```
// Last used 08-07-20
// Intelligent_EEProm_Update_V2
//

  protoID=1;                          // initialize Protocol ID to 1
  customVar1.field1=34922.00;         // Primary Frequency 1
  customVar1.field2=0.20;             // Duty Cycle 1
  customVar1.field3=7.83;             // Secondary Gating Frequency
  customVar1.field4=0.50;             // Duty Cycle 2

  protoID=2;                          // initialize Protocol ID to 2
  customVar2.field1=34922.00;         // Primary Frequency 1
  customVar2.field2=0.20;             // Duty Cycle 1
  customVar2.field3=396.00;           // Secondary Gating Frequency
  customVar2.field4=0.50;             // Duty Cycle 2

  protoID=3;                          // initialize Protocol ID to 3
  customVar3.field1=34922.00;         // Primary Frequency 1
  customVar3.field2=0.20;             // Duty Cycle 1
  customVar3.field3=7.83;             // Secondary Gating Frequency
  customVar3.field4=0.50;             // Duty Cycle 2

  protoID=4;                          // initialize Protocol ID to 4
  customVar4.field1=34922.00;         // Primary Frequency 1
  customVar4.field2=0.20;             // Duty Cycle 1
  customVar4.field3=417.00;           // Secondary Gating Frequency
  customVar4.field4=0.50;             // Duty Cycle 2

  protoID=5;                          // initialize Protocol ID to 5
  customVar5.field1=34922.00;         // Primary Frequency 1
  customVar5.field2=0.20;             // Duty Cycle 1
  customVar5.field3=7.83;             // Secondary Gating Frequency
  customVar5.field4=0.50;             // Duty Cycle 2

  protoID=6;                          // initialize Protocol ID to 6
  customVar6.field1=34922.00;         // Primary Frequency 1
  customVar6.field2=0.20;             // Duty Cycle 1
  customVar6.field3=528.00;           // Secondary Gating Frequency
  customVar6.field4=0.50;             // Duty Cycle 2

  protoID=7;                          // initialize Protocol ID to 7
  customVar7.field1=34922.00;         // Primary Frequency 1
  customVar7.field2=0.20;             // Duty Cycle 1
  customVar7.field3=7.83;             // Secondary Gating Frequency
  customVar7.field4=0.50;             // Duty Cycle 2

  protoID=8;                          // initialize Protocol ID to 8
  customVar8.field1=34922.00;         // Primary Frequency 1
  customVar8.field2=0.20;             // Duty Cycle 1
  customVar8.field3=639.83;           // Secondary Gating Frequency
  customVar8.field4=0.50;             // Duty Cycle 2

  protoID=9;                          // initialize Protocol ID to 9
  customVar9.field1=34922.00;         // Primary Frequency 1
```

```
customVar9.field2=0.20;             // Duty Cycle 1
customVar9.field3=7.83;             // Secondary Gating Frequency
customVar9.field4=0.50;             // Duty Cycle 2

protoID=10;                         // initialize Protocol ID to 10
customVar10.field1=34922.00;        // Primary Frequency 1
customVar10.field2=0.20;            // Duty Cycle 1
customVar10.field3=741.00;          // Secondary Gating Frequency
customVar10.field4=0.50;            // Duty Cycle 2

protoID=11;                         // initialize Protocol ID to 11
customVar11.field1=34922.00;        // Primary Frequency 1
customVar11.field2=0.20;            // Duty Cycle 1
customVar11.field3=7.83;            // Secondary Gating Frequency
customVar11.field4=0.50;            // Duty Cycle 2

protoID=12;                         // initialize Protocol ID to 12
customVar12.field1=34922.00;        // Primary Frequency 1
customVar12.field2=0.20;            // Duty Cycle 1
customVar12.field3=852.00;          // Secondary Gating Frequency
customVar12.field4=0.50;            // Duty Cycle 2

protoID=13;                         // initialize Protocol ID to 13
customVar13.field1=34922.00;        // Primary Frequency 1
customVar13.field2=0.20;            // Duty Cycle 1
customVar13.field3=72.00;           // Secondary Gating Frequency
customVar13.field4=0.50;            // Duty Cycle 2

protoID=14;                         // initialize Protocol ID to 14
