

## CADD Manual

### MicroStation and InRoads Key-Ins

**Did you know** that the new CADD Manual contains two reference documents that may be of particular use to those that use Key-Ins? These documents attached below are called [MicroStation Key-in Reference](#) and [InRoads Key-in Reference](#). They can also be found in the [CDOT CADD Design Manual](#) under Chapter Six, Drafting Guidelines, 6.6 Key-Ins.



## MICROSTATION KEYIN REFERENCE

This document provides a MicroStation alternate keyins.  
These keyins can be typed into the Key-in Browser individually or strung together by a semicolon.



### Angle

**AA**= Sets the active angle

### Auxiliary Coordinate Systems

**AD**= Places relative data points  
**AX**= Places absolute data points  
**PX**= Deletes an ACS  
**RX**= Attaches an ACS  
**SX**= Saves the current ACS

### Cells

**AC**= Sets the Active Cell and activates the Place Cell tool  
**AP**= Sets the active pattern cell  
**AR**= Sets the Active Cell, and activates Place Cell Relative  
**CC**= Create Cell from fence or selection set  
**CD**= Delete Cell from attached cell library  
**CM**= Creates an array of cells  
**CR**= Rename a cell in the attached cell library  
**LT**= Sets the active line terminator cell  
**PT**= Sets the active point used with the Place Point command.  
**RC**= Attaches a cell library

### Color

**CT**= Attaches a color table

### Dimensioning

**LD**= Sets the level for dimension data  
**TV**= Sets the dimensioning tolerance limits

### Element Symbology

**CO**= Sets the active color  
**LC**= Sets the active line style  
**WT**= Sets the active line weight

### Files

**EL**= Creates an element list file  
**FF**= Copy the contents of a fence to a new or existing file  
**RD**= Open another design file  
**RF**= Attach a reference file  
**SF**= Move the contents of a fence to a new or existing file  
**XD**= Exchanges the active file with a reference file

### Grid

**GR**= Sets the active grid reference spacing  
**GU**= Sets the distance of the grid dots in working units  
**UR**= Sets the unit round off

### Line Terminators

**LT**= Sets the active line terminator cell  
**TS**= Sets the scale factor for the active terminator

### Levels

**LV**= Sets the active level  
**OF**= Turns levels off  
**ON**= Turns levels on

### Patterns

**AP**= Sets the active pattern cell  
**PA**= Sets the pattern angle for pattern cells  
**PD**= Sets the spacing between patterns  
**PS**= Sets the active pattern scale

### Precision Input

**DI**= Places a data point at a given distance and direction  
**DL**= Places a data point at a given X, Y and Z distance along the design axes  
**DX**= Places a data point at a given X, Y and Z distances along the view axes  
**XY**= Places a data point using absolute coordinates

**Scale**

**AS=** Sets the active scale  
**XS=** Sets the active X Scale  
**YS=** Sets the active Y Scale  
**ZS=** Sets the active Z Scale

**Stream digitizing**

**SD=** Sets the stream delta  
**ST=** Sets the stream tolerance

**Text**

**DF=** Opens the Fonts dialog box  
**DR=** Displays a text file  
**FT=** Sets the active font  
**LL=** Sets the maximum line length for text  
**LS=** Sets the lines spacing for multiple lines of text  
**NN=** Sets the active text node number  
**TB=** Sets the tab spacing when importing text  
**TH=** Sets the text height  
**TI=** Sets the copy and increment value  
**TW=** Sets the Text Width  
**TX=** Sets both the height and width of the text

**View Control**

**DV=** Deletes a named or saved view  
**RV=** Rotates a view  
**SV=** Save a view  
**VI=** Attaches a saved view  
**WO=** Sets the window origin

**View Control – 3D**

**AZ=** Sets the active depth - absolute  
**DD=** Changes the display depth - relative  
**DP=** Sets the display depth - absolute  
**DZ=** Sets a new active depth - relative

**Miscellaneous**

**KY=** Sets the keypoint snap divisor

## INROADS KEY-IN REFERENCE

This document provides the InRoads key-ins that can be used with the MicroStation key-in browser.



### Station key-in formats

When using alignment station values conventionally there is a plus sign “+” between the second and third digits. InRoads will allow you to input the station with or without the plus sign in the MicroStation Key-in Browser and InRoads dialogs.

- 15+15.25
- 1515.25

### Slope key-in formats

When entering slope or grade information in InRoads dialogs and the MicroStation Key-in Browser you can use the below formats.

To key-in a grade of 10 percent:

- 10%
- 1:10
- .10

### Angle key-in formats

When entering angles in InRoads dialogs and the MicroStation Key-in Browser you can use the below formats.

To key-in a bearing of N12°34'56"E:

- N12^34'56"E
- N12.5822E

### Plan View key-ins

#### **Northing Easting Elevation (NE=)**

NE=northing,easting,[elevation]

NE= 2842525.75,1558050.78,11530.47

#### **Station Offset Elevation (SO=)**

SO=station,offset,[elevation],[alignment name],[project name]

SO=1500,-25,0,siderd01,geometry01

#### **Distance Direction (DI=)**

DI=distance,direction

DI=100,n45e

**Cross Section and Profile key-ins**

Delta Offset (DO=)  
DO=delta,offset  
DO=50,-10

Distance Grade (DG=)  
DG=distance,grade  
DG=200,50%

**Cross Section key-ins**

Offset Elevation (OE=)  
OE=offset,elevation  
OE=50,11430

**Profile key-ins**

Station Elevation (SE=)  
SE=station,elevation  
SE=19+50,11430