

Robix™ Script Language Quick Reference 2004-08-01 for Usbor (USB-connected) Systems

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Notation used below: **Script Element(s)**, **<Script Element(s) Needed>**

Scripts are case-insensitive, so **MOVE**, **move**, and **mOvE** all have the same meaning.

<servo list> or **<digout list>** represents a list such as **1** or **2,4,5** or **ALL**.

Servo, **digout numbering** starts with **1** (not 0).

Vertical bar ‘|’ means ‘or’, so **on|off** means use **on** or **off**.

<val> means an integer value is needed.

<posval> means an integer position is needed: **<val> |minpos |maxpos |initpos (xxx) . . .** means **xxx** is needed one or more times, separated by ‘,’s.

Multiple commands on a single line need ; separators. End-of-line ; is optional.

means that the rest of the line is a comment.

Scripts can be created interactively and then run from the robot console program or from **Java, C++, VB** for more complex, sensor-based programs. See **Reference** at www.robix.com

Move commands move servos with coordinated motion:

```
move|jump (<servo list> to <posval> | by <val>)...
# e.g. move 1,2,3 to 0; jump 4 to initpos
# e.g. move 3,4 to -300, 1 to maxpos, 5 by -250
```

AccDec, Accel, Decel, Maxspd, commands set servo values:

```
accdec | accel | decel | maxspd <servo list> <val>
# e.g. accdec all 20
# e.g. maxspd 1,2,3 80
```

Position commands set servo values, auto-saved on close.

```
invert <servo list> on|off # Set servo direction
maxpos|minpos <servo list> <val>|default
initpos|p0pos <servo list> <val>|default
```

Remember: Servos go to last **initpos** at startup. **Very useful!**

Other Commands:

```
digout <digout list> on|off # digital outputs.
wait <val> # Approx .1 sec units.
power <servo list> on|off|1..100 # servo duty cycle: percent
```

Macro - Defining:

```
macro <macro name> # Starts definition.
<command>; <command>; <command> # Can include <command>'s,
<other macro name>; <command> # other macros.
end # Completes definition.
```

Macro - Calling, with repeat count specifier:

```
<macro name> <nothing>|<val>|0 # Do 1|<val>|inf time(s).
```

Basic Rotational Joints

