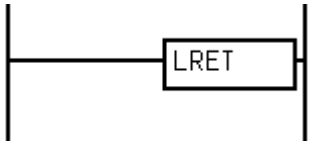
LRET (Label Return)

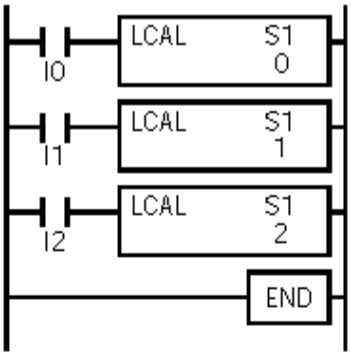


This instruction is placed at the end of a subroutine called by the LCAL instruction. When the subroutine is completed, normal program execution resumes by returning to the instruction following the LCAL instruction.

The LRET must be placed at the end of the subroutine starting with a LABEL instruction. When the LRET is programmed at other places, a user program execution error will result, turning on special internal relay M8004 and the ERROR LED.

Example: LCAL and LRET

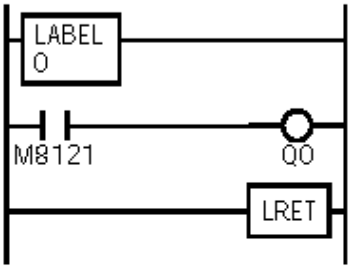
The following example demonstrates a program to call three different portions of program depending on the input. When the subroutine is complete, program execution returns to the instruction following the LCAL instruction.



When input I0 is on, program execution jumps to label 0.

When input I1 is on, program execution jumps to label 1.

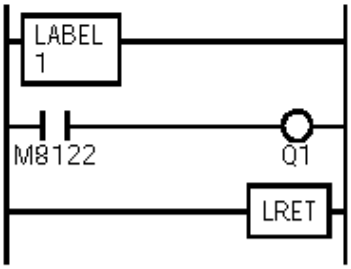
When input I2 is on, program execution jumps to label 2.



M8121 is the 1-sec clock special internal relay.

When jump occurs to label 0, output Q0 oscillates in 1-sec increments.

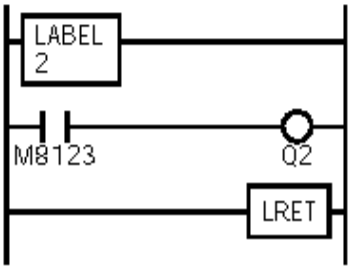
Program execution returns to rung 1, input I1.



M8122 is the 100-msec clock special internal relay.

When jump occurs to label 1, output Q1 oscillates in 100-msec increments.

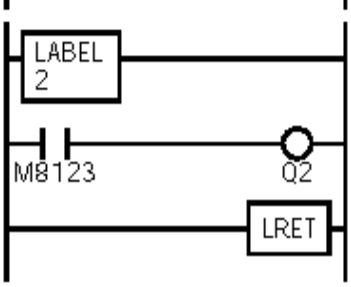
Program execution returns to rung 1, input I2.



M8123 is the 10-msec clock special internal relay.

When jump occurs to label 2, output Q2 oscillates in 10-msec increments.

Program execution returns to rung 1, END.



M8123 is the 10-msec clock special internal relay.

When jump occurs to label 2, output Q2 oscillates in 10-msec increments.

Program execution returns to rung 1, END.