ServoMaster: Observations on USB PhidgetAdvancedServo

Table of contents

1. Summary

This is the most advanced servo controller I was able to get a hold of so far.

Removable Device
Individual Servo min/max preset
Silent Operation
Hardware controlled constant velocity transition, per servo
Hardware controlled constant acceleration transition, per servo

Table 1: Supported Features

2. Release Notes

The driver for this device is available since release 0.4p2.

This driver will not support the serial interface: it is too slow, and the serial port estate is **really** expensive. The user is encouraged to use the USB connection instead.

3. Good Things

- The number of servos supported now is 8;
- Servo velocity can be controlled;
- Servo acceleration can be controlled;
- Servo position feedback is available from the controller;
- Communication interface has changed from `control_msg` to `bulk write` - less overhead;
- The device is now bootable - if there's a problem with the firmware, you don't have to order a new one, just get the fresh firmware and reboot it;
- Dual (USB/Serial) interface.

4. Bad Things

None left.

5. Conclusion

It was worth the wait.

6. Aftermath

Apparently, this prototype never made it to production. Too bad, because I'm yet to see another controller that sports functionality and stability this prototype has.

Even though this controller can't be bought, I know that there's a number of people that have the prototype, so the driver will stay published.