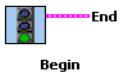
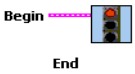
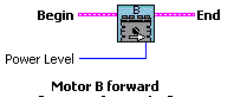
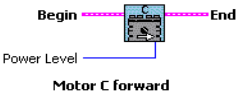
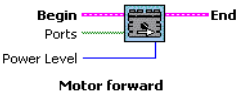
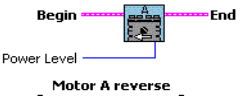
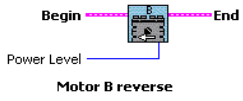
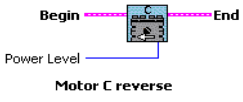
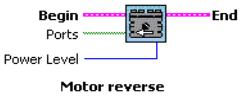
Robolab Cheat Sheet

I. Basics:

A. Begin / End

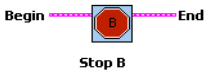
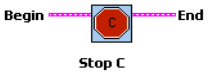
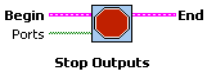
Icon	Path to the Icon	Description & Defaults
		Always start the Inventor program with this command.
		Always end an Inventor program with this command. Each task will need its own end command.

B. Motors

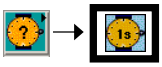
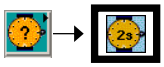
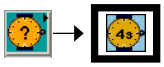
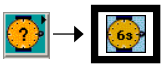
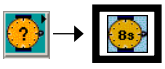
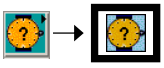
Icon	Path to the Icon	Description & Defaults
		Turn on the motor connected to port A in the forward direction. The default is full power.
		Turn on the motor connected to port B in the forward direction. The default is full power.
		Turn on the motor connected to port C in the forward direction. The default is full power.
		Turn on motors in the forward direction. The default is to turn on all ports at power level 5.
		Turn on the motor connected to port A in the reverse direction. The default is full power.
		Turn on the motor connected to port B in the reverse direction. The default is full power.
		Turn on the motor connected to port C in the reverse direction. The default is full power.
		Turn on motors in the reverse direction. The default is to turn on all ports at power level 5.

*Note the Icons and Descriptions are from RoboLab Help.

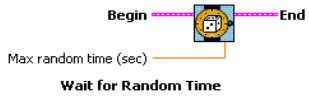
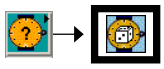
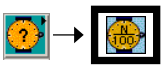
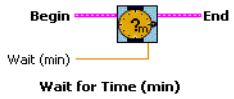
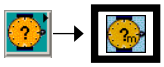
C. Stops

Icon	Path to the Icon	Description & Defaults
		Stop the motor connected to port A.
		Stop the motor connected to port B.
		Stop the motor connected to port C.
		Stop the motors connected to all ports.
		Stop the motors. The default is to stop all the motors.

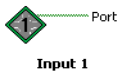
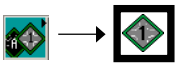
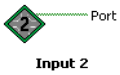
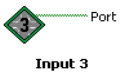
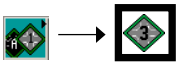
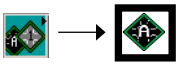
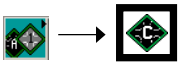
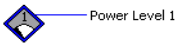
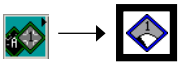
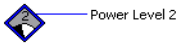
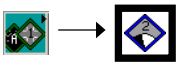
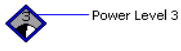
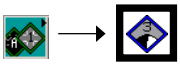
D. Wait for Time

Icon	Path to the Icon	Description & Defaults
		Wait for 1 second.
		Wait for 2 seconds.
		Wait for 4 seconds.
		Wait for 6 seconds.
		Wait for 8 seconds.
		Wait for 10 seconds.
		Wait for a specified amount of time. The default time is 1 second.

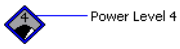
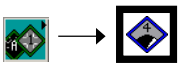
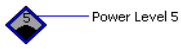
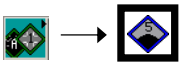
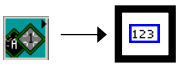
*Note the Icons and Descriptions are from RoboLab Help.

Icon	Path to the Icon	Description & Defaults
		Wait for a random amount of time. The default is to wait for a random amount. of time between 0 and 5 seconds.
		Wait for a specified amount of time. The default time is 1 second.
		Wait for a specified amount of time in minutes. The default time is 1 minute.

