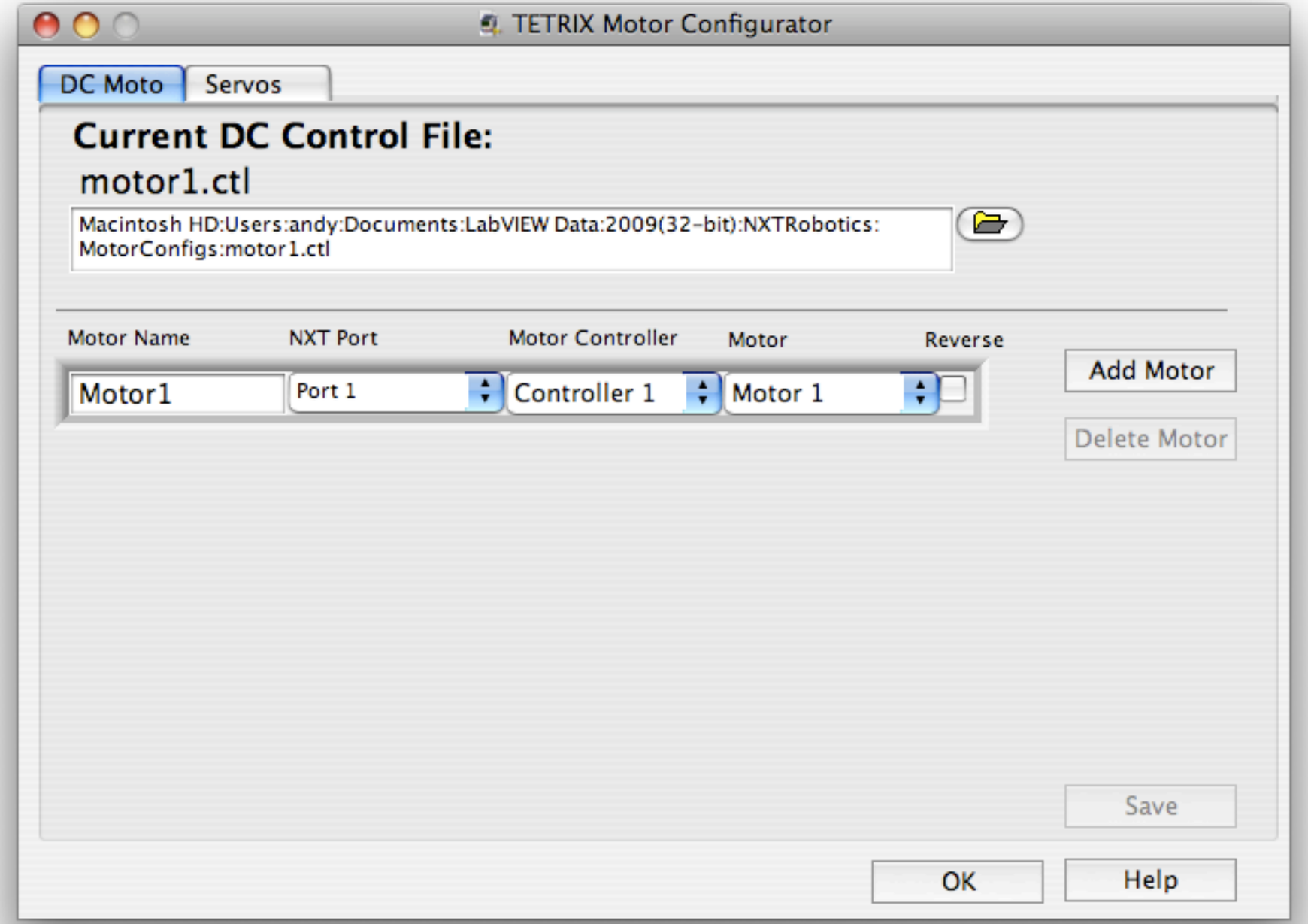


TETRIX Motor

Configure a Motor

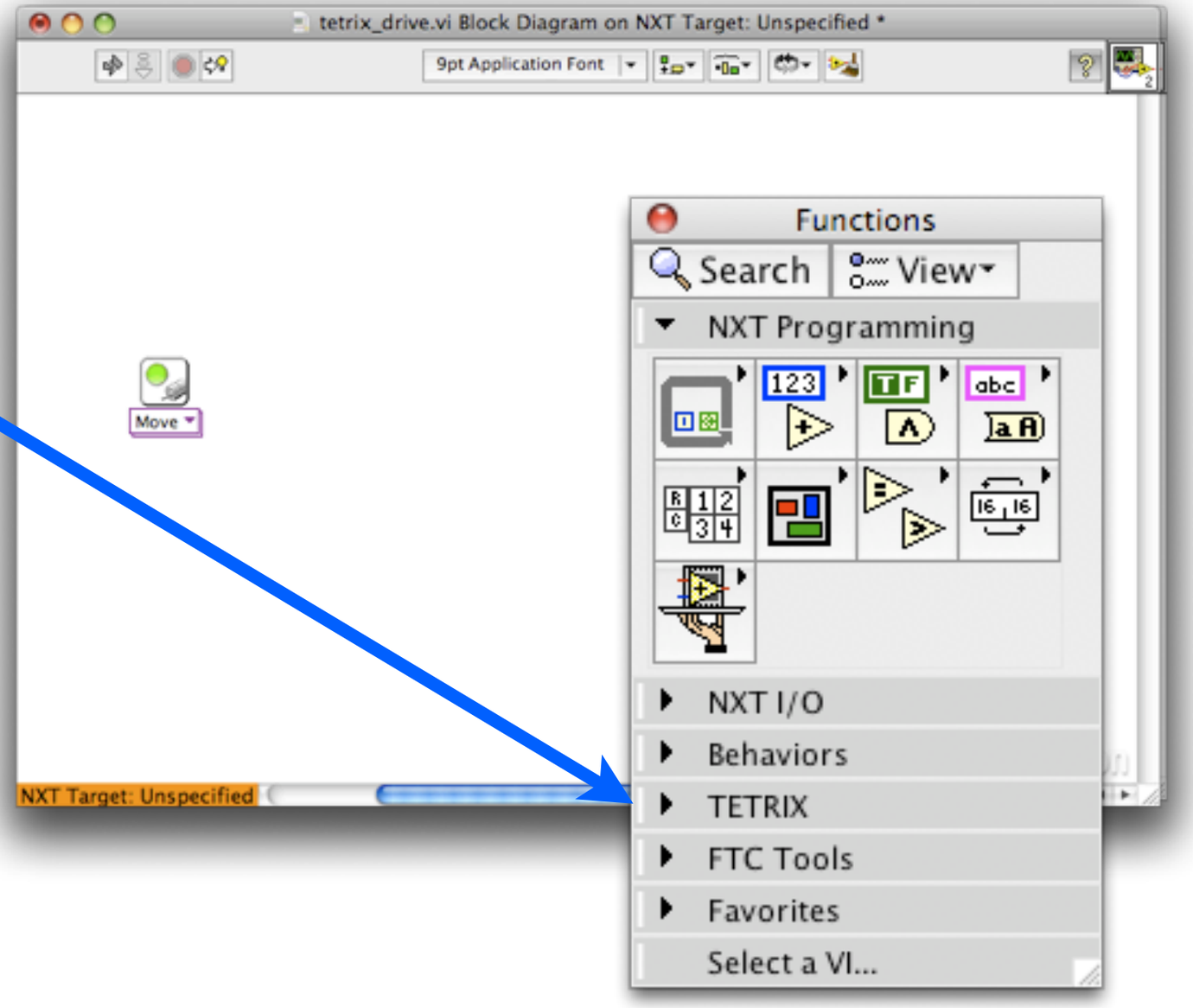


TETRIX Motor



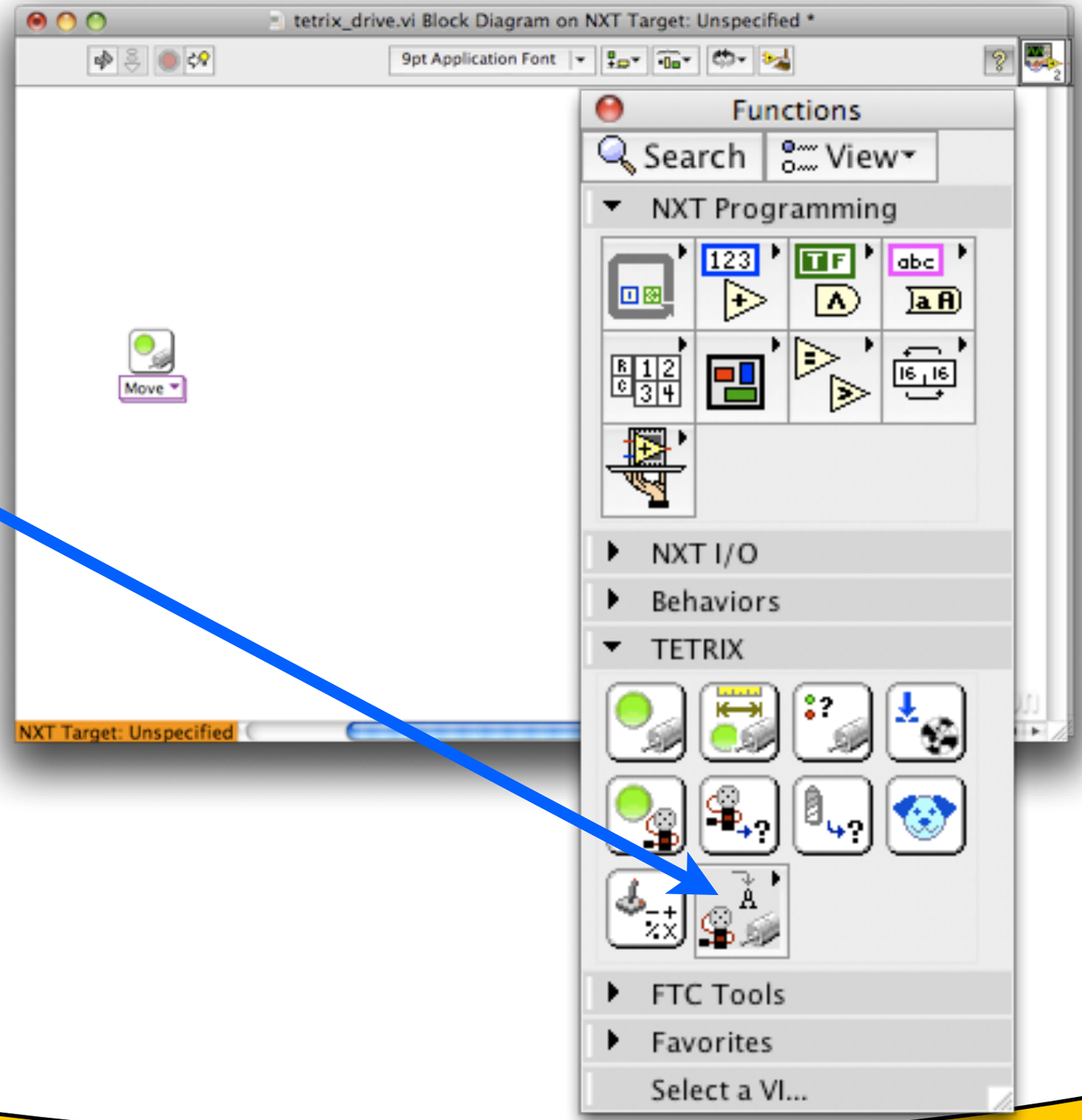
