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' File..... BungieDragon.BS1
' Purpose.... Bungie Dragon for House
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' Started.... Sept 6, 2013
' Updated....
'
' {$STAMP BS1}
' {$PBASIC 1.0}
=====

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' -----[ Program Description ]-----
' Program for control boxes. This one is for the Bungie Dragon for the House
' This box will operate a 120v light, 3 LEDs and a series sound bites.
' 110v light is on when relay is off.
'

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' Trigger check delay from JonnyMac at EFX-TEK
'

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' -----[ I/O Definitions ]-----

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SYMBOL Sio          = 7          ' serial to AP-16+
SYMBOL Trigger      = PIN6       ' push Button Trigger
SYMBOL LED3         = PIN4       ' controls LED3
SYMBOL LED2         = PIN3       ' controls LED2
SYMBOL LED1         = PIN2       ' controls LED1
SYMBOL FOG          = PIN1       ' controls fog machine
SYMBOL RELAY        = PIN0       ' controls 120v light

```

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' -----[ Constants ]-----

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SYMBOL IsOn        = 1
SYMBOL IsOff       = 0

SYMBOL Yes         = 1
SYMBOL No          = 0

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' -----[ Variables ]-----

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SYMBOL timer       = W5          ' for debounce loop

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' -----[ Initialization ]-----

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Reset:

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SEROUT Sio, OT2400, ("!AP16", %00, "X") ' Resets AP-16+, it will stop  
PAUSE 100 ' sound file if playing
```

' -----[ Program Code ]-----

START:

```
' 76543210  
DIRS = %00011111 ' set output pins (1s)  
PINS = %00000000 ' all outputs off
```

MAIN:

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timer = 0 ' reset debounce timer
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Check\_Trigger:

```
PAUSE 5 ' scan delay  
IF Trigger = 0 THEN Main ' check trigger input  
timer = timer + 5 ' update timer  
IF timer < 100 THEN Check_Trigger ' check timer
```

Action:

```
RELAY = IsOn ' turns 120v light off  
SEROUT Sio, OT2400, ("!AP16", %00, "PS", 1, 1) ' starts sound file SFX01  
LED1 = IsOn  
PAUSE 1000 ' pause wait 3 sec into SFX01  
FOG = IsOn  
PAUSE 3000  
LED2 = IsOn  
PAUSE 3000  
FOG = IsOff  
PAUSE 3000 ' pause for SFX01  
LED1 = IsOff  
LED2 = IsOff  
PAUSE 2000  
LED3 = IsOn ' show the way out  
PAUSE 8000  
LED3 = IsOff  
Relay = IsOff ' turns on 120v light
```

GOTO RESET