

A simple look at how cam tables are organized

The cam table is a list of master and follower positions. The first point in the table is the number of data pairs (master/follower points) that are stored in the table. The second and all subsequent points in the table are the data pairs that define the follower position based on the master position. The cam table layout and graphical view are shown below. This table shows master positions that are evenly spaced, but the distance between master points can vary. Usually the value is smaller when there is more curving in the cam profile.

MW+ Table Syntax	Value	Description	MP940 Address
CamTable[0]	9	Number of Master/Follower Pairs	ML20640
CamTable[1]	0	First master position	ML20642
CamTable[2]	0	First follower position	ML20644
CamTable[3]	100	Second master position	ML20646
CamTable[4]	100	Second follower position	ML20648
CamTable[5]	200	Third master position	ML20650
CamTable[6]	350	Third follower position	ML20652
CamTable[7]	300	Fourth master position	ML20654
CamTable[8]	475	Fourth follower position	ML20656
CamTable[9]	400	Fifth master position	ML20658
CamTable[10]	525	Fifth follower position	ML20660
CamTable[11]	500	Sixth master position	ML20662
CamTable[12]	475	Sixth follower position	ML20664
CamTable[13]	600	Seventh master position	ML20666
CamTable[14]	350	Seventh follower position	ML20668
CamTable[15]	700	Eighth master position	ML20670
CamTable[16]	100	Eighth follower position	ML20672
CamTable[17]	800	Ninth master position	ML20674
CamTable[18]	0	Ninth follower position	ML20676

The cam cycle will be linear between two adjacent points, as you can see in the graph. To achieve a smoother motion, simply use more points in defining the curve. For a long linear section, simply include the start and end points and all of the intermediate points will be along the same line.

