

Adept Limits:

Max force = 178N

Max speed = 9.15 m/s

Max payload = 9kg

Start up:

Turn on power from below. Make sure fan is on.

Type "en po" to enable power. Type "ca" to calibrate.

During operation:

Ctrl + S = stop

Ctrl + Q = continue

Ctrl + C = break

Ctrl + U = cancel current input line

Writing commands: (every command can be typed in lowercase)

To type instructions into a text file: type MC or continuing reading **Text editor**

To execute commands from terminal: type DO

Text editor:

LOAD [insert directory name]

--> to open a directory of files

SEE [insert filename]

--> open a text file to edit

press Insert Key

--> to edit code

press F4

--> exit (saves program only to memory)

STORE [insert directory name]

--> saves the program on the disk

Function in text editor: (Let me know if you figure out how to copy and paste...)

Shift key accesses the yellow commands

Ctrl + Delete

--> deletes the current line

COPY

--> copy current line

CUT

--> cut current line

PASTE

--> paste current line

Parameters and Switches:

I thought these won't be as necessary, so I didn't include them. If necessary, I can include them in a few minutes.

Useful Switches:

TRACE

--> program step displays before execution

DRY.RUN

--> for testing program without robot motion

Motion Instructions:

Two types of motion. Joint motion (tell joints to move), translation (Cartesian coordinates to move)
Measured in degrees and millimeters (mm)

	ENABLE CP	--> makes motions continuous between points. "disable cp" stops cp
Move:	MOVE loc DRIVE joint, degree, speed APPRO loc, distance DEPART distance	--> moves the robot to a location --> moves a single joint --> moves to a position given a distance from a location --> moves vertically away from current location
Speed:	SPEED percentage SPEED percentage [ALWAYS] ACCEL acc, decc	--> sets speed as a percentage of max speed --> sets speed again. "ALWAYS" applies speed to following code --> sets acceleration, deceleration as percentage of max
Time:	DELAY seconds PAUSE BREAK DURATION seconds	--> delays motion for "seconds" --> stops till user types "proceed" --> delays motion till current motion finishes --> sets time for subsequent motion to take

Location / Transformformation

WHERE	--> displays location of robot (can be typed in console)
HERE variable_name	--> assigns the current location to variable_name
POINT loc_var	--> assigns a location expression to loc_var. (Eg: loc_var = loc_exp)
SET loc_var = loc_exp	--> assigns a location expression to a location variable
TRANS(x, y, z, n, p, r) (FUNCTION)	--> translate to defined location
INRANGE (loc)	--> determines if loc is within workspace

Program Execution

EXECUTE [insert filename]	--> runs program
ENABLE/DISABLE TRACE	--> displays code being run
ABORT	--> stops program. Type "proceed" to continue

Programming Features

; --> to add comments to code

Logical/relational operators: <, >, <=, =<, ==, >=, =>, <>, AND, NOT, OR, XOR

conditional execution: IF logical_exp THEN [ELSE] END

iteration: FOR var = start TO final [STEP inc] END

WHILE logical_exp DO END

DO UNTIL logical_exp