Technical Information
Version Update

October 10, 2003

JX6-CON2 / JX6-CON3 Modifications
from Version 3.001 to Version 3.023
1 Modifications / New Functions  
1.1 Axis Control  

2 Bug Fix  
2.1 Axis Control
The numbers in parenthesis indicate the version numbers.

1 Modifications / New Functions

1.1 Axis Control

- (3.004) Starting from this version, the tables can be entered and processed separately. This means that it is possible to enter another table while a table is being processed. The new register 1xy260 serves to select the table for the process.

The following diagram illustrates the entry and process of various tables:

As in previous versions, different table sizes are allowed. As long as register 1xy260 is not written, register 1xy147 is used as selected table for the process.

- (3.016) From this version onwards, the revised board DELREGA3 can be applied.
2Bug Fix

2.1 Axis Control

- (3.001) Using the acceleration limitation (register 60) with the follower only worked in one direction.
- (3.002) When recording the actual position in JetSym or Sympas oscilloscope mode, the values might have been incorrect.
- (3.003) Starting from version 2.900, an error might occur when creating a table if a table was written before using a too extensive table pointer.
- (3.004) Starting from version 2.900, the correction value during table mode overflow applied to the last table element. Starting from this version, the correction value must be entered again as additional element:

<table>
<thead>
<tr>
<th>Element 0</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Element 358</th>
<th>3580</th>
</tr>
</thead>
<tbody>
<tr>
<td>359</td>
<td>3590</td>
</tr>
<tr>
<td>360</td>
<td>3600</td>
</tr>
</tbody>
</table>

The correction value in case of table overflow is calculated as follows:

\[
\text{Correction value} = \text{Value of the table element (register 1xy055)} - \text{value of the table element (0)}
\]

\[
= 3600 \text{ increments} - 0 \text{ increments} = 3600 \text{ increments}
\]

- (3.004) The function for shifting a table slave to the master (starting from version 2.907) via register 1xy248 did not work properly.
- (3.004) Due to the intermediate interpolation in table mode (starting from version 2.900) position jumps in the slaves occurred if the values of the table elements differed significantly. After having corrected this error, it is now possible to carry out the overflow of endless axes exactly at the value defined in register 1xy058.
- (3.005) If a JX6-SB belonging to a JX6-CON-Move had been plugged into a JX6-CON2/3, start-up of the operating system would not be possible any more.
- (3.005) When the table mode had been activated by issuing command 46, the actual master position (register 95) would be calculated wrongly when master offset register 248 was applied; this could lead to a tracking error.
• (3.007) During quick changes of direction (automatic reference run), there could occur minor jumps (300 increments) of the virtual axis.
• (3.009, 3.010, 3.011, 3.012, 3.014, 3.017, 3.019, 3.020) Various bugfixes regarding interpolation with supplements:
  - Speed correction for linear interpolation with various encoder resolutions (command 150) did not function when the calculation was being carried out during a circular interpolation.
  - If certain sections of interpolation are so short that, at the actually driven speed, the deceleration ramp will already start at the beginning of the interpolation section, the deceleration ramp must not be programmed before the last section of interpolation. For the other sections, a very short deceleration ramp must be programmed.
• (3.016) Upload of an SSI encoder at the third axis would not work.
• (3.018) The relative mode of a third axis with overflow did not work.
• (3.019) When a JetControl647 was being used and the "AXARR" instruction had been given, JX6-CON would not carry out the instruction in absolute mode.