customVar14.field1=34922.00;        // Primary Frequency 1
customVar14.field2=0.20;            // Duty Cycle 1
customVar14.field3=432.00;          // Secondary Gating Frequency
customVar14.field4=0.50;            // Duty Cycle 2

protoID=15;                         // initialize Protocol ID to 15
customVar15.field1=28000.00;        // Primary Frequency 1
customVar15.field2=0.20;            // Duty Cycle 1
customVar15.field3=432.00;          // Secondary Gating Frequency
customVar15.field4=0.50;            // Duty Cycle 2

protoID=16;                         // initialize Protocol ID to 16
customVar16.field1=28000.00;        // Primary Frequency 1
customVar16.field2=0.20;            // Duty Cycle 1
customVar16.field3=72.00;           // Secondary Gating Frequency
customVar16.field4=0.50;            // Duty Cycle 2

protoID=17;                         // initialize Protocol ID to 17
customVar17.field1=28000.00;        // Primary Frequency 1
customVar17.field2=0.20;            // Duty Cycle 1
customVar17.field3=7.83;            // Secondary Gating Frequency
customVar17.field4=0.50;            // Duty Cycle 2

protoID=18;                         // initialize Protocol ID to 18
customVar18.field1=28000.00;        // Primary Frequency 1
```

```
customVar18.field2=0.20;            // Duty Cycle 1
customVar18.field3=396.00;          // Secondary Gating Frequency
customVar18.field4=0.50;            // Duty Cycle 2

protoID=19;                         // initialize Protocol ID to 19
customVar19.field1=28000.00;        // Primary Frequency 1
customVar19.field2=0.20;            // Duty Cycle 1
customVar19.field3=7.83;            // Secondary Gating Frequency
customVar19.field4=0.50;            // Duty Cycle 2

protoID=20;                         // initialize Protocol ID to 20
customVar20.field1=28000.00;        // Primary Frequency 1
customVar20.field2=0.20;            // Duty Cycle 1
customVar20.field3=417.00;          // Secondary Gating Frequency
customVar20.field4=0.50;            // Duty Cycle 2

protoID=21;                         // initialize Protocol ID to 21
customVar21.field1=28000.00;        // Primary Frequency 1
customVar21.field2=0.20;            // Duty Cycle 1
customVar21.field3=7.83;            // Secondary Gating Frequency
customVar21.field4=0.50;            // Duty Cycle 2

protoID=22;                         // initialize Protocol ID to 22
customVar22.field1=28000.00;        // Primary Frequency 1
customVar22.field2=0.20;            // Duty Cycle 1
customVar22.field3=528.00;          // Secondary Gating Frequency
customVar22.field4=0.50;            // Duty Cycle 2

protoID=23;                         // initialize Protocol ID to 23
customVar23.field1=28000.00;        // Primary Frequency 1
customVar23.field2=0.20;            // Duty Cycle 1
customVar23.field3=7.83;            // Secondary Gating Frequency
customVar23.field4=0.50;            // Duty Cycle 2

protoID=24;                         // initialize Protocol ID to 24
customVar24.field1=28000.00;        // Primary Frequency 1
customVar24.field2=0.20;            // Duty Cycle 1
customVar24.field3=639.83;          // Secondary Gating Frequency
customVar24.field4=0.50;            // Duty Cycle 2

protoID=25;                         // initialize Protocol ID to 25
customVar25.field1=28000.00;        // Primary Frequency 1
customVar25.field2=0.20;            // Duty Cycle 1
customVar25.field3=7.83;            // Secondary Gating Frequency
customVar25.field4=0.50;            // Duty Cycle 2

protoID=26;                         // initialize Protocol ID to 26
customVar26.field1=28000.00;        // Primary Frequency 1
customVar26.field2=0.20;            // Duty Cycle 1
customVar26.field3=741.00;          // Secondary Gating Frequency
customVar26.field4=0.50;            // Duty Cycle 2

protoID=27;                         // initialize Protocol ID to 27
customVar27.field1=28000.00;        // Primary Frequency 1
```

```
  customVar27.field2=0.20;            // Duty Cycle 1
  customVar27.field3=7.83;            // Secondary Gating Frequency
  customVar27.field4=0.50;            // Duty Cycle 2