TETRIX Palette

Select the
TETRIX Palette



TETRIX Motor

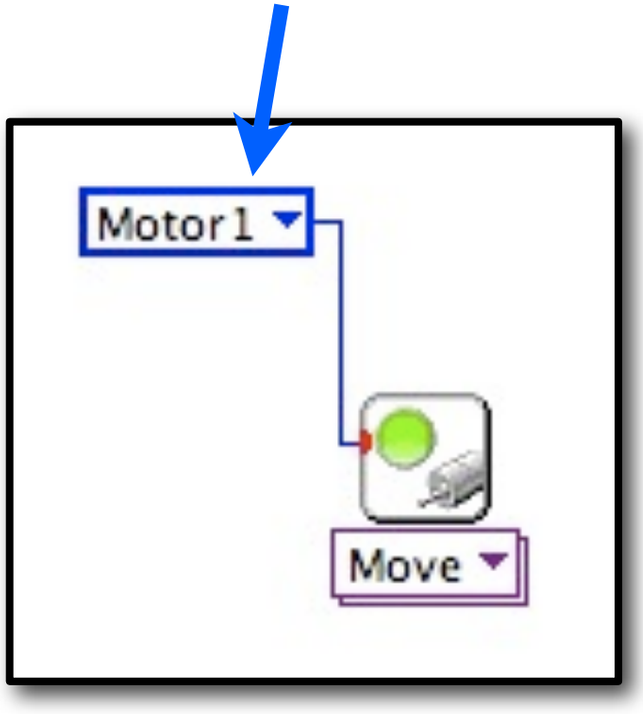
Click
Motor
Configuration

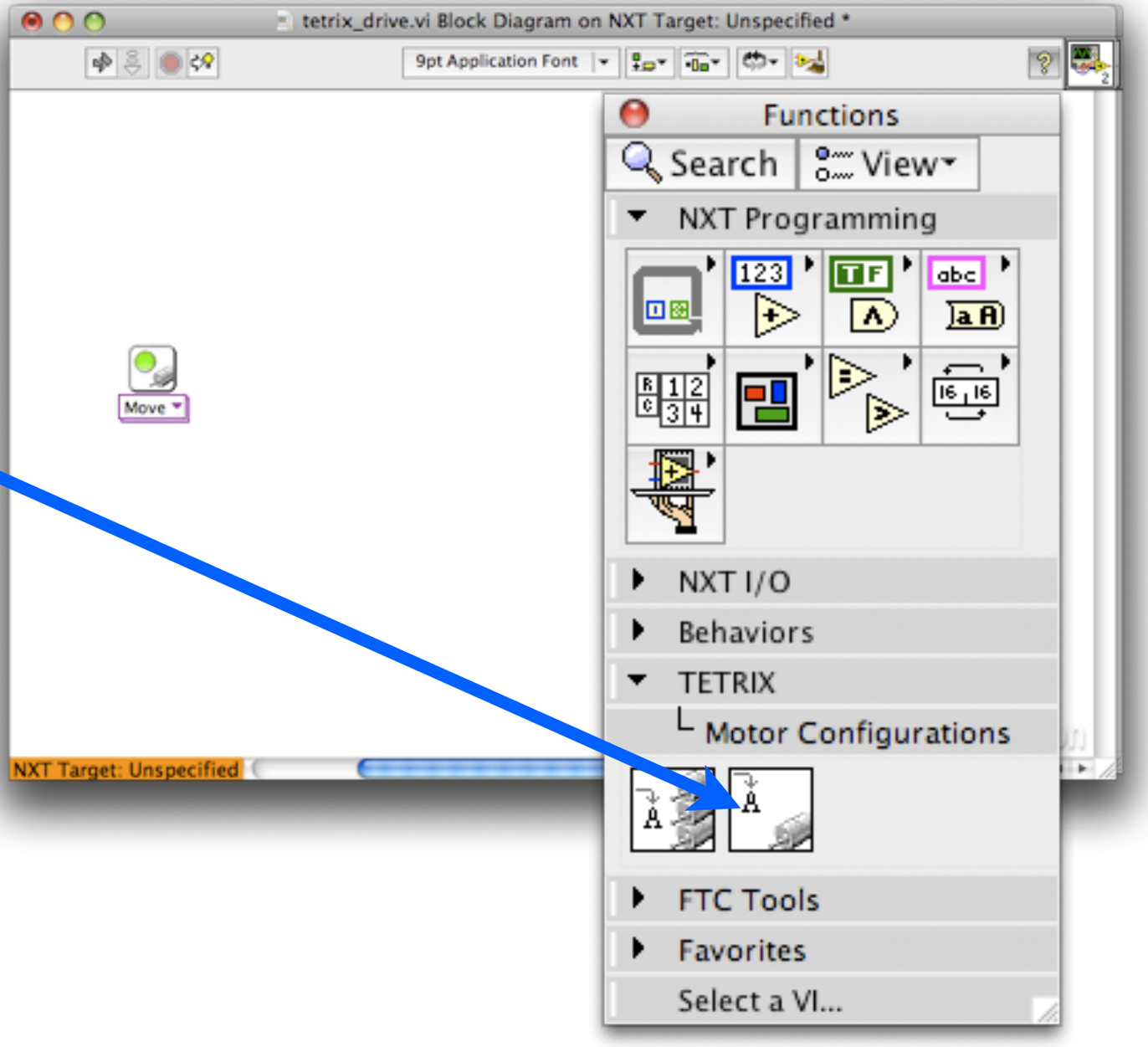


RoboJackets

TETRIX Motor

