

# AD - Attribute Definition

Parameter	Possible Values	Default Value	Applicable Statements
AD	see below	see below	CALLNAT DISPLAY FORMAT INPUT PERFORM PRINT REINPUT WRITE

With this parameter, you can specify field attributes at field or statement level.

You can specify multiple attributes in any sequence:

$AD = \begin{matrix} \mathbf{B} \\ \mathbf{C} \\ \mathbf{D} \\ \mathbf{I} \\ \mathbf{N} \\ \mathbf{U} \\ \mathbf{V} \\ \mathbf{Y} \end{matrix} \begin{matrix} \mathbf{L} \\ \mathbf{R} \\ \mathbf{Z} \end{matrix} \begin{matrix} \mathbf{A} \\ \mathbf{M} \\ \mathbf{O} \\ \mathbf{P} \end{matrix} \begin{matrix} \mathbf{E} \\ \mathbf{F} \end{matrix} \begin{matrix} \mathbf{G} \\ \mathbf{H} \end{matrix} \begin{matrix} \mathbf{T} \\ \mathbf{W} \end{matrix} [c]$
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The meaning of each value is explained on the following pages.

Default values are underlined.

For the alignment of field values (2nd column of values in above syntax), the default value is **L** - for alphanumeric fields, and **R** - for numeric fields.

## Examples:

```
DISPLAY #FIELD A (AD=R)
INPUT #FIELD B (AD=M)
INPUT (AD=IM) #FIELD A #FIELD B
```

## Field Representation

Value	Meaning	Statements	Explanation
<b>B</b>	blinking (*)	all	The value of the field is displayed blinking.
<b>C</b>	cursive/italic (*)	all	The value of the field is displayed cursive/italic.
<b>D</b>	default intensity	all	The value of the field is displayed with normal intensity, that is, not highlighted in any way.
<b>I</b>	intensified	all	The value of the field is displayed intensified.
<b>N</b>	non-display	all	A value entered in the field will not be displayed.
<b>U</b>	underlined	all	The value of the field is displayed underlined.
<b>V</b>	reverse video (*)	all	The value of the field is displayed reverse video.
<b>Y</b>	dynamic attributes	INPUT DISPLAY WRITE	Attributes are to be controlled via a control variable (format C).

\* The field representation attributes marked with an asterisk (\*) require corresponding hardware features, and will be ignored at runtime if these features are not available.

## Field Alignment

Value	Meaning	Statements	Explanation
<b>L</b>	left-justified	all	The value of the field is displayed left-justified.
<b>R</b>	right-justified	all	The value of the field is displayed right-justified.
<b>Z</b>	leading zeros	all	Numeric values are displayed with leading zeros, right-justified.

## Field Input/Output Characteristics

Value	Meaning	Statements	Explanation
<b>A</b>	input field, non-protected	INPUT	The value of the field is to be entered in response to the INPUT statement.
<b>M</b>	output field, modifiable	INPUT CALLNAT	The value of the field is to be displayed during INPUT statement execution, and a different value may be entered by the user. The field is an output field and may be modified.
<b>O</b>	output field, write-protected	INPUT CALLNAT	The value of the field is to be displayed during INPUT execution. The field is an output field and may not be modified.
<b>P</b>	temporarily protected	INPUT REINPUT	Used in conjunction with control variable (format C), the DY parameter, and the REINPUT statement.

## Mandatory Input

Value	Meaning	Statements	Explanation
<b>E</b>	value mandatory	INPUT	A value must be entered in the field in response to an INPUT statement; otherwise an error message will be issued. This is only relevant for input-only fields (AD=A).
<b>F</b>	value optional	INPUT	A value can, but need not, be entered in the field in response to an INPUT statement.

## Length of Input Value

Value	Meaning	Statements	Explanation
G	value size	INPUT	The value entered in the field in response to an INPUT statement must be of the same length as the field. This is only relevant for input-only fields (AD=A).
H	value size	INPUT	The value entered in the field in response to an INPUT statement may be shorter than the field.

## Field Upper/Lower Case Characteristics

Value	Meaning	Statements	Explanation
T	translate lower to upper case	INPUT	The value entered is to be translated to upper case.
W	accept lower case	INPUT	Lower case values are to be accepted.

## Filler Character

Value	Meaning	Statements	Explanation
'c'	filler character	INPUT	The empty field is to be filled with the specified character c (for display only) if AD=A or AD=M is specified.

### Note for mainframe computers:

If the filler character is set to blank (X'40'), filling blanks are replaced by X'00' to allow for insertion of characters without having to clear the remainder of the input field before. In BS2000 environments, X'00' characters are displayed as dots on 97xx type terminals. Their appearance can be changed by means of the SIDA utility or with the configuration utility of the respective terminal emulation.

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