  protoID=28;                         // initialize Protocol ID to 28
  customVar28.field1=28000.00;        // Primary Frequency 1
  customVar28.field2=0.20;            // Duty Cycle 1
  customVar28.field3=852.00;          // Secondary Gating Frequency
  customVar28.field4=0.50;            // Duty Cycle 2

  protoID=29;                         // initialize Protocol ID to 29
  customVar29.field1=28000.00;        // Primary Frequency 1
  customVar29.field2=0.20;            // Duty Cycle 1
  customVar29.field3=72.00;           // Secondary Gating Frequency
  customVar29.field4=0.50;            // Duty Cycle 2

  protoID=30;                         // initialize Protocol ID to 30
  customVar30.field1=28000.00;        // Primary Frequency 1
  customVar30.field2=0.20;            // Duty Cycle 1
  customVar30.field3=432.00;          // Secondary Gating Frequency
  customVar30.field4=0.50;            // Duty Cycle 2

  protoID=31;                         // initialize Protocol ID to 31
  customVar31.field1=34922.00;        // Primary Frequency 1
  customVar31.field2=0.20;            // Duty Cycle 1
  customVar31.field3=432.00;          // Secondary Gating Frequency
  customVar31.field4=0.50;            // Duty Cycle 2

  protoID=32;                         // initialize Protocol ID to 32
  customVar32.field1=34922.00;        // Primary Frequency 1
  customVar32.field2=0.20;            // Duty Cycle 1
  customVar32.field3=72.00;           // Secondary Gating Frequency
  customVar32.field4=0.50;            // Duty Cycle 2

// ******** Fillers to 50 ***********

  protoID=33;                         // initialize Protocol ID to 33
  customVar33.field1=34922.00;        // Primary Frequency 1
  customVar33.field2=0.20;            // Duty Cycle 1
  customVar33.field3=7.83;            // Secondary Gating Frequency
  customVar33.field4=0.50;            // Duty Cycle 2

  protoID=34;                         // initialize Protocol ID to 34
  customVar34.field1=34922.00;        // Primary Frequency 1
  customVar34.field2=0.20;            // Duty Cycle 1
  customVar34.field3=396.00;          // Secondary Gating Frequency
  customVar34.field4=0.50;            // Duty Cycle 2

  protoID=35;                         // initialize Protocol ID to 35
  customVar35.field1=34922.00;        // Primary Frequency 1
  customVar35.field2=0.20;            // Duty Cycle 1
  customVar35.field3=7.83;            // Secondary Gating Frequency
  customVar35.field4=0.50;            // Duty Cycle 2
```

```
protoID=36;                          // initialize Protocol ID to 36
customVar36.field1=34922.00;         // Primary Frequency 1
customVar36.field2=0.20;             // Duty Cycle 1
customVar36.field3=417.00;           // Secondary Gating Frequency
customVar36.field4=0.50;             // Duty Cycle 2

protoID=37;                          // initialize Protocol ID to 37
customVar37.field1=34922.00;         // Primary Frequency 1
customVar37.field2=0.20;             // Duty Cycle 1
customVar37.field3=7.83;             // Secondary Gating Frequency
customVar37.field4=0.50;             // Duty Cycle 2

protoID=38;                          // initialize Protocol ID to 38
customVar38.field1=34922.00;         // Primary Frequency 1
customVar38.field2=0.20;             // Duty Cycle 1
customVar38.field3=528.00;           // Secondary Gating Frequency
customVar38.field4=0.50;             // Duty Cycle 2

protoID=39;                          // initialize Protocol ID to 39
customVar39.field1=34922.00;         // Primary Frequency 1
customVar39.field2=0.20;             // Duty Cycle 1
customVar39.field3=7.83;             // Secondary Gating Frequency
customVar39.field4=0.50;             // Duty Cycle 2

protoID=40;                          // initialize Protocol ID to 40
customVar40.field1=34922.00;         // Primary Frequency 1
customVar40.field2=0.20;             // Duty Cycle 1
customVar40.field3=639.83;           // Secondary Gating Frequency
customVar40.field4=0.50;             // Duty Cycle 2
EEPROM.put(eeAddress,customVar40);   // Update EProm

protoID=41;                          // initialize Protocol ID to 41
