



**Title:** MultiFlex MCCL Macro Execution with User-Defined Default Axes  
**Products(s):** All MultiFlex 1000 Series motion controllers  
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## **Summary**

Definition of a default axis for subsequent command execution requires careful code implementation for proper execution of macros in the MCCL command language.

## **More Information**

The behavior of the command interpreter relating to user-defined default axes using the **UA** command is somewhat dependent upon how the macros are coded. The following examples will attempt to illustrate some key points

1. If an axis is explicitly defined in a command, all following commands that do not contain an axis identifier up to the <CR> assume that axis number

**5MN, MR10, MF**

In this case, all commands are directed to axis 5.

2. If a default axis is defined, it will be used for subsequent commands without axis identifiers **ONLY** until a command is encountered with an explicit identifier. At that point, rule (1) applies

**UA2, MN, MR100, 5MN, MR10, MF**

In this case, MN and MR100 are issued to axis 2 and MN, MR10 and MF are issued to axis 5

3. In order to preserve the default axis past an explicit reference to another axis, as shown in (2), subsequent commands should have an axis identifier of 0, rather than omitting the axis number

**UA2, MN, MR100, 5MN, 0MR10, 0MF**

In this case, MN, MR100, MR10 and MF are issued to axis 2 and MN is issued to axis 5

4. The user-defined default axis is preserved through a macro call/return sequence

**MD10, 5MN, 5MR100  
MD20, UA1, MN, MC10, MR10, MF**

In this case, calling macro 20 will properly apply all commands to axis 1 even though axis 5 is referenced in the call to macro 10