

Programming: Communications

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While there are a variety of options, the default mode of communication for the SmartMotor is serial RS-232 (with the power input). Each SmartMotor is equipped with a secondary serial port called the "AniLink" port. The SmartMotor can be configured to communicate with either RS-485 or I2C. The I2C connects SmartMotor peripheral I/O cards, etc., while the RS-485 will interface bar code readers, light curtains, and other "intelligent" peripheral SmartMotors if desired.

To maximize the flexibility of the SmartMotor, these serial communications ports are fully programmable with re

There is a sixteen-byte input buffer for the primary RS-232 port and another for the secondary RS-485 port. TI

keep up with the incoming data.

By default, the primary RS-232 channel that shares a connector with the incoming power, is set up as a comm: default characteristics:

	Defaults:	Other Options:
Type:	RS-232	RS-485 (w/adap)
Parity:	None	Odd or Even
Bit Rate:	9600	2400 to 38400
Stop Bits:	1	0 or 2
Data Bits:	8	7
Mode:	Command	Data
Echo:	Off	On

Because of the buffers on both sides there is no need for any hand shaking protocol when commanding the SmartMotor. Most commands execute in less time than it would take to receive the next one. Still, you should take some care as to allow processes to complete, particularly relatively slow processes like printing to a connected LCD display, or executing a full subroutine. Since the EEPROM long term memory is slow to write, the terminal software does employ two way communication to regulate the download of a new program.