main (running part)

From
Page 1

while (1)

IF
Receive flag set
Count flag set
ZCD flags not set
Reset tick flag not set

THEN
Receive_BYTE_P10 (Receives a byte of firing matrix from Processor 1)

ELSE
Matrix_Update() (Updates the matrix with the new one)

IF
Timer flag set

THEN
Increments Phase Counters

ELSE
IF
ZCDx flag set (x=1, 2, or 3)

THEN
See Page 3

ELSE
See Page 4

Write_Output() (Writes output to serial port)

See
Page 4