

## **Gobotics 32 Channel Servo Controller Protocol Document (Rev. A1)**

### **32 Channel Servo Controller Protocol-I**

#### **Protocol Data Values:**

The Gobotics 32 Channel Servo Controller protocol is designated as “#XPXXXX” where “X” stands for any digit between 0-9.

#### **COMMAND 1**

The first call of the protocol is a “#” sign, to initiate a command to a new servo number.

**#**

#### **COMMAND 2**

The number, or numbers, following the “#” designate which servo port to control, starting with 0 and ending with 31 to make up the 32 servos.

*For servos ports requiring only one digit, the format “#X” MAY BE USED. For servos requiring more than one digit, starting with 10, the format “#XX” may be used. Do not place a “0” before servo ports with only ONE digit.*

**#X or #XX**

#### **COMMAND 3**

The “P” represents the call for “position”.

**#XP or #XPP**

#### **COMMAND 4**

The numbers following the “P” designate the position to which the servo should move in the form of “XXXX”.

*All four of the digits in this call must be used. Entering a value of zero is acceptable.*

**#XPXXXX or #XPPXXXX**

#### **EXAMPLES**

- 1) *To move the servo at position 1 on the Controller Board to position 2300*
  - a. *#0P2300*
- 2) *To move the servo at position 15 on the Controller board to position 2300*
  - a. *#14P2300*
- 3) *To move the servo at position 32 on the Controller Board to position 1955*
  - a. *#31P1955*

**Strings of commands can be given to control more than one servo at a time**

- 4) *To send the Controller board the commands of examples 1, 2, and 3 at the same time*
  - a. *#0P2300#14P2300#31P1955*

The range of positions for a Gobotics robotbase servo is 0000-9999, all other branded servos may have different position ranges.