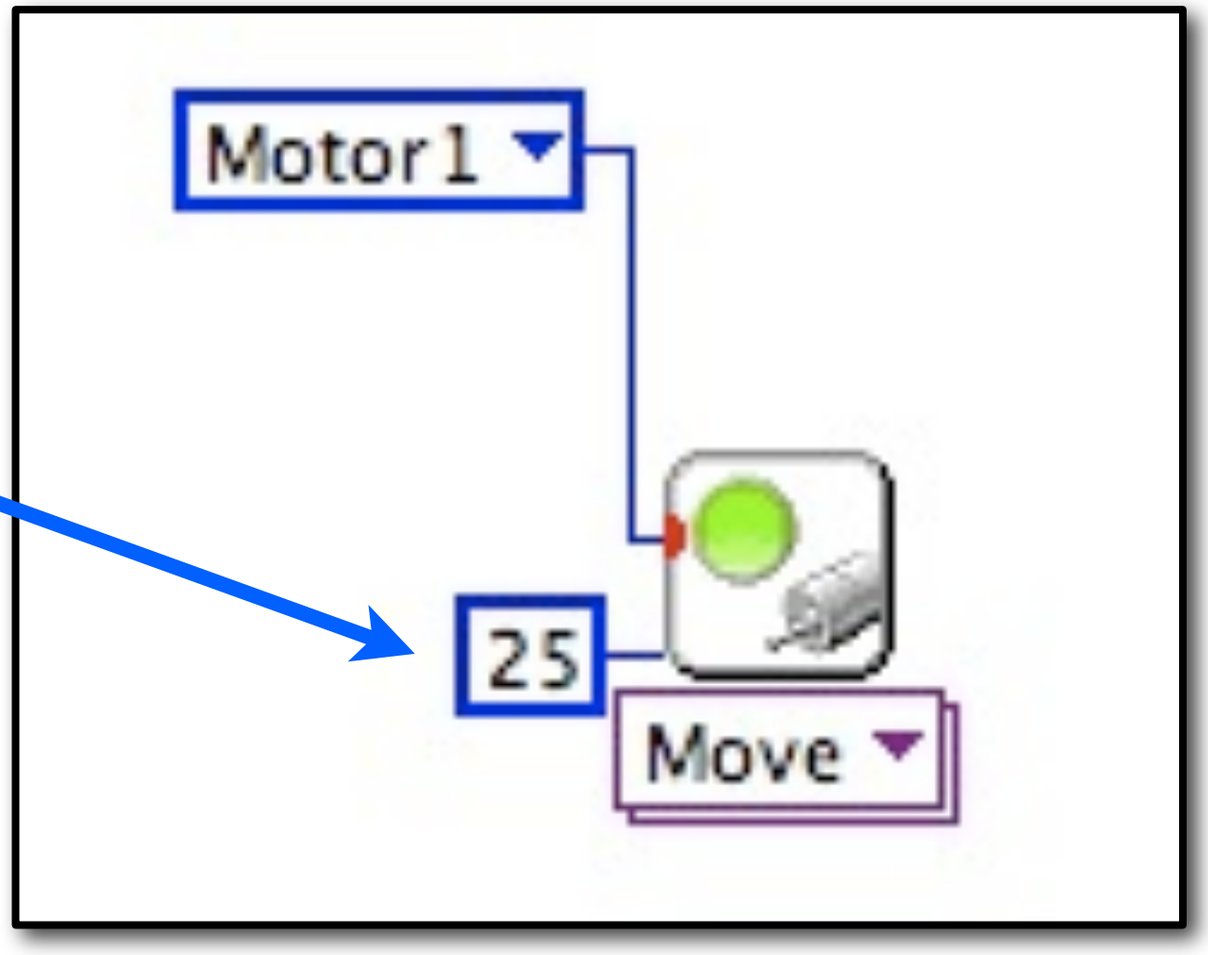
Drag on a
motor1.ctl



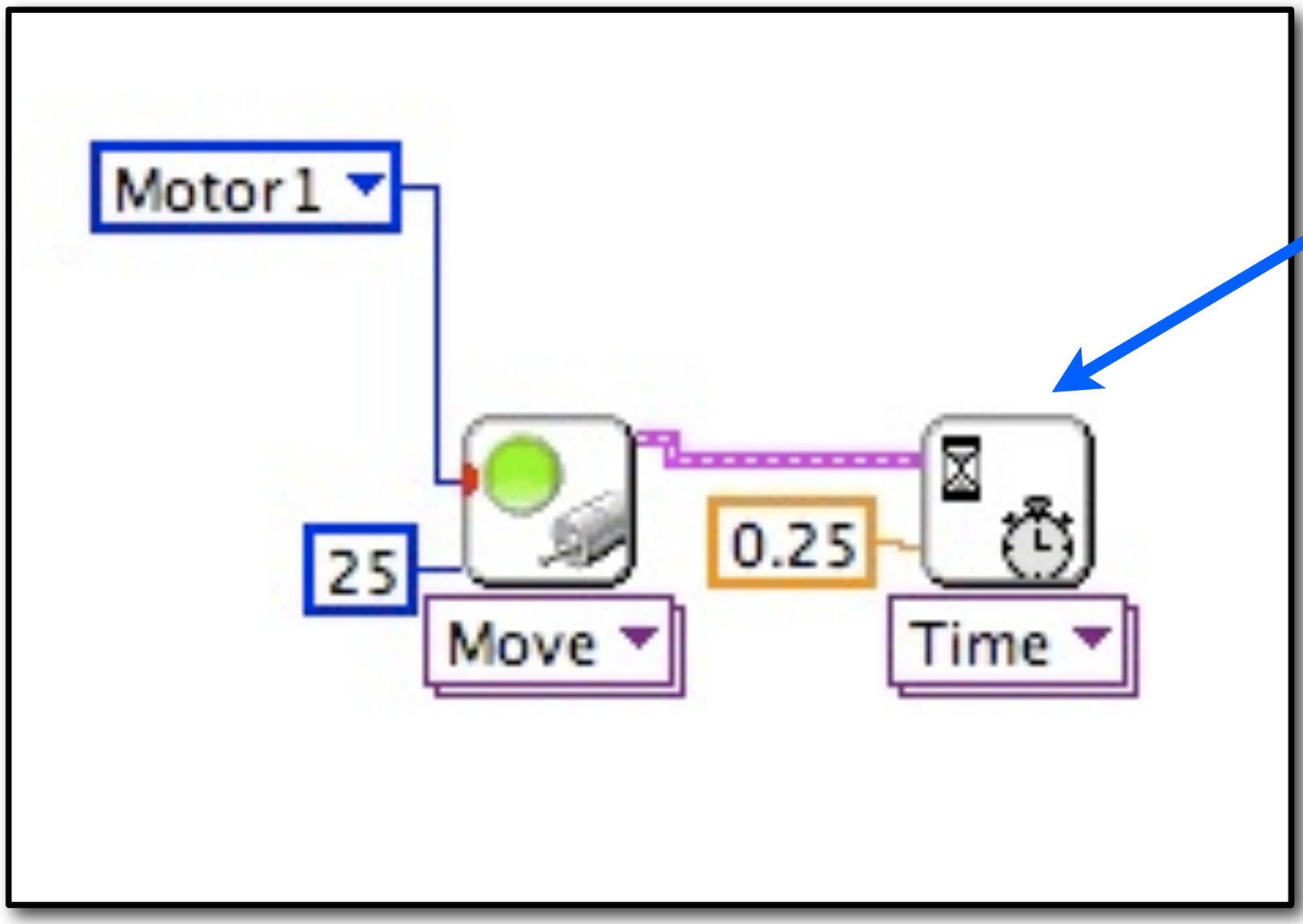


Set Motor Speed

Right Click -> Create Constant
Highlight Type “25”

