Options for Input Mode in MIMS

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About Input Mode

Input Mode allows points to be specified based on either a relative or absolute location. Relative locations are measured from another point. The most commonly used absolute locations are given by latitude and longitude.

This information is typed in as opposed to points that are input by clicking at a location on the map with the mouse.

Using Input Mode

F7 will bring up the Input Mode window where input can be typed in.
Once the input is typed in, <Enter> will show where that point will go.
<Corner> will put an actual corner point at that location.
Hitting F7 a second time will exit out of Input Mode and allow other commands to be used again.

Note: Function keys are customizable in MIMS. Check your MIMS Text Window to see what key corresponds to the <Corner> command.

Relative Locations

Relative locations are points that are defined with a direction and distance from another point. Most points in legal descriptions are relative locations. *"…Thence south 34 degrees 14 minutes 23 seconds east 340.23 feet…"*

Formats

The formats for entering relative locations are as follows:

{N/S} (angle) {E/W} (distance) { /M/F/R/C/V}
(angle) {N/S} (distance) { /M/F/R/C/V}
{N/S/E/W} (distance) { /M/F/R/C/V}
(angle) {R/L} (distance) { /M/F/C/V}

where (angle) is in degrees, degrees & minutes, or degrees & minutes & seconds and (distance) is in international feet, meters, rods (16.5'), chains (66'), or veras (2.777777'). The default is feet if none are specified.

In the second form, the angle is interpreted as an azimuth, with a value 0 - 360 degrees clockwise from North (usual azimuths) or South (geodetic azimuths).

In the last form listed, the angle is interpreted as a deflection angle to the right or left of the previous line segment. It cannot be used with a distance in rods.

Examples:
N23 34 15E 1434.4F
90R 250 F   Will go 250 feet at a 90 degree angle to the right from the last line segment.
0R 10 F   Will go 10 feet at a zero degree angle from the last line. (In essence, this says to continue going in the same direction as the previous segment and allows you to extent a line. *0L 10F* would do the same thing.)

Grid Bearings

Some legal descriptions specify that the legal description uses grid bearings. *"All bearings are based on the Oklahoma State Plane Coordinate system and are not astronomical bearings."*

Grid bearings can be specified in Input Mode by adding a G to the bearing.

Example: *N23 34 13E G 123.22 F*

Distances Along or Parallel to Section Lines

If you have a land grid layer, you may specify that a line goes northerly, southerly, easterly, or westerly along or parallel to a section (or quarter section) line. MIMS will supply the bearing of the line you choose; you do not need to measure the bearing or type it in.

On the "input point" line, enter:

{N/S/E/W} (dist) {F/M/R/C/V} {A/PE/PW/PN/PS/PC/PT}

The first letter is the general direction of the line, then comes the distance in either feet, meters, rods, chains, or veras. The last entry has the following meaning:

A means to go "along" the section (or quarter section) line at from that point. To work, there must actually be a line on the land grid layer which heads in the direction specified. (If not, use one of the parallel choices.) If the location is within two feet (0.6 meters) of a grid line, MIMS will snap to that line and then go along it.

PE, PW, PN, PS specify that the line should be parallel to the east, west, north, or south line of the quarter section. (Grid layers are usually quarter sections, however, some users may have full sections or sixteenth sections instead.) PE and PW can be used only if the line goes northerly or southerly; PS and PN are for easterly or westerly lines. The line should be interior to a quarter section, if it is along the edge, use "A" as described above.

PC stands for "Parallel to the Center line." This is used the same as the parallel choices above, but will go parallel to the 40-acre line in the middle of the quarter section. (Or parallel to the quarter line if you have a grid based on sections.)

PT stands for "Parallel to the tick marks." This is used to go along the aliquot part divisions smaller than 40 acres. For example, use PT to go along a 10-acre or 5-acre line.

Examples:
N 100F   will go 100 feet due north.
N 100F A   will go northerly along a section line.
N 100F PE   will go northerly parallel to the east line of the quarter section.

Absolute Locations

Absolute locations include points that are input with latitude and longitude or with State Plane Coordinates.

Latitude and Longitude

The latitude-longitude format is:

(long) {E/W} (lat) {N/S}
or   (lat) {N/S} (long) {E/W}

where: {N/S} or {E/W} means to select one letter, upper or lower case; these four components may be separated by spaces; (long) and (lat) are in degrees, minutes, and seconds in one of these formats:

DDD.dddddddd
DDD MM.mmmmmm
DDD MM SS.ssss

and: any number of digits can follow the decimal point;

the separators between degrees, minutes, and seconds can be spaces, commas or any special character except ^ or =.

Example: *34 31 22.234N 97 42 12.335W*

X-Y Coordinates (State Plane Coordinates)

The coordinates can be in meters or (US survey) feet; their format is:

MMMMMMM.mmm X MMMMMMM.mmm Y { /M/F}
or   MMMMMMM.mmm Y MMMMMMM.mmm X { /M/F}

The default is meters if neither {M/F} is entered.