**Purpose:**

To inform customers of a solution to a problem that can cause loss of communications between an ORION Controller and a QuickPanel Touch Screen and/or unexplained QuickPanel resets.

**Revisions Affected**

This bulletin applies to MBX-QP version 1.1b and earlier.

**Description:**

In applications where you have used QuickPanel tags mapped to non-integer MotionBASIC® variables, your program must be running and events must be enabled (EVENT ON) in order for the QuickPanel to access the non-integer variables. If these conditions are not true, the ORION will return an exception code to the QuickPanel when it tries to access a non-integer variable. These MBX-QP versions return an incorrect exception code which may cause either an unrecoverable loss of communications or may cause the QuickPanel to begin its download sequence resulting in a QuickPanel reset.

This problem may also occur if your program uses INPUT$ or INPUT # statements. These statements also prevent the QuickPanel from accessing non-integer variables.

**Solution:**

This problem will be corrected in a future release of MBX-QP. Until such time as the new release is available, the problem can be avoided by making sure your program is written so that EVENTS are not OFF or STOPped for more than 750 ms. Also, if you are using INPUT$ or INPUT # in your program, follow the recommendations described below.

**Recommendations:**

If your program waits in an INPUT$ or INPUT # statement, it will prevent the QuickPanel from accessing non-integer variables. If you need to use INPUT$ or INPUT # we suggest the following:

Note: the variable dev represents the device number you used to open the file or communications port from which you wish to read the data.

If you want to read a single character, instead of:
VARIABLE$=INPUT$(dev, 1)

use:

IF NOT EOF(dev) THEN VARIABLE$=INPUT$(dev, 1)

This approach will only execute the INPUT$ statement if there is a character available to read. This minimizes the time MotionBASIC® waits in the statement and therefore minimizes the time the QuickPanel cannot access non-integer variables.

If you must wait until a character is available, use:

WHILE EOF(dev) :WEND
VARIABLE$=INPUT$(dev, 1)

If you are reading multiple characters, instead of:

VARIABLE$=INPUT$(dev, 10)

use:

VARIABLE$=""
WHILE LEN(VARIABLE$)<10
    IF NOT EOF(dev) THEN VARIABLE$=VARIABLE$+INPUT$(dev, 1)
WEND

Avoid using INPUT #, instead of:

INPUT #dev, VALUE!

use:

BUFFER$="" :KEY$=""
WHILE KEY$<>CHR$(13) 'loop until KEY$ is a Carriage Return
    IF NOT EOF(dev) THEN
        KEY$=INPUT$(dev, 1)
        IF KEY$<>CHR$(13) THEN BUFFER$=BUFFER$+KEY$
    ENDIF
WEND
VALUE!=VAL(BUFFER$)

(The VALUE variable could be any variable type, not just single precision)

Following these guidelines will prevent the temporary loss of access to non-integer variables and the associated indications of communication faults that would otherwise occur.