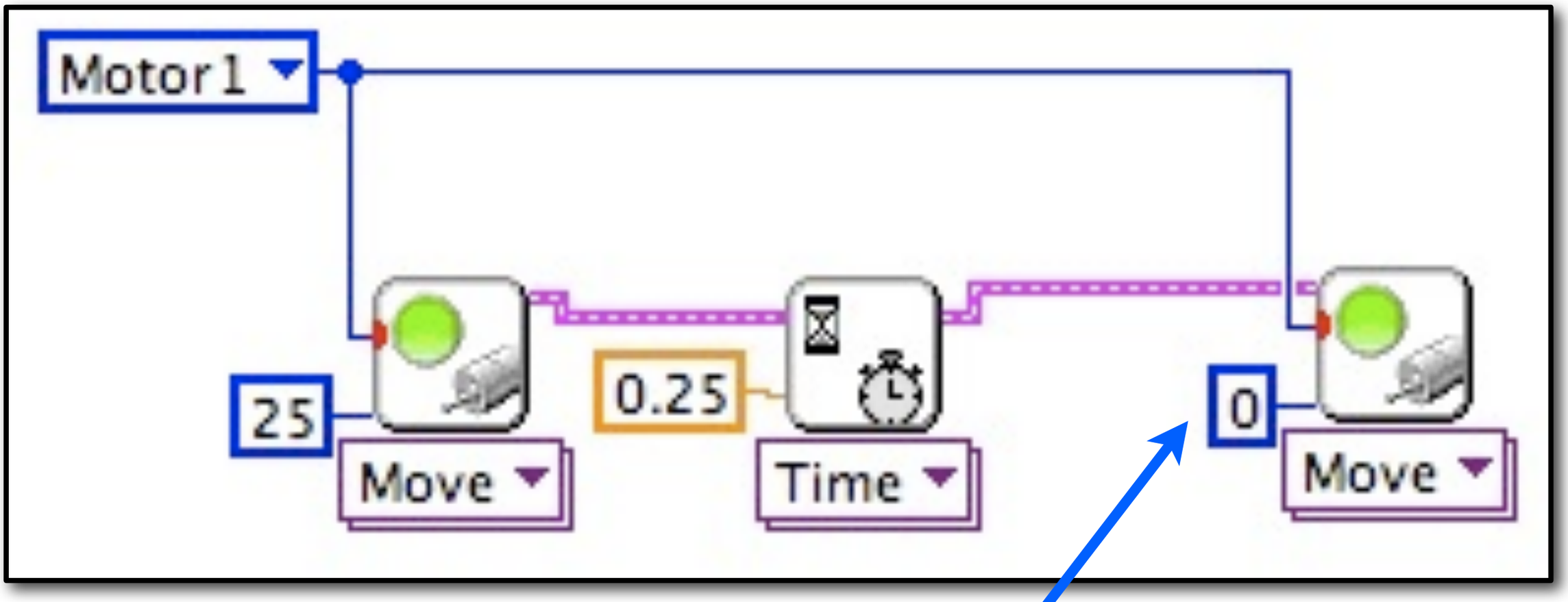


Add Timer



Add **Timer**
Set **.25 Sec**

Add Another Motor Block

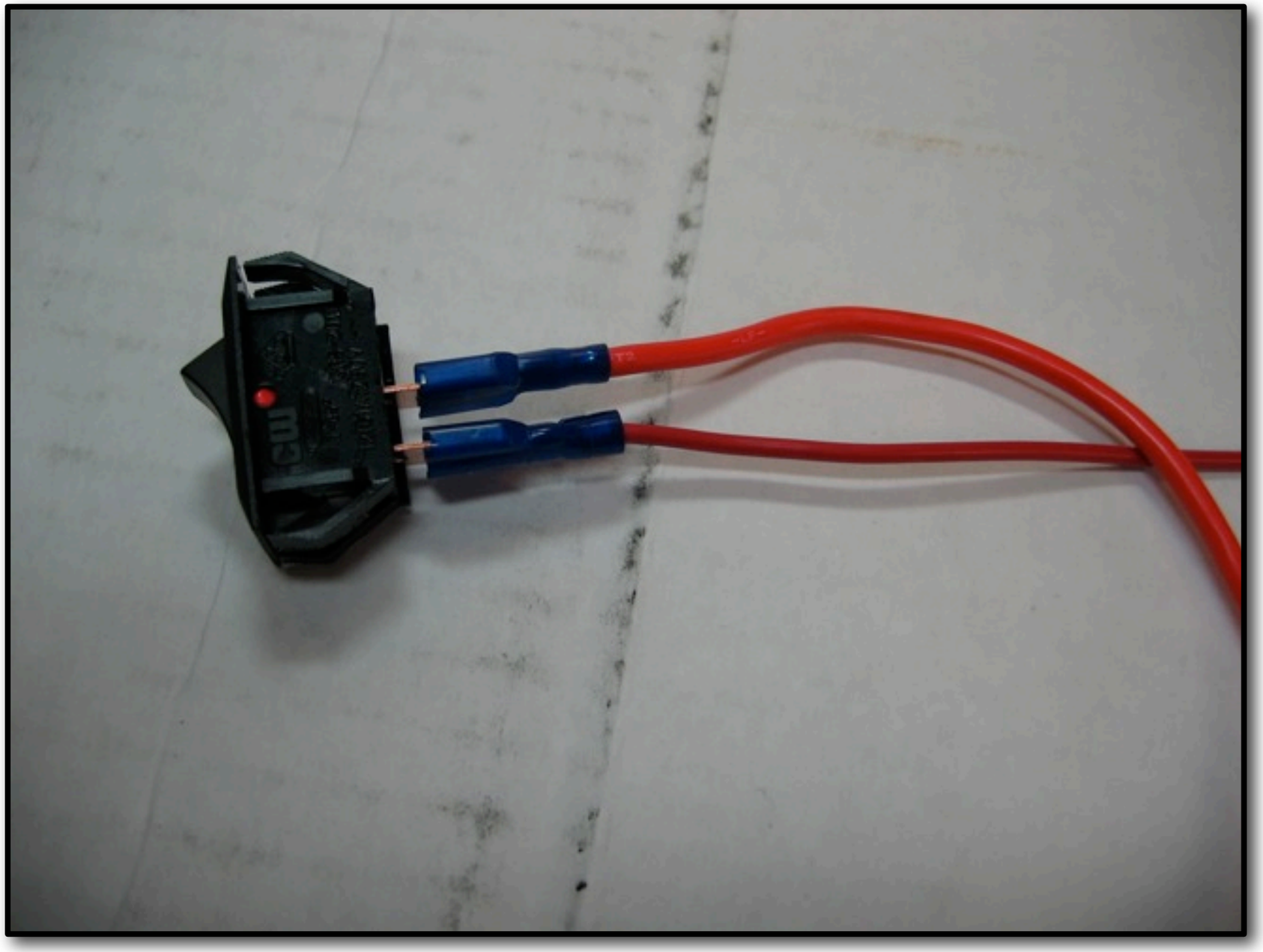


Set **Speed to 0**
Stopping the Motor

