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RC5IN

Syntax
Variable **= RC5IN**

Overview
Receive Philips RC5 infrared data from a predetermined pin. The pin is automatically made an input.

Operators
Variable - a bit, byte, word, dword, or float variable, that will be loaded by **RC5IN**. The return data from the **RC5IN** command consists of two bytes, the SYSTEM byte containing the type of remote used. i.e. TV, Video etc, and the COMMAND byte containing the actual button value. The order of the bytes is COMMAND (low byte) then SYSTEM (high byte). If a byte variable is used to receive data from the infrared sensor then only the COMMAND byte will be received.

Example
```
' Receive Philips RC5 data from an infrared sensor attached to PORTC.0
    Device = 16F877
    RC5IN_PIN = PORTC.0             ' Choose the port and pin for the infrared sensor
    Dim RC5_WORD as WORD            ' Create a WORD variable to receive the data
     ' Alias the COMMAND byte to RC5_WORD low byte
    Dim RC5_COMMAND as RC5_WORD.Lowbyte
    ' Alias the SYSTEM byte to RC5_WORD high byte
    Dim RC5_SYSTEM as RC5_WORD.Highbyte

    ALL_DIGITAL = ON                ' Make all pins digital mode
    Cls                             ' Clear the LCD
    While 1 = 1                     ' Create an infinite loop
    Repeat
    RC5_WORD = RC5In                ' Receive a signal from the infrared sensor
    Until RC5_COMMAND<> 255         ' Keep looking until a valid header found
    Print at 1,1,"SYSTEM  ",Dec RC5_SYSTEM," "  ' Display the SYSTEM value
    Print at 2,1,"COMMAND ",Dec RC5_COMMAND," " ' Display the COMMAND value
    Wend
```

There is a single Declare for use with **RC5IN**: -

DECLARE RC5IN_PIN PORT **.** PIN
Assigns the Port and Pin that will be used to input infrared data by the **RC5IN** command. This may be any valid port on the PICmicro.

If the Declare is not used in the program, then the default Port and Pin is PORTB.0.

Notes
The **RC5IN** command will return with both COMMAND and SYSTEM bytes containing 255 if a valid header was not received. The CARRY (STATUS.0) flag will also be set if an invalid header was received. This is an ideal method of determining if the signal received is of the correct type.

SONYIN

Syntax
Variable **= SONYIN**

Overview
Receive Sony SIRC (Sony Infrared Remote Control) data from a predetermined pin. The pin is automatically made an input.

Operators
Variable - a bit, byte, word, dword, or float variable, that will be loaded by **SonyIn**. The return data from the **SonyIn** command consists of two bytes, the SYSTEM byte containing the type of remote used. i.e. TV, Video etc, and the COMMAND byte containing the actual button value. The order of the bytes is COMMAND (low byte) then SYSTEM (high byte). If a byte variable is used to receive data from the infrared sensor then only the COMMAND byte will be received.

Example
```
' Receive Sony SIRC data from an infrared sensor attached to PORTC.0
    Device = 16F877
    SONYIN_PIN = PORTC.0              ' Choose the port and pin for the infrared sensor
    Dim SONYIN_WORD as WORD           ' Create a WORD variable to receive the SIRC data
     ' Alias the COMMAND byte to SONYIN_WORD low byte
    Dim SONY_COMMAND as SONYIN_WORD.Lowbyte
    ' Alias the SYSTEM byte to SONYIN_WORD high byte
    Dim SONY_SYSTEM as SONYIN_WORD.Highbyte

    ALL_DIGITAL = ON                  ' Make all pins digital mode
    Cls                               ' Clear the LCD
    While 1 = 1                       ' Create an infinite loop
    Repeat
    SONYIN_WORD = SonyIn              ' Receive a signal from the infrared sensor
    Until SONY_COMMAND<> 255          ' Keep looking until a valid header found
    Print at 1,1,"SYSTEM  ",Dec SONY_SYSTEM," "  ' Display the SYSTEM value
    Print at 2,1,"COMMAND ",Dec SONY_COMMAND," " ' Display the COMMAND value
    Wend
```

There is a single Declare for use with **SonyIn**: -

DECLARE SONYIN_PIN PORT **.** PIN
Assigns the Port and Pin that will be used to input infrared data by the **SonyIn** command. This may be any valid port on the PICmicro.

If the Declare is not used in the program, then the default Port and Pin is PORTB.0.

Notes
The **SonyIn** command will return with both COMMAND and SYSTEM bytes containing 255 if a valid header was not received. The CARRY (STATUS.0) flag will also be set if an invalid header was received. This is an ideal method of determining if the signal received is of the correct type.

SonyIn is oscillator independent as long as the crystal frequency is declared at the top of the program. If no XTAL Declare is used, then **SonyIn** defaults to a 4MHz crystal frequency for its timing.