

String Syntax

1 Basic Rules

String entries are made up of printable characters.

Decimal and hexadecimal numbers have the same value ranges. The difference between the numbers lies in how they are written.

If an element separator within the command sequence is illegal, the whole string is considered invalid and ignored. This could happen if a comma is left out, if two commas are written next to each other, if only a space is used to separate two commas etc. See the section "Examples" below.

Strings are written within quotes, e.g. "This is a string". Only printable characters are allowed within the quotes. Printable characters are found within the decimal range 32 - 126 or hexadecimal /20 - /7E. All other characters are considered non-printable and are written as either decimal or hexadecimal numbers.

A pair of double quotes "" cannot be written as a normal string, i.e. within quotes. They have to be written with their decimal or hexadecimal number, i.e. '34,34' or '/22,/22'.

Decimal numbers are written without any special indicators, e.g. write 65 as 65. The decimal range is 0 - 255.

Hexadecimal numbers are preceded by a slash, e.g. /1B. The hexadecimal range is /00 - /FF.

The document on the US ASCII 7-bit Character Set (Decimal Values 32-126) shows all printable characters and their decimal and hexadecimal values.

2 Examples

A. Valid strings

```
"abc" , 65  
"abc" , /41  
"abc" , 65 , /41  
"abc" , "def"  
"abcdef"  
"abc" , 65 , 66 , 32 , /1B , /1B , "def"  
65 , /41  
/41 , 65  
/41 , /1B , "a"  
/41 , /1b , "a"  
"/1B , 65 , abc , def , 127"  
/1B , 34 , /65  
27 , 65
```

B. Invalid strings

```
abc , 65  
- quotes are missing around "abc"  
/41 , abc
```

- quotes are missing around "abc"

/41abc

- a comma is left out and quotes are missing.

65, "abc" /1B

- a comma is left out

"abcdef" , /1B, 65, "ahg

- end-quote is missing.

"abc, /1B, 65

- whole string is considered a string, but the end-quote is missing.

1B, 65

- slash before hexadecimal number is missing.

65, 66, ab"

- start-quote is missing.