McLua Work Offsets and Parameters:

Reference: B-63944EN_02.pdf Chapter 16 (Fanuc 31i manual) Thanks to Tom Lamontagne for the reference manual and how It is used in Mach4.

local FixOffset = mc.mcCntlGetPoundVar(inst, 4014)

--Get current fixture offset number

This Parameter as of Mach4 version "2472" returns a decimal number instead of an integer number. So, to make the return value usuable multiple by 10.

G54 = .1 G55 = .2 G56 = .3 G57 = .4 G58 = .5 G59 = .6 G54.1 P1 = .7 - .654.1 P1 - P120 if using the extended range G54.1 P2 = .8and so on multiply by 10 to make it: 1, 2, 3, 4 etc.

Fixture offsets, G54, 55, 56 etc. have a Gap of 20 between them. fixture offset values start with G54 at #5221 G54 X = #5221 G54 Y = #5222 G54 Z = #5223 G54 A = #5224 G54 B = #5225 G54 C = #5226 --20 point gap between G54 and G55, i.e. 522x to 524x G55 X = #5241 G55 Y = #5242 G55 Z = #5243 G55 A = #5244 G55 B = #5245 G55 C = #5246

Fixture offsets, G54.1 P1, G54.1 P2, G54.1 P3 etc. have a Gap of 20 between 6 axis groups. fixture offset values start with G54.1 P1 starts at #7001

G54.1 P1 X = #7001 G54.1 P1 Y = #7002 G54.1 P1 Z = #7003 G54.1 P1 A = #7004 G54.1 P1 B = #7005 G54.1 P1 C = #7006 --20 point gap between G54.1 P1-6 and G54.1 P7-12 G54.1 P2 X = #7021 G54.1 P2 X = #7022 G54.1 P2 Z = #7023 G54.1 P2 A = #7024 G54.1 P2 B = #7025 G54.1 P2 C = #7026

So, in the extended range, you can have 120 more groups of 6 axis fixture offsets.

Enjoy, Scott Shafer