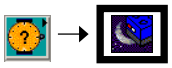
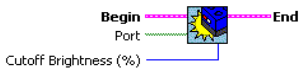
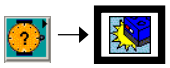
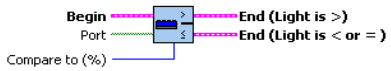
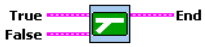
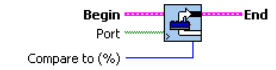
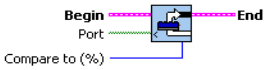
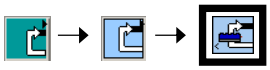
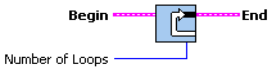
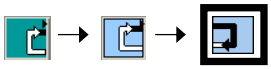
II. Modifiers:

Icon	Path to the Icon	Description & Defaults
		String this modifier to a command to select input port 1.
		String this modifier to a command to select input port 2.
		String this modifier to a command to select input port 3.
		String this modifier to a command to select output port A. To select more than one output port, string additional modifiers into the bottom of this icon.
		String this modifier to a command to select output port B. To select more than one output port, string additional modifiers into the bottom of this icon.
		String this modifier to a command to select output port C. To select more than one output port, string additional modifiers into the bottom of this icon.
		String this modifier onto a motor icon to set the power level to 1.
		String this modifier onto a motor icon to set the power level to 2.
		String this modifier onto a motor icon to set the power level to 3.

*Note the Icons and Descriptions are from RoboLab Help.

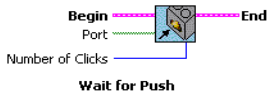
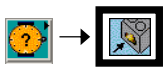
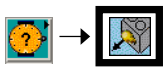
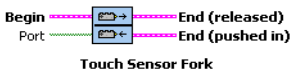
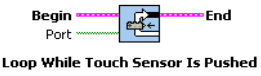
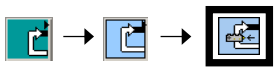
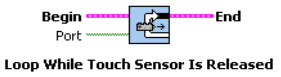
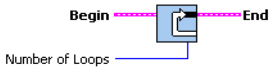
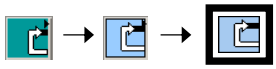
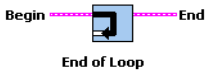
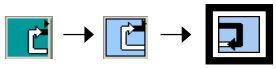
Icon	Path to the Icon	Description & Defaults
 **Power Level 4**		String this modifier onto a motor icon to set the power level to 4.
 **Power Level 5**		String this modifier onto a motor icon to set the power level to 5.
 **Constant**		Numerical constant

III. Light Sensor:

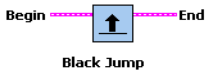
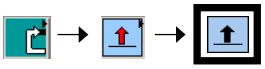
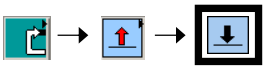
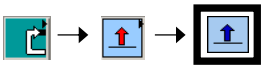
Icon	Path to the Icon	Description & Defaults
 **Wait for Dark**		Wait until the Light Sensor reads a value that is darker than the number specified. The default is for the Light Sensor on port 1 to wait until it reads a value that is less than 55.
 **Wait for Light**		Wait until the Light Sensor reads a value that is darker than the number specified. The default is for the Light Sensor on port 1 to wait until it reads a value that is less than 55.
 **Light Sensor Fork**		Choose a path depending on whether the value of the Light Sensor is greater-than or less-than a specified number. The default is to compare the value of the Light Sensor to 55
 **Fork Merge**		Merge the 2 strings of a Fork back together. All Forks need a Merge, so that there will always be an equal number of Merges as there are forks.
 **Loop While Light Sensor Is Greater Than**		Start a loop that repeats while the value of the Light Sensor is greater than a specified number. The default is to repeat the loop while the value of the Light Sensor on Port 1 is greater than 55.
 **Loop While Light Sensor is Less Than**		Start a loop that repeats while the value of the Light Sensor is less than a specified number. The default is to repeat the loop while the value of the Light Sensor on Port 1 is less than 55.
 **Start of Loop**		Start a loop. The default is to loop twice.
 **End of Loop**		Jump back to the start of loop command. The start of loop command is required earlier in the program.

*Note the Icons and Descriptions are from RoboLab Help.

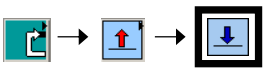
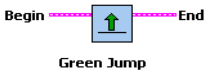
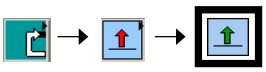
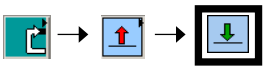
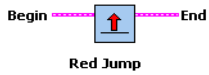
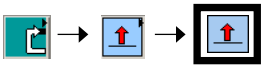
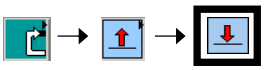
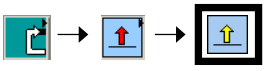
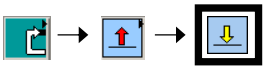
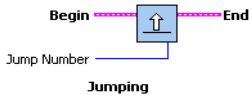
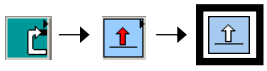
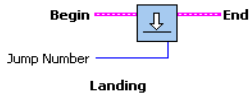
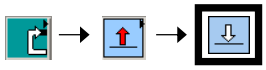
IV. Touch Sensor:

