

## Beckman ORCA NT



Manufacturer: Beckman Coulter, Inc.  
 Model Number: Beckman-Orca-NT  
 Web Address: [www.beckmancoulter.com](http://www.beckmancoulter.com)

Compact, yet robust, the ORCA robotic arm brings dependable robotic automation to the laboratory with precision and flexibility. ORCA (Optimized Robot for Chemical Analysis) works reliably with common labware and instrumentation in a space-efficient, time-saving and safe manner.

### Robotic Arm: Commands

▶ **GetFirmwareVersion( )** - Retrieve the firmware version on the controller.

▶ **GetSide( )** - Retrieve the side on which the robot resides.

▶ **GetRail( )** - Retrieve the current value of the robot rail axis.

▶ **GetReach( )** - Retrieve the current value of the robot reach axis.

▶ **GetHeight( )** - Retrieve the current value of the robot height axis.

▶ **GetBend( )** - Retrieve the current value of the robot bend axis.

▶ **GetTwist( )** - Retrieve the current value of the robot twist axis.

▶ **GetGrip( )** - Retrieve the current value of the robot grip axis.

▶ **SetGrip( grip )** - Set the current value of the robot grip axis.

grip	Float	Grip axis of the robot.
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▶ **ClearError( )** - Clears the error status of the robot controller.

▶ **CmdInitialize( side )** - Initialize the robotic arm.

side	String	Side of the robotic arm to be initialized ('A' or 'B').
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▶ **SetSpeed( speed )** - Set the current speed for the robotic arm movements.

speed	Float	Speed of the robotic arm movements. Range of values: 1 to 100.
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▶ **SetTorque( torque )** - Set the current torque for the robotic arm movements.

torque	Float	Torque for the robotic arm movements. Range of values: 1 to 100.
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▶ **SetForce( force )** - Set the current force for the robotic arm movements.

force	Float	Force for the robotic arm movements. Range of values: 1 to 100.
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▶ **RelRail( distance )** - Move the rail axis of the robot by the specified distance (in centimeters) from the current position.

distance	Float	Distance for the robotic arm move in centimeters.
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▶ **RelReach( distance )** - Move the reach axis of the robot by the specified distance (in centimeters) from the current position.

distance	Float	Distance for the robotic arm move in centimeters.
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▶ **RelHeight( distance )** - Move the height axis of the robot by the specified distance (in centimeters) from the current position.

distance	Float	Distance for the robotic arm move in centimeters.
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▶ **RelBend( degrees )** - Move the bend axis of the robot by the specified degrees from the current position.

degrees	Float	Degrees for the robotic arm move.
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▶ **RelTwist( degrees )** - Move the twist axis of the robot by the specified degrees from the current position.

degrees	Float	Degrees for the robotic arm move.
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▶ **RelGrip( distance )** - Move the grip axis of the robot by the specified distance (in centimeters) from the current position.

distance	Float	Distance for the robotic arm move in centimeters.
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▶ **SetFlipAngle( angle )** - Set the angle for the flip command.

angle	Float	Angle for the flip command.
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▶ **Flip( angle, wristMode, speed )** - Executes a flip of the robotic arm from one side of the rail to the other.

angle	Float	Angle for the flip command.
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wristMode	Integer	Wrist mode. 0 - wrist locked, 1 - wrist free. Range of values: 0 to 1.
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speed	Float	Speed for the flip command. Range of values: 1 to 100.
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▶ **MoveTo( rail, reach, height, bend, twist, grip )** - Moves the robot to the position indicated by the provided parameters.

rail	Float	Rail axis of the robot.
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reach	Float	Reach axis of the robot.
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height	Float	Height axis of the robot.
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bend	Float	Bend axis of the robot.
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twist	Float	Twist axis of the robot.
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grip	Float	Grip axis of the robot.
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## Robotic Arm: Errors

🔥 **Error( number, message )** - Error occurred during command execution.

number	Integer	Error number.
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message	String	Error message.
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