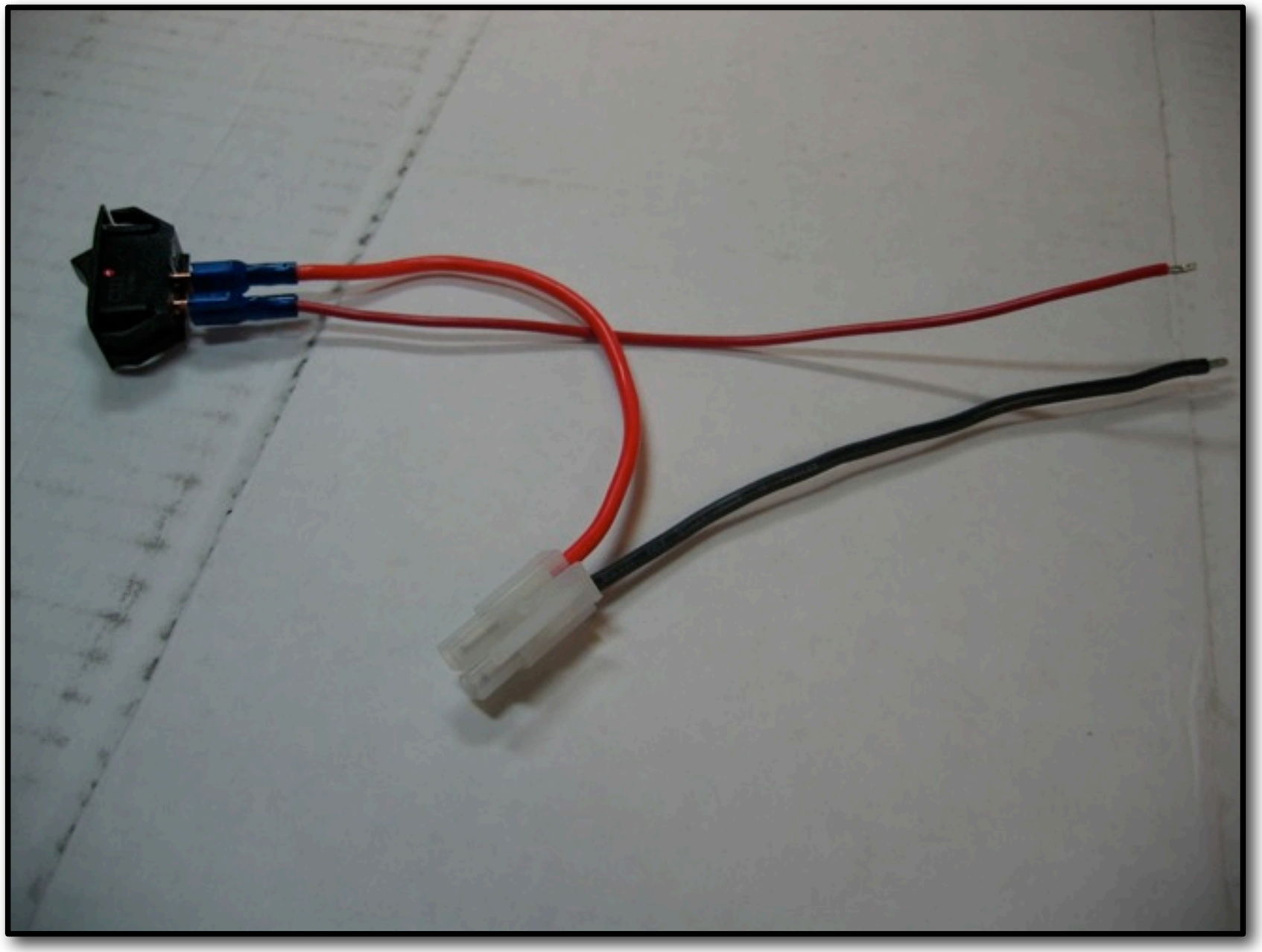
HOOKING EVERYTHING UP

RoboJackets

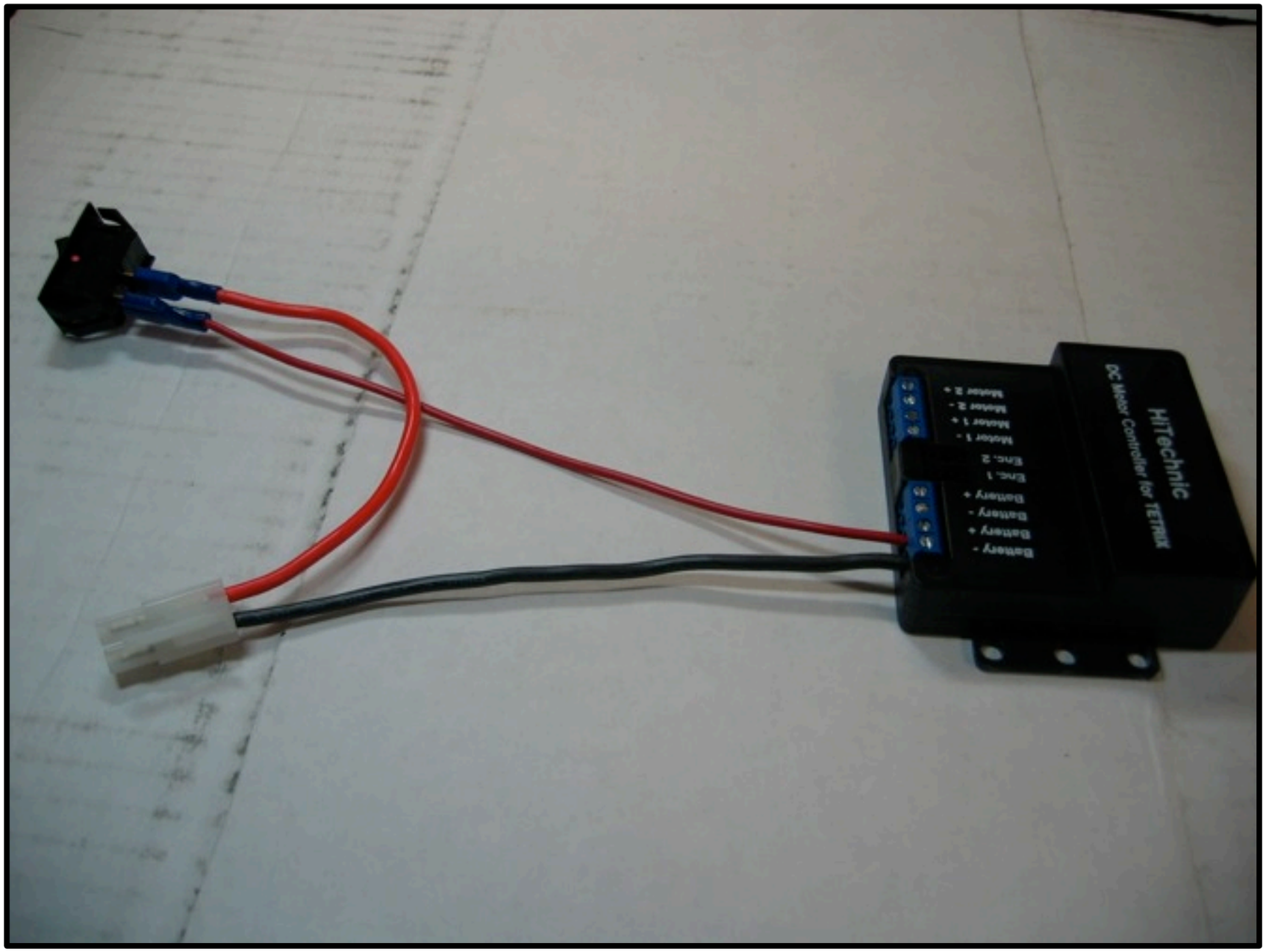
Connect the Switch



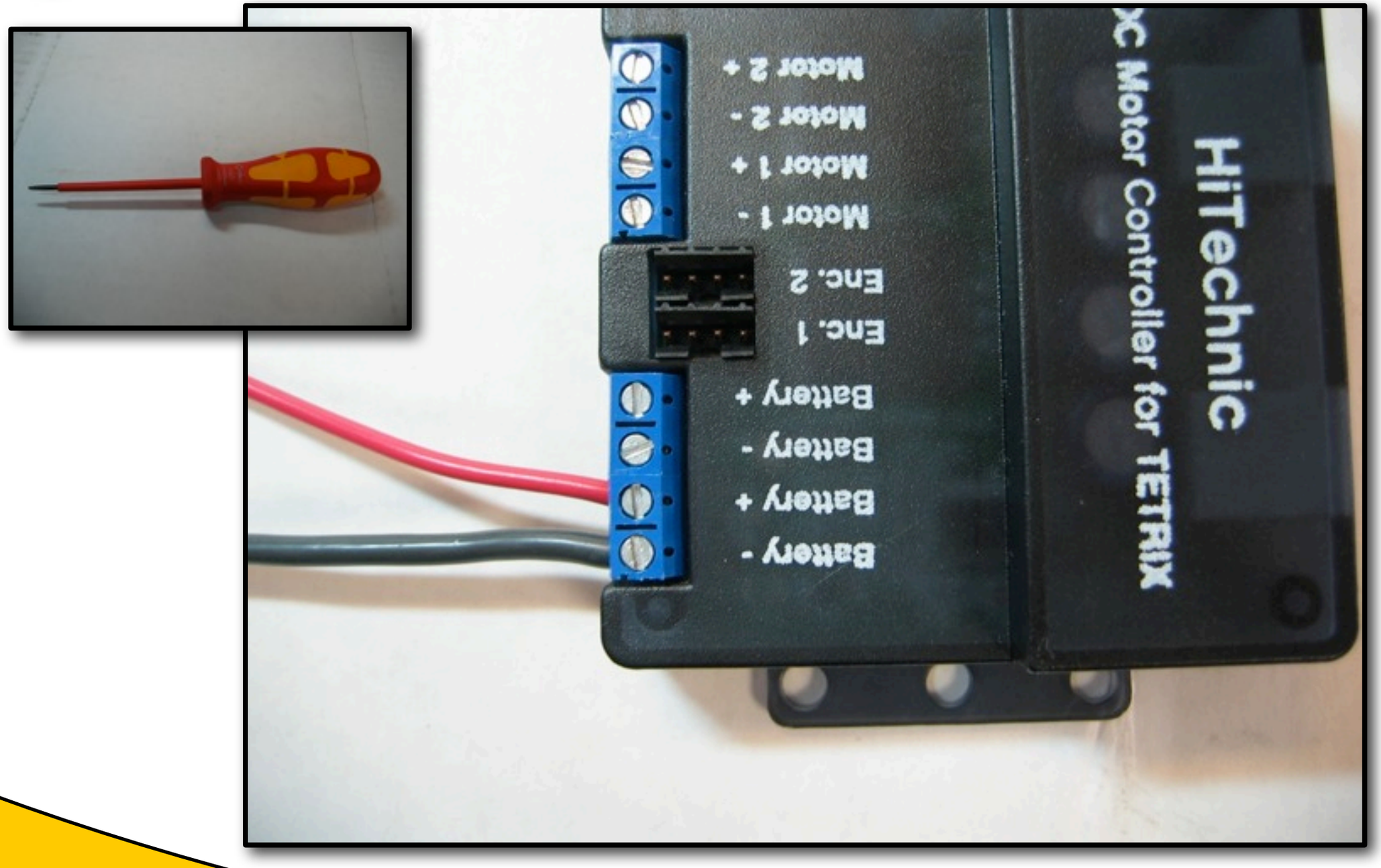