Icon	Path to the Icon	Description & Defaults
		Wait until the Touch Sensor is pushed in. The default is to check Port 1.
		Wait until the Touch Sensor is released. The default is to check Port 1.
		Have the program choose between one of two paths depending on the state of the touch sensor. If the touch sensor is pushed in, the program will follow the bottom string. If the touch sensor is released, the program will follow the top string. The default is on Port 1.
		Merge the 2 strings of a Fork back together. All Forks need a Merge, so that there will always be an equal number of Merges as there are forks.
		Start a loop that repeats while the Touch Sensor is pushed. The default is to repeat the loop while the Touch Sensor on Port 1 is pushed.
		Start a loop that repeats while the Touch Sensor is released. The default is to repeat the loop while the Touch Sensor on Port 1 is released.
		Start a loop. The default is to loop twice.
		Jump back to the start of loop command. The start of loop command is required earlier in the program.

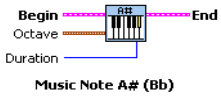
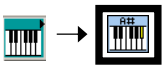
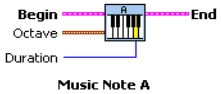
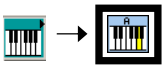
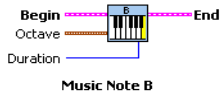
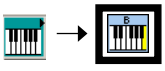
V. Jumps:

Icon	Path to the Icon	Description & Defaults
		Makes the program jump to a specific place, indicated by a Black Land.
		This command is where the program will jump to when the Black Jump is used.
		Makes the program jump to a specific place, indicated by a Blue Land.

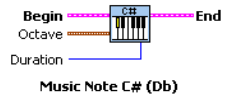
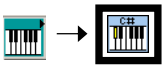
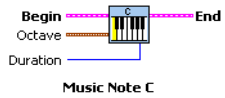
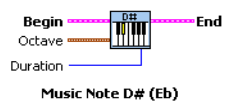
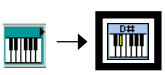
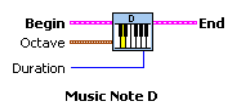
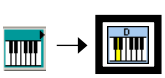
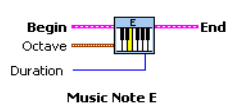
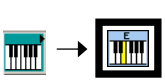
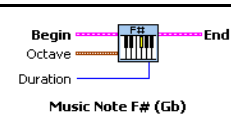
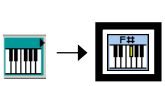
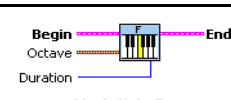
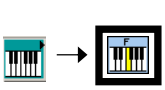
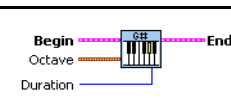
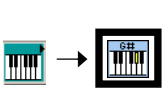
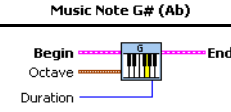
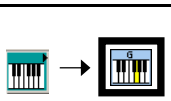
*Note the Icons and Descriptions are from RoboLab Help.

Icon	Path to the Icon	Description & Defaults
		This command is where the program will jump to when the Blue Jump is used.
		Makes the program jump to a specific place, indicated by a Green Land.
		This command is where the program will jump to when the Green Jump is used.
		Makes the program jump to a specific place, indicated by a Red Land.
		This command is where the program will jump to when the Red Jump is used.
		Makes the program jump to a specific place, indicated by a Yellow Land.
		This command is where the program will jump to when the Yellow Jump is used.
		Make the program jump to a specific place in string. The default jump number is 1.
		This command is where the program will jump to when the Jumping command is used.

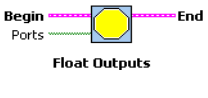
VI. Music:

Icon	Path to the Icon	Description & Defaults
		Play the musical note 'A' The default is a quarter note in the standard scale.
		Play the musical note 'A#' The default is a quarter note in the standard scale.
		Play the musical note 'B' The default is a quarter note in the standard scale.

*Note the Icons and Descriptions are from RoboLab Help.

Icon	Path to the Icon	Description & Defaults
		Play the musical note 'C#' The default is a quarter note in the standard scale.
		Play the musical note 'C' The default is a quarter note in the standard scale.
		Play the musical note 'D#' The default is a quarter note in the standard scale.
		Play the musical note 'D' The default is a quarter note in the standard scale.
		Play the musical note 'E' The default is a quarter note in the standard scale.
		Play the musical note 'F#' The default is a quarter note in the standard scale.
		Play the musical note 'F' The default is a quarter note in the standard scale.
		Play the musical note 'G#' The default is a quarter note in the standard scale.
		Play the musical note 'G' The default is a quarter note in the standard scale.

VII. Miscellaneous:

Icon	Path to the Icon	Description & Defaults
		Play one of six different beeping sounds. The Default sound (6) is a fast increasing sweeping sound.
		Float motors. The default is to Float all motors. This command will stop powering the outputs so they will stop gradually.

*Note the Icons and Descriptions are from RoboLab Help.