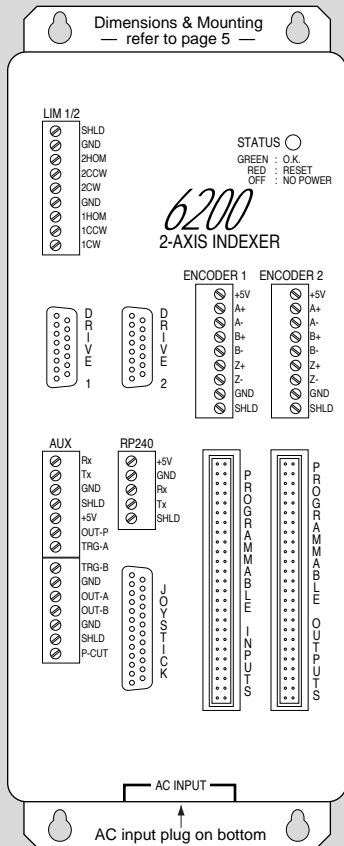


6200 2-Axis Indexer

Connections

See also pages 6-21



OTHER PIN OUTS

PROGRAMMABLE INPUTS

Pin	Function
49	+5VDC
47	Input #1 (LSB)
45	Input #2
43	Input #3
41	Input #4
39	Input #5
37	Input #6
35	Input #7
33	Input #8
31	Input #9
29	Input #10
27	Input #11
25	Input #12
23	Input #13
21	Input #14
19	Input #15
17	Input #16
15	Input #17
13	Input #18
11	Input #19
9	Input #20
7	Input #21
5	Input #22
3	Input #23
1	Input #24 (MSB)

PROGRAMMABLE OUTPUTS

Pin	Function
49	+5VDC
47	Output #1 (LSB)
45	Output #2
43	Output #3
41	Output #4
39	Output #5
37	Output #6
35	Output #7
33	Output #8
31	Output #9
29	Output #10
27	Output #11
25	Output #12
23	Output #13
21	Output #14
19	Output #15
17	Output #16
15	Output #17
13	Output #18
11	Output #19
9	Output #20
7	Output #21
5	Output #22
3	Output #23
1	Output #24 (MSB)

Even numbered pins are connected to logic ground.
MSB = Most Significant Bit; LSB = Least Significant Bit

DRIVE

Pin	Function
1	Step +
2	Direction +
4	In-Position
5	Drive Fault
7	+5VDC Output
8	Shield (chassis gnd)
9	Step Return (-)
10	Direction Return (-)
11	Shutdown +
12	Shutdown Return (-)
13	Isolated Ground
14	Isolated Ground

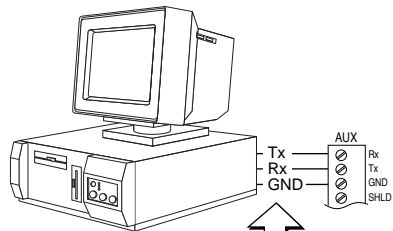
Pins 3, 6, & 15 are reserved

JOYSTICK

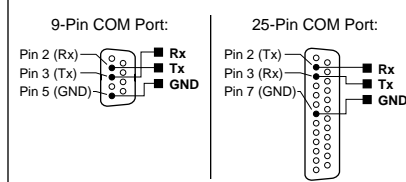
Pin	Function
1-3	Analog Channels 1-3
8	Shield (chassis gnd)
14	Isolated Ground
15	Axis Select Input
16	Velocity Select Input
17	Release Input
18	Trigger Input
19	Auxiliary Input
23	+5VDC Output

Pins 4-7, 9-13, 20-21, 24-25 are reserved

SERIAL COMMUNICATION



Serial Port Connection



Maximum RS-232C cable = 50 feet (15.25 meters)

To communicate with the 6200, you will need a terminal emulation program. We recommend you use Motion Architect, a Windows-based program that is included in the 6200 ship kit. Motion Architect provides terminal emulation and program editor features as part of its ensemble of programming tools.

Getting Started with Motion Architect:

1. Connect the 6200 to the computer.
2. Power up the computer and then the 6200.
3. To install Motion Architect, insert Disk 1 into your computer's disk drive and run the Setup program (setup.exe). Follow the instructions in the Setup program.
4. Run Motion Architect.
5. From Motion Architect's main menu, click on the "Product" pull-down menu and click on "Selection". In the dialog box, select "6200" and click the Okay button.
6. From Motion Architect's main menu, click on "Terminal" to launch the terminal emulator. The terminal window will display a command prompt (>); this indicates that you are communicating with the 6200.