Connect the Switch



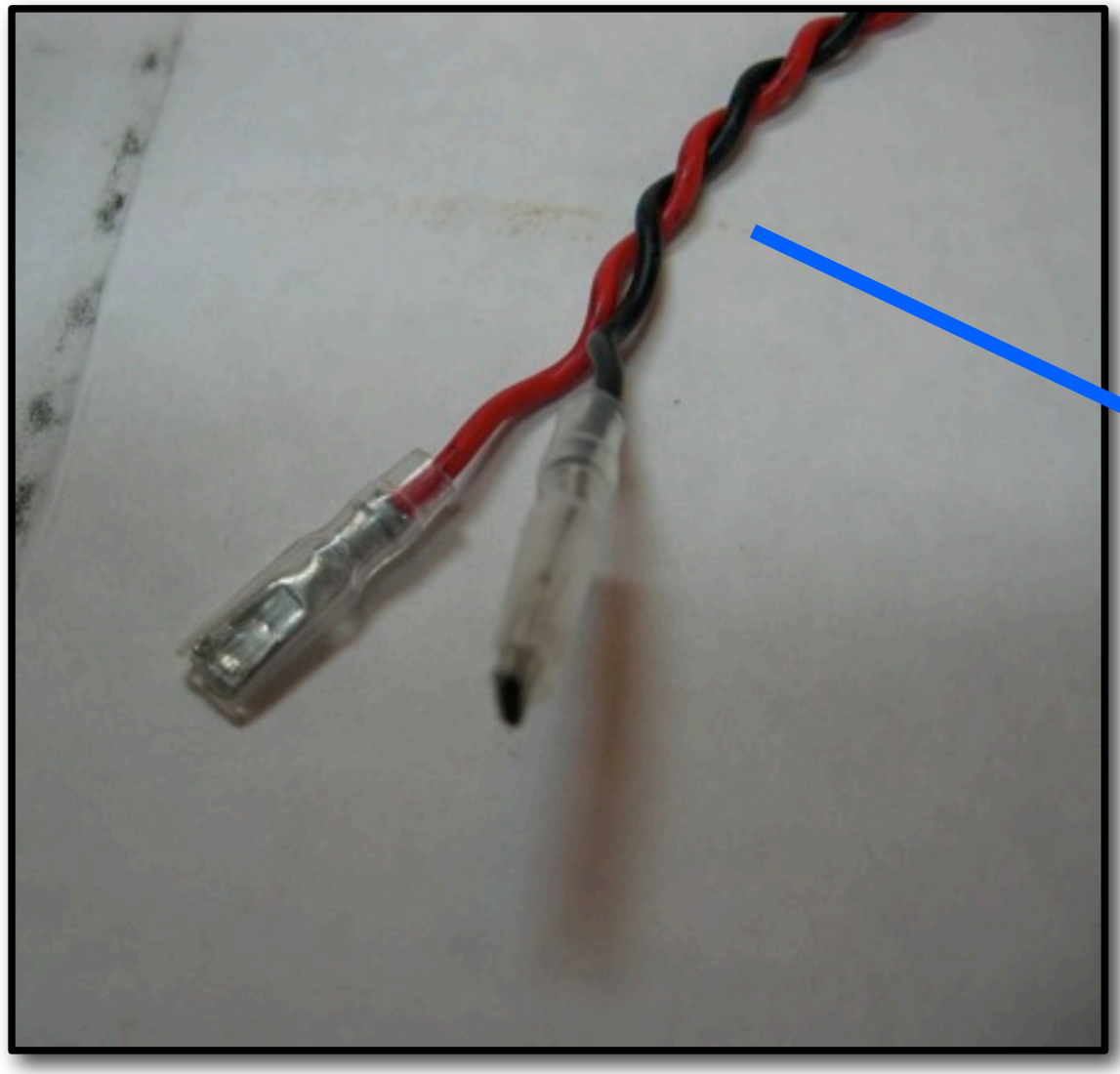
Connect Switch to Motor Driver

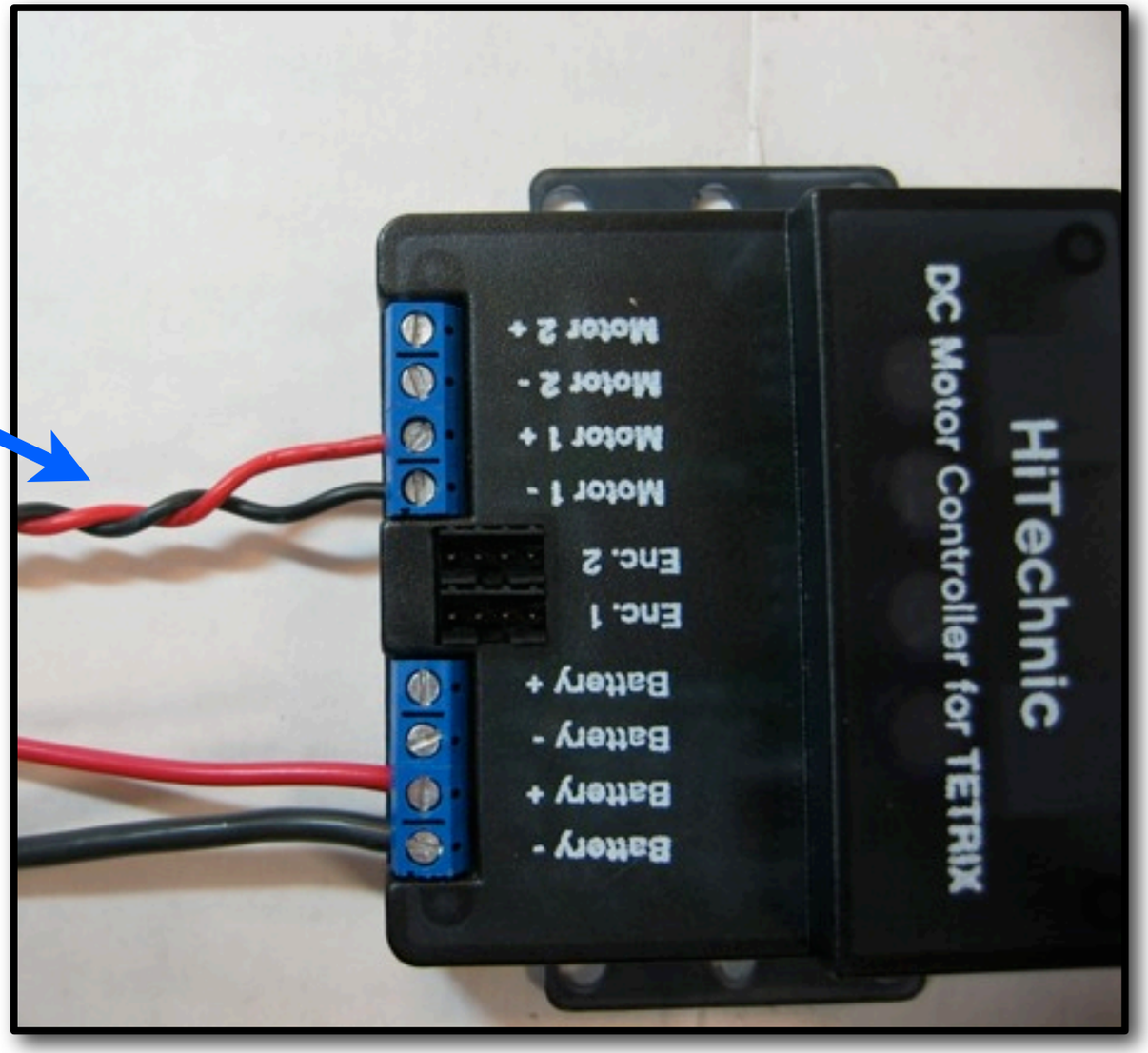


Connect Switch to Motor Driver

