# List of new commands for the script language that were added for the JET3up

The commands are only depicted as extracts. There are only parts described which were added especially for the JET3up. There are no changes for the interface protocol.

***JLPAR parameter list (Job list parameter)***

**Syntax: JLPAR [Parameter list]**

The system parameters occur only once in the Script.

The parameter list contains the following parameters in this order:

|  |  |  |
| --- | --- | --- |
|  | Values margin | Unit |
| 1 | Print Height Y | 0 ... 100 |  |
| 2 | PrintGo-signal | 0 - 2 |  |
| 3 | PrintGo-Gate | 0 - 2 |  |
| 4 | Encoder-signal | 0 - 4 |  |
| 5 | Speed | 1 – 1000 | dm/min, (for int. Encoder-Signal) |
| 6 | Rotation | 0 90 180 270 | Degree, anticlockwise |
| 7 | Mirrored | 0 1 |  |
| 8 | Encoder resolution | 1 - 2000000000 | pulse / m |
| 9 | ShiftingChange of date | 00–23:0-59 | hours:minutes |
| 10 | Backward Lock | 0 1 |  |
| 11 | Speed dependant output | 0 ... 1000 | dm/min |
| 12 | Encoder for mirrored | 0 1 |  |
| 13 | Extern reset for batch job | 0 1 |  |
| 14 | PGG-PG Distance | 1000-250000 | µm |
| Table 2: Declaration of the job list parameter |

**Encoder signals**

|  |
| --- |
| Encoder-Signal |
| Internal | = 0 |
| External, direction 1 (clockwise)  | = 1 |
| External, direction 2 (counter clockwise) | = 2 |
| External, both directions | = 3 |
| Speed measuring(1) | = 4 |
| Table 5: Encoder-Signal1. = Only after Jet3up

Determination of the speed with measuring of the time between PGG (PrintGo gate) and PG (PrintGo) Sensor |

**Mirrored**

The fitting position of the print head is adjusted here.

Mirrored is a mirror by the Y-axis.

This parameter is ignored in the Jet3up (should be 0). To get a mirrored print use the mirror parameter in the JOBPAR command.

**PGG-PG Distance**

Distance between PGG (PrintGo Gate) Sensor and PG (PrintGo) Sensor in µm. Is used for calculating of the speed when „Encoder Signal“ is switched to Speed measuring.

Only available in Jet3up!

***VISION Parameter list:***

**Syntax : VISION [Parameter list]**

Vision parameter is used for the settings of the new V-check Sensor. It`s used only once in one job or joblist.

This parameter is only used in the Jet3up.

The parameter list contains following parameter in these order.

|  |  |  |
| --- | --- | --- |
|  | Wertebereich | Einheit |
| 1 | V-check enabled for job | 0 = Disabled1 = Enabled | Default: 0 |
| 2 | Operation Monitoring | 0 - MAXINT | 1 |
| 3 | Trigger offset | 0 - MAXINT | 0 |
| 4 | Trigger delay | 0 - MAXINT | 55000 in µm |
| 5 | „Bad“ signal until warning | 0 - MAXINT | 3 |
| 6 | „Bad“ signal until error | 0 - MAXINT | 5 |
| 7 | „Too fast“ signal until warning | 0 - MAXINT | 3 |
| 8 | „Too fast“ signal until error | 0 - MAXINT | 5 |
| Table 5: Declaration of Vision parameter |

***JOBPAR parameter list (Job parameter)***

**Syntax: JOBPAR [Parameter list]**

|  |  |  |
| --- | --- | --- |
| Values margin | Unit |  |
| 1 | PrintGo-delay | 0 - MAXINT | µm |  |
| 2 | PG-repetition | 0 - 65535 |  |  |
| 3 | PG-distance | 0 - MAXINT | µm, only for PG-repetition. > 0: |  |
| 4 | Stroke distance | 0 – MAXINT | µm |  |
| 5 | Print Mode | 0-11 |  |  |
|  | optional: |  |  |  |
| 6 | Flight time compensation | 0–MAXINT |  |  |
| 7 | Sensor control | 0 1 | Leave that 0 ! |  |
| 8 | Stroke control | 0 1 |  |  |
| 9 | PrintGo control | 0 1 |  |  |
| 10 | PGHoldOff | 0-MAXINT |  |  |
| 11 | IdentNr CameraJob | (-1) – 2^31 |  |  |
| 12 | CameraJob Name | (alphanumeric text) |  |  |
| 13 | Max. products between printer and Camera | 1 - 1000 |  |  |
| 14 | Product offset between printer and Camera | 1 – 1000 |  |  |
| 15 | Cameratrigger-delay | 0-MAXINT | µm |  |
| 16 | Print stop interrupts print-out immediately | 0 1 |  |  |
| 17 | Indexcounter of previous camera job data | 0 - 65535 |  |  |
| 18 | Plotmode | 0 1 |  |  |
| 19  | Mirrored  | 0 1 |  |  |
| 20 | PG Length | 0-50000000 | µm |  |
| 21 | PG Tolerance | 1000-10000000 | µm |  |
| Table 7: Declaration of the job-parameters  |

**PG Length**

Length of the PrintGo Signal (= product) in µm. This is used for checking of the length of the product.

When this is 0, the checking is switched off.

When the length of the product is bigger or smaller as this parameter (look at PG tolerance), an error will be caused.

Only available on the Jet3up

**PG Tolerance**

Tolerable difference of the product length.

Only available on the Jet3up

***CNT parameter list (Counter parameter)***

**Syntax: CNT [Parameter list]**

Every counter which is declared refers to the last defined object. The counter is placed at the position where you can find the object {c} in the text.

The parameter list contains the following parameters in this order:

|  |  |  |
| --- | --- | --- |
|  |  | Values margin |
| 1 | Number of digits | 1 - 10 |
| 2 | Start value | 0 – 9.999.999.999 |
| 3 | Initial value | 0 – 9.999.999.999 |
| 4 | End value | 0 – 9.999.999.999 |
| 5 | Increment | -100 ... +100 |
| 6 | Repetitions | 0 – 100 |
| 7 | Leading zeros | 0 1 |
| 8 | Counting event | 0 – 2 |
| 9 | Counter basis | 10 (currently only 10 permitted ) |
| 10 | Reset | 0 – 2 |
| 11 | LoopMode | 0 1 2 |
| 12 | Repetitor | 0 – 100 |
| 13 | Don’t print | 0 1 |
| 14 | Global counter | 0 1 |
| 15  | CounterID | 0 – 128  |
| Table 8: Declaration of counter |

Maximum number of counters:

* Jet3, Jet3up: 32
* Jet2neo: 3

**Global counter**

* Jet3/Jet2neo:
The printer has one global counter. If this flag is set, this counter uses the global counter (and changes it). Otherwise the counter always starts with the initial value.
* Jet3up:
The counter given in “Counter ID” is not overwritten with the initial value.

**Counter ID**

Assignment of the counter to one of the 128 common used memory places.

If set to 0 the counter is managed separately (compatibility to old jet Versions).

Only available on the Jet3up.