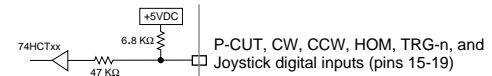
Having serial communication problems?
Refer to page 26 for help.

I/O SPECIFICATIONS & INTERNAL SCHEMATICS

AC Input.....110-240VAC (±10%) single-phase, 50/60Hz,
0.6A @ 120VAC.
Connection instructions — see page 18.

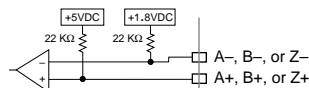
Serial Com......RS-232C 3-wire (Rx, Tx & GND on the AUX connector);
Up to 99 units in a daisy chain.
9600 baud (or use AutoBaud feature — see page 4);
8 data bits; 1 stop bit; no parity.
Connection instructions — see page 7.
Terminal emulation — see page 20.
Address & AutoBaud DIP switches — see page 4.

P-CUT, Limits, Triggers, and Joystick Inputs (pg. 7, 10, 12, 13)



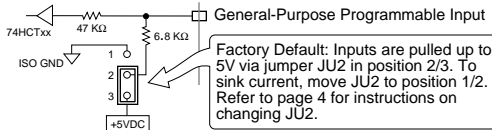
Specs: TTL-compatible*; voltage range = 0-24VDC.

Encoder Inputs (pg. 11)



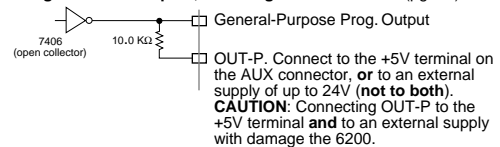
Specs: Differential comparator. Use 2-phase quadrature encoders;
max. frequency = 1.6 MHz; min. time between transitions = 625 ns.
TTL levels (Low ≤ 0.4V, High ≥ 2.4V); range = 0-5VDC.

Programmable Inputs (pg. 14)



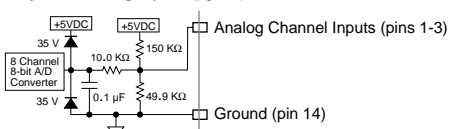
Specs: TTL-compatible*; voltage range = 0-24VDC.

Programmable Outputs, including OUT-A & OUT-B (pg. 14)



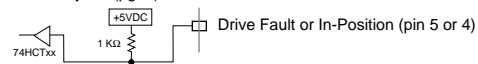
Specs: Open collector output. Max. voltage in OFF state (not sinking current) = 24V; Max. current in ON state (sinking) = 30mA.

Joystick Analog Inputs (pg. 12)



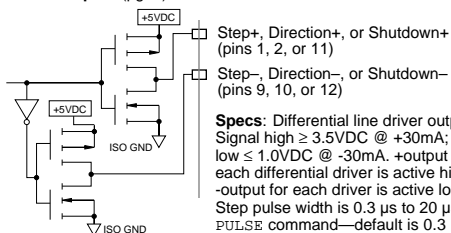
Specs: Voltage range = 0-2.5VDC, 8-bit. Must not exceed 5VDC.

Drive Inputs (pg. 8)



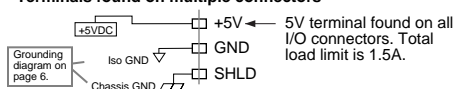
Specs: TTL-compatible*; voltage range = 0-5VDC.

Drive Outputs (pg. 8)



Specs: Differential line driver output.
Signal high ≥ 3.5VDC @ +30mA; signal low ≤ 1.0VDC @ -30mA. +output for each differential driver is active high; -output for each driver is active low.
Step pulse width is 0.3 μs to 20 μs (see PULSE command—default is 0.3 μs).

Terminals found on multiple connectors



* TTL-compatible levels: Low ≤ 0.4V, High ≥ 2.4V.

Troubleshooting

See also pages 24-27

- STATUS LED: Green = 110-240VAC power is applied. Red = power reset required. Off = no power.
- Status information (see command descriptions in 6000 Series Software Reference):
 - General status information.....TASF, TSSF, TSTAT
 - Limits (end-of-travel, home).....TASF, TLIM
 - P-CUT input.....TINOF (bit #6)
 - Programmable inputs and TRG-n.....TIN, INFNC
 - Programmable outputs and OUT-n.....TOUT, OUTFNC
- P-CUT input must be grounded to GND terminal to allow motion.
- CW & CCW inputs must be grounded to GND terminal to allow motion (or disable with LHØ command).
- To help prevent electrical noise, shield all connections at one end only (see also Appendix B).
- Error messages while programming or executing programs — see 6000 Series Programmer's Guide.
- Technical support — see phone numbers on inside of front cover, and the HELP command response.