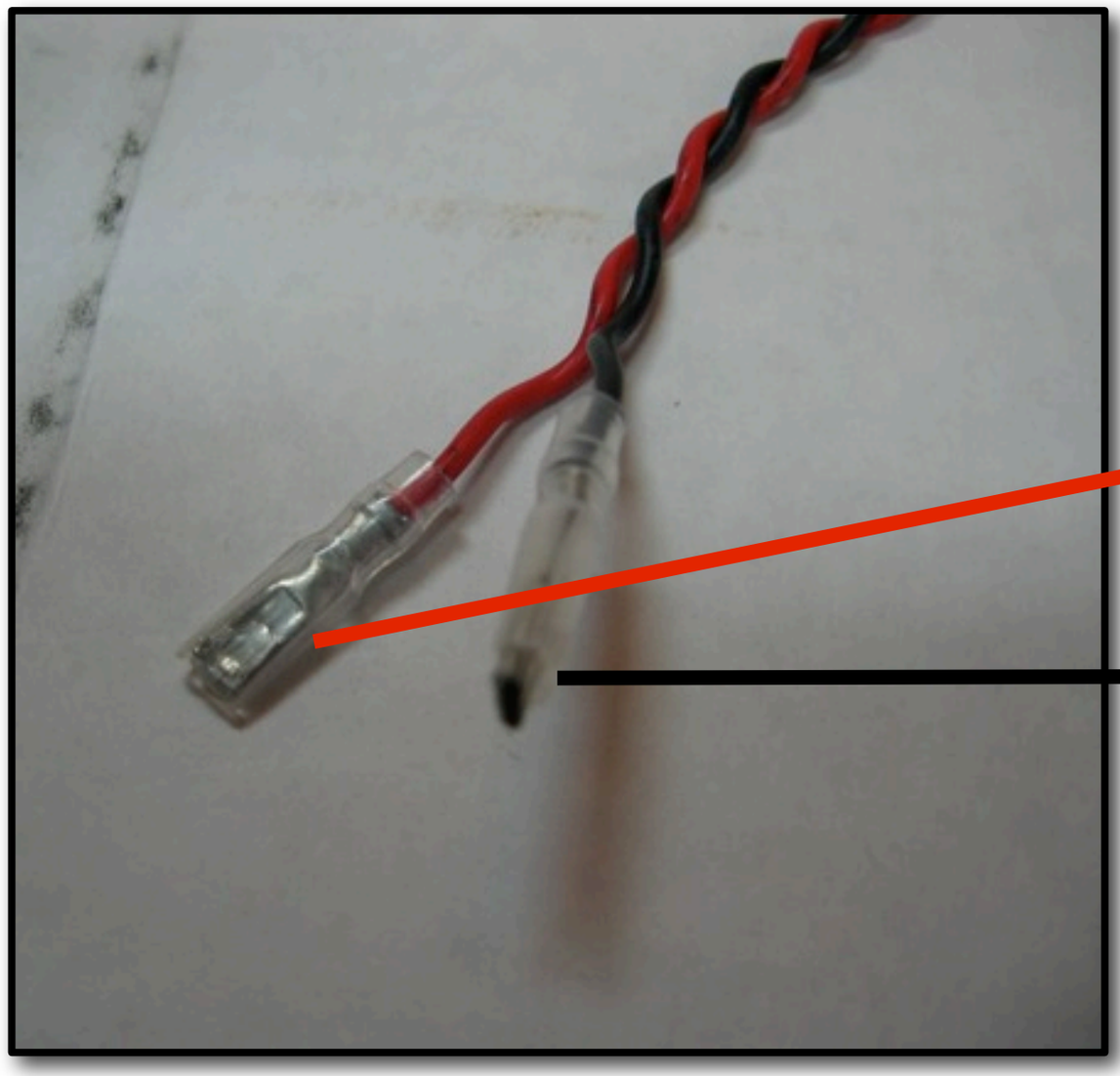


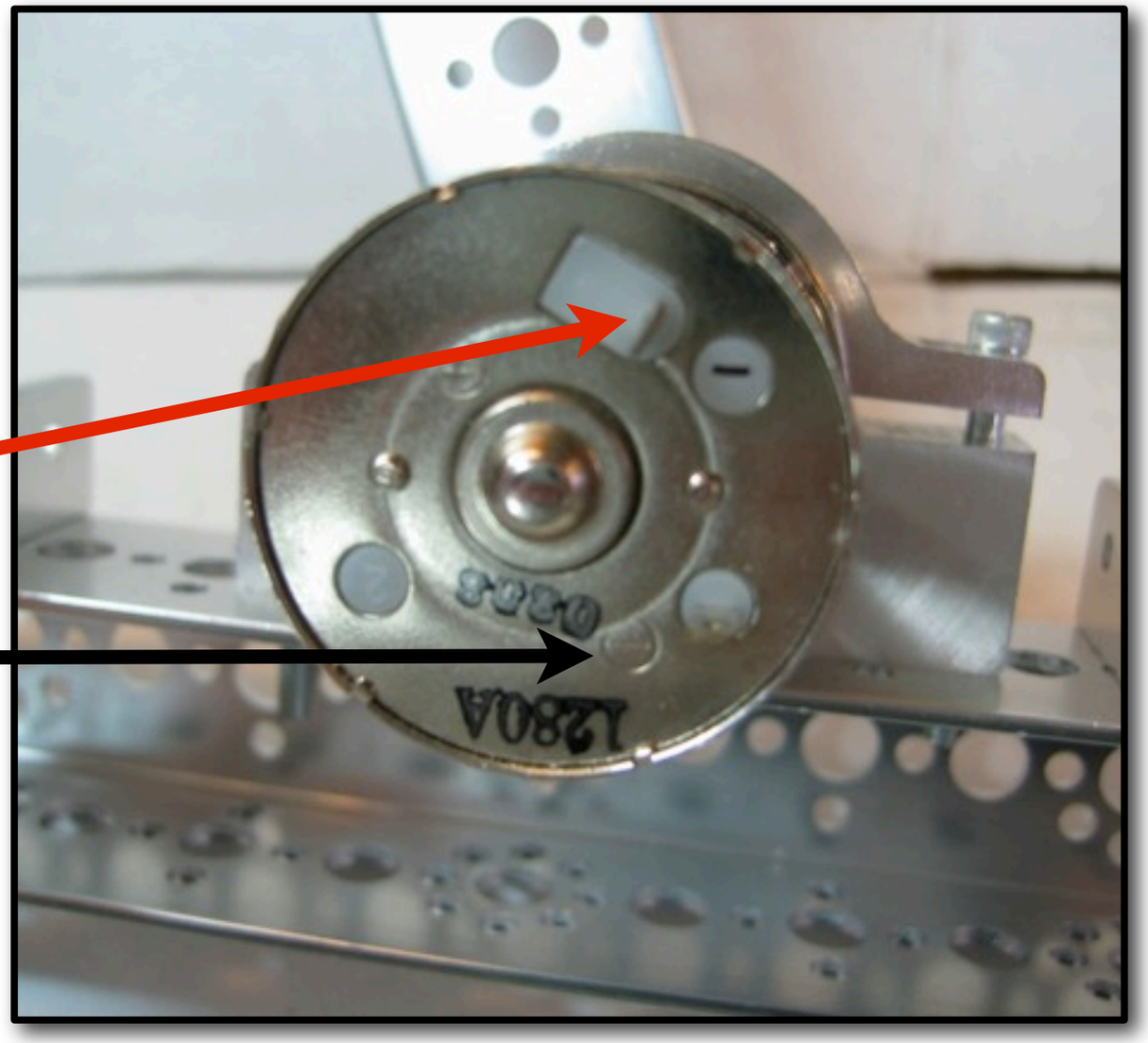
Connect Motor Wires To Driver





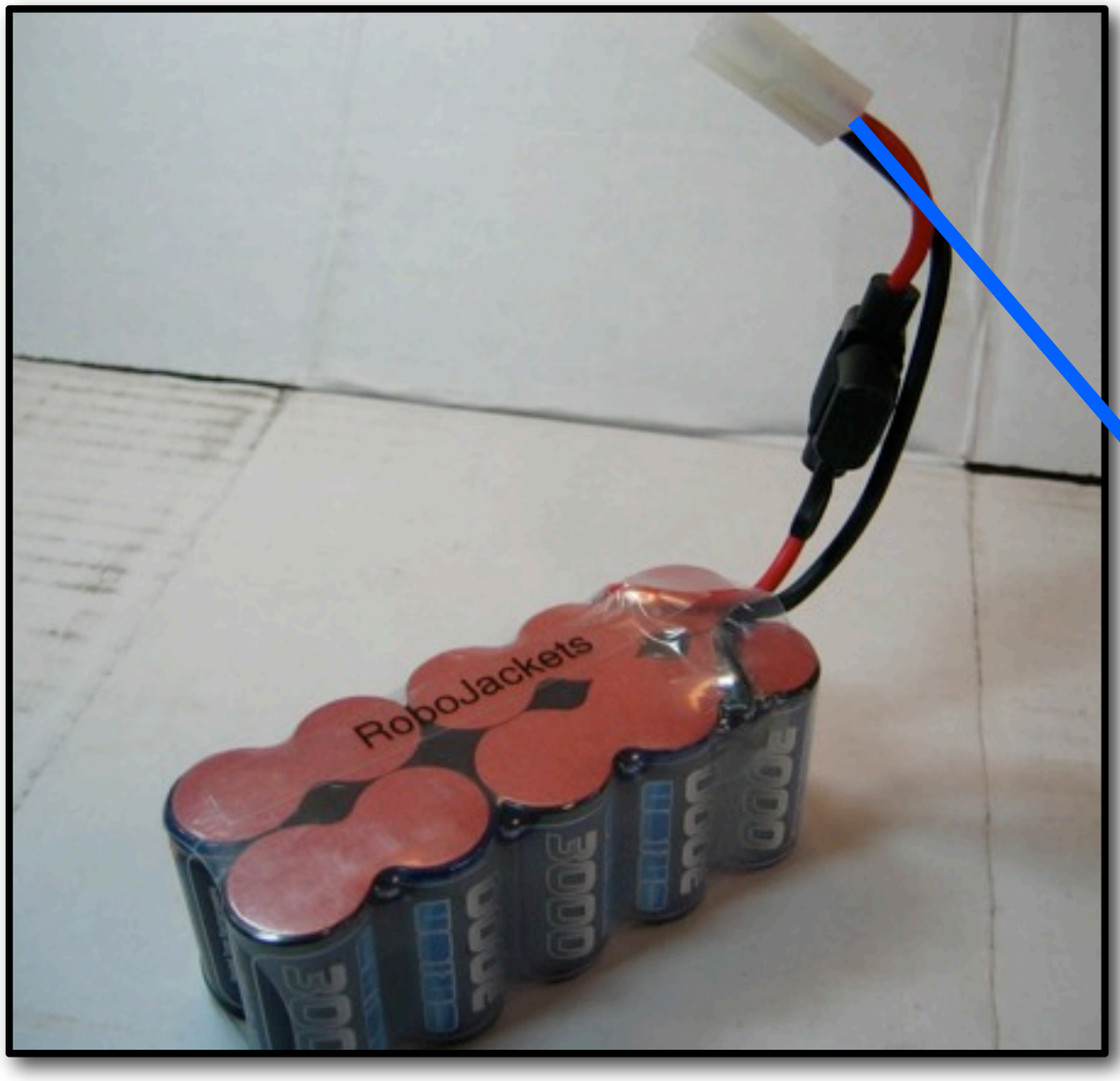
Connect Motor Wires to Motor

