

Title: Configuring DC2-PC / DC2-STN Joystick Operation from Windows
Products(s): DC2-PC, DC2-STN
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Summary

The DC2-PC and DC2-STN are capable of manual operation using a joystick as input. The examples given in the MCAPI (Windows interface) online help for joystick configuration do not work correctly with either DC2 model.

More Information

Configuration of the DC2 joystick interface is different than from configuration of the DCX series controllers joystick interface, the samples in the MCAPI online help relate to the DCX series (not the DC2).

To configure the DC2 for joystick operation you should first set the velocity of the axes to be controlled to zero. Next place the axes in velocity mode and tell them to go. To enable the joystick you need to set the Deadband, Offset (set to 128 for mid-scale), and Gain values of an MCJOG data structure, then issue the configuration by calling `MCSetJogConfig()`. The Acceleration and MinVelocity members of the MCJOG data structure are ignored by the DC2.

```
MCJOG Jog;  
  
MCSetVelocity( hCtrlr, iAxis, 0.0 );  
MCSetOperatingMode( hCtrlr, iAxis, 0, MC_MODE_VELOCITY );  
MCGo( hCtrlr, iAxis );  
  
Jog.Deadband = 5.0;  
Jog.Offset = 128.0;  
Jog.Gain = 10000.0;  
MCSetJogConfig( hCtrlr, iAxis, &Jog );
```

To exit joystick control set the Gain member of the MCJOG data structure to zero and call `MCSetJogConfig()` to issue the updated configuration. You should also call `MCStop()` for each axis that was in joystick mode.

Note that you do not need to use the `MCEnableJog()` MCAPI function with the DC2 as described in the online help. Also, the `MCGetJogConfig()` function does not work with the DC2 (it is not possible to read back the value of these settings from this controller).