



## ROBOTC for VEX Cortex and PIC - VEXnet Remote Control

### vexRT[]

Array that contains the values of the joysticks and buttons from a VEXnet Transmitter. Supports Joystick channels Ch1 through Ch4.

Returns values between -127 and 127 (normalized for motor values in ROBOTC.)

As well as Buttons Btn5 through Btn8. Returns values of either 0 (not-pressed) or 1 (pressed).

Example:

```
while(true)
{
    // Joystick Control:
    motor[port2] = vexRT[Ch2]; //Motor port 2 speed is determined by Ch2 on the VEXnet Transmitter
    motor[port3] = vexRT[Ch3]; //Motor port 3 speed is determined by Ch3 on the VEXnet Transmitter

    // Button Control:
    if(vexRT[Btn5U] == 1)      //If button 5U is pressed:
    {
        motor[port5] = 32;      //run motor port 5 at quarter speed (i.e. lift an arm)
    }
    else if(vexRT[Btn5D] == 1) //If button 5D is pressed:
    {
        motor[port5] = -32;     //run motor port 5 at quarter speed reversed (i.e. lower an arm)
    }
    else                      //If neither buttons 5U or 5D are pressed:
    {
        motor[port5] = 0;       //stop motor port 5 (i.e. don't move arm up or down)
    }
}
```



### Channel variable names:

- **Ch1** - X-Axis - Right Joystick
- **Ch2** - Y-Axis - Right Joystick
- **Ch3** - Y-Axis - Left Joystick
- **Ch4** - X-Axis - Left Joystick

### Button variable names:

- **Btn5U** - Button group 5 - "U" (up)
- **Btn5D** - Button group 5 - "D" (down)
- **Btn6U** - Button group 6 - "U" (up)
- **Btn6D** - Button group 6 - "D" (down)
- **Btn7U** - Button group 7 - "U" (up)

- **Btn7D** - Button group 7 - "D" (down)
- **Btn7L** - Button group 7 - "L" (left)
- **Btn7R** - Button group 7 - "R" (right)
- **Btn8U** - Button group 8 - "U" (up)
- **Btn8D** - Button group 8 - "D" (down)
- **Btn8L** - Button group 8 - "L" (left)
- **Btn8R** - Button group 8 - "R" (right)

#### Channel variable names for VEXnet Transmitter 2:

- **Ch1Xmtr2** - X-Axis - Right Joystick
- **Ch2Xmtr2** - Y-Axis - Right Joystick
- **Ch3Xmtr2** - Y-Axis - Left Joystick
- **Ch4Xmtr2** - X-Axis - Left Joystick

#### Button variable names for VEXnet Transmitter 2:

- **Btn5UXmtr2** - Button group 5 - "U" (up)
- **Btn5DXmtr2** - Button group 5 - "D" (down)
- **Btn6UXmtr2** - Button group 6 - "U" (up)
- **Btn6DXmtr2** - Button group 6 - "D" (down)
- **Btn7UXmtr2** - Button group 7 - "U" (up)
- **Btn7DXmtr2** - Button group 7 - "D" (down)
- **Btn7LXmtr2** - Button group 7 - "L" (left)
- **Btn7RXmtr2** - Button group 7 - "R" (right)
- **Btn8UXmtr2** - Button group 8 - "U" (up)
- **Btn8DXmtr2** - Button group 8 - "D" (down)
- **Btn8LXmtr2** - Button group 8 - "L" (left)
- **Btn8RXmtr2** - Button group 8 - "R" (right)





---

Copyright © 2012 Robotics Academy/Robomatter - <http://robotc.net/>