FANUC Robotics

# Battery Power Loss Recovery Method: Quick Master

## Conditions Required for Quick Mastering

- You have only lost battery power (i.e., SRVO-062 BZAL)
- You have not replaced any motors, end coders, gearboxes, belts or gears
- You have the original master counts from before mastering was lost
- SMASTER_ENB = 1 or 2

## Set Up

Move the robot as close to zero position as possible, either by aligning witness marks or by aligning zero position on calibration scales. Each motor **must** be within ½ turn of the original mastering for this procedure to work.

## Procedure

1. On the Teach Pendant, select Menu → 0.  (Next) →System→F1 [Type] →2. Variables
2. Scroll down to $DMR_GRP[ ] and press Enter twice.
3. Set $DMR_GRP[ ]
    a. $REF_POS[ ]=0.00 (all axis)
    b. $REF_COUNT[ ]=original master count number – may be a positive or negative integer
    c. $REF_DONE=TRUE
4. Press F1 [Type] →Master/Cal
5. Select 3. QUICKMASER
6. Press F4, YES
7. Select 6. CALIBRATE
8. Press F4, YES

## Verify

Send the robot to ZERO, or move to zero by jogging the robot. Verify by monitoring actual positioning by selecting the POSN key on the Teach Pendant. If the mastering is off from the witness marks, then move the axis that is off back on to the witness mark (or just the other side of the mark) and repeat the procedure.