customVar41.field1=34922.00;         // Primary Frequency 1
customVar41.field2=0.20;             // Duty Cycle 1
customVar41.field3=7.83;             // Secondary Gating Frequency
customVar41.field4=0.50;             // Duty Cycle 2

protoID=42;                          // initialize Protocol ID to 42
customVar42.field1=34922.00;         // Primary Frequency 1
customVar42.field2=0.20;             // Duty Cycle 1
customVar42.field3=741.00;           // Secondary Gating Frequency
customVar42.field4=0.50;             // Duty Cycle 2

protoID=43;                          // initialize Protocol ID to 43
customVar43.field1=34922.00;         // Primary Frequency 1
customVar43.field2=0.20;             // Duty Cycle 1
customVar43.field3=7.83;             // Secondary Gating Frequency
customVar43.field4=0.50;             // Duty Cycle 2

protoID=44;                          // initialize Protocol ID to 44
customVar44.field1=34922.00;         // Primary Frequency 1
customVar44.field2=0.20;             // Duty Cycle 1
customVar44.field3=852.00;           // Secondary Gating Frequency
customVar44.field4=0.50;             // Duty Cycle 2
```

```
  protoID=45;                          // initialize Protocol ID to 45
  customVar45.field1=34922.00;         // Primary Frequency 1
  customVar45.field2=0.20;             // Duty Cycle 1
  customVar45.field3=7.83;             // Secondary Gating Frequency
  customVar45.field4=0.50;             // Duty Cycle 2

  protoID=46;                          // initialize Protocol ID to 46
  customVar46.field1=34922.00;         // Primary Frequency 1
  customVar46.field2=0.20;             // Duty Cycle 1
  customVar46.field3=396.00;           // Secondary Gating Frequency
  customVar46.field4=0.50;             // Duty Cycle 2

  protoID=47;                          // initialize Protocol ID to 47
  customVar47.field1=34922.00;         // Primary Frequency 1
  customVar47.field2=0.20;             // Duty Cycle 1
  customVar47.field3=7.83;             // Secondary Gating Frequency
  customVar47.field4=0.50;             // Duty Cycle 2

  protoID=48;                          // initialize Protocol ID to 48
  customVar48.field1=34922.00;         // Primary Frequency 1
  customVar48.field2=0.20;             // Duty Cycle 1
  customVar48.field3=417.00;           // Secondary Gating Frequency
  customVar48.field4=0.50;             // Duty Cycle 2

  protoID=49;                          // initialize Protocol ID to 49
  customVar49.field1=34922.00;         // Primary Frequency 1
  customVar49.field2=0.20;             // Duty Cycle 1
  customVar49.field3=7.83;             // Secondary Gating Frequency
  customVar49.field4=0.50;             // Duty Cycle 2

  protoID=50;                          // initialize Protocol ID to 50
  customVar50.field1=34922.00;         // Primary Frequency 1
  customVar50.field2=0.20;             // Duty Cycle 1
  customVar50.field3=528.00;           // Secondary Gating Frequency
  customVar50.field4=0.50;             // Duty Cycle 2

  protoID=1;                           // initialize Protocol ID to 1
  eeAddress=highEPromAd;               // define starting eeprom address
  EPromObject2 customVarHigh;          // Variables to store custom
objects in EEPROM
  customVarHigh.field0=protoID;        // set the default last_protoID to
present protoID
  customVarHigh.field1=mode;           // set to default SIMPLE Mode 1
  customVarHigh.field2=defaultFreqTime; // set to run frequencies for
default 3 minutes
  customVarHigh.field3=defaultRunTime; // set to 30 minutes default
program Run time
  customVarHigh.field4=startFreq;      // set a default Start Frequency
Group ID
  customVarHigh.field5=stopFreq;       // set a default Stop Frequency
Group ID
  customVarHigh.field6=startSweep;     // set a defaull Start Sweep Group
ID
```

```
  customVarHigh.field7=stopSweep;      // set a default Stop Sweep Group
ID
  EEPROM.put(eeAddress,customVarHigh); // Update EProm

  // turn the LED on when we're done
  digitalWrite(13, HIGH);
}

void loop() {
  /** Empty loop. **/
}
```