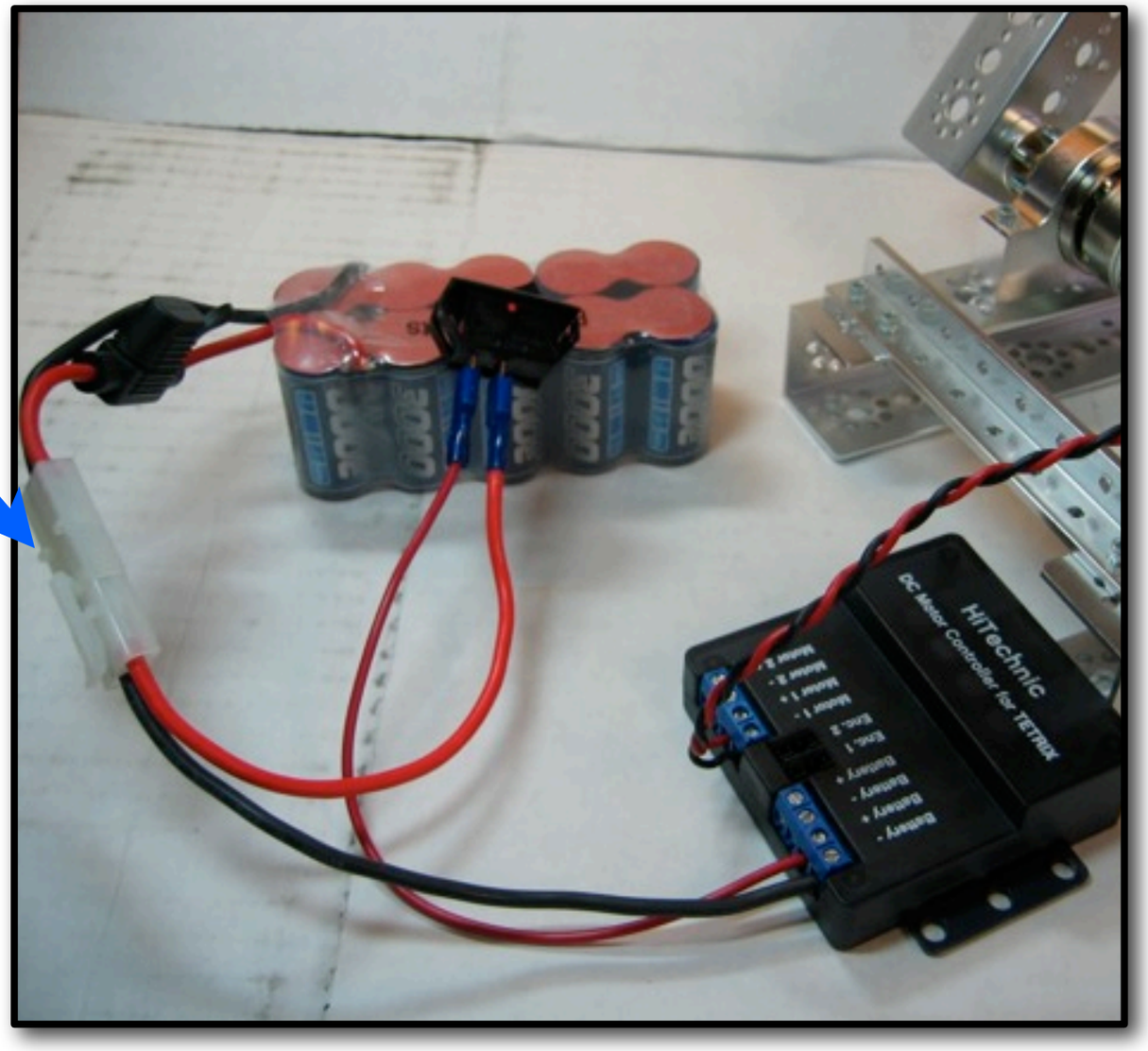




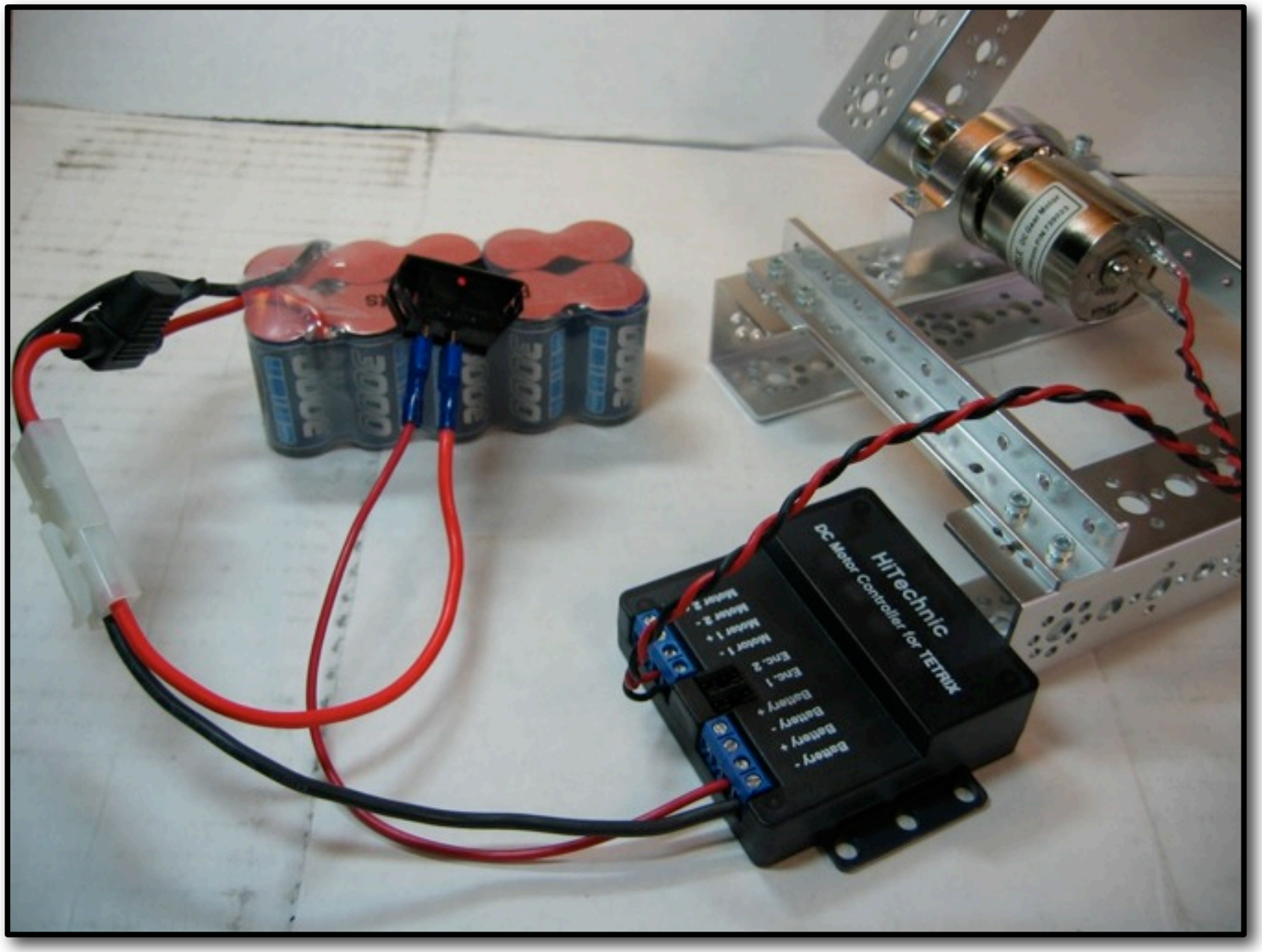
Polarity matters!

Connect Battery





Current Assembly



Connect NXT

Use
Port 1

Any Port
on
Controller