**Receive Data (from Radio, into Alarm)**

**Test Button Presses | 11 bytes | Constants: A=70, D=01**

A | Test Signal | 1 byte | 70=Test

B | Device ID | 3 bytes

C | Trigger type | 1 byte | 81=fire, 41=CO, FF=Both

D | ? | 1 byte | Always 01 when first byte = 70? OR 01 when ok, 00 in error

E | Model ID | 3 bytes | ED08=connected, 1103=wst, 7803=CO, C304=Strobe

F | No idea, in this case, seems to be part of the model ID

G | Count | 1 byte | counts from 00-0F

H | End | 1 byte | Always 7E

fp2620w2 70 2D 8D 01 81 01 ED 08 07 03 7E

fp2620w2 70 2D 8D 01 81 00 ED 08 07 0E 7E (low bat error)

WST-630(a) 70 13 F4 3E 81 01 11 03 02 07 7E

WST-630(b) 70 06 F9 3E 81 01 11 03 02 0A 7E

W2-CO-10X(a) 70 11 CE 01 41 01 78 03 03 0E 7E

W2-CO-10X(b) 70 AD 80 03 41 01 78 03 15 0D 7E

W2-SVP-630 70 60 1A 03 FF 01 C3 04 09 09 7E

‎FP1720W2-R 70 A7 6F 18 82 01 11 04 14 0E 7E

**On/Off Base, Low Battery Events | 10 bytes | Constants: A=71, E=02**

A | Base Event | 1 byte | 71=Base Event

B | Device ID | 3 bytes

C | Model? | 2 bytes | ED08=connected, 1103=wst, 7803=CO, C304=Strobe

D | Trigger type | 1 byte | 01=OffBase, 05=OnBase bit3=0:offbase, bit3=1:onbase

Bit1+6 on=lowbat, bit1+6 off = batOK

E | ? | 1 byte | Always 02 when first byte = 71

F | Count | 1 byte | counts from 00-0F

G | End | 1 byte | Always 7E

WST-630(b) 71 06 F9 3E 11 03 01 02 0F 7E

fp2620w2 71 2D 8D 01 ED 08 47 07 0B 7E (attach / low bat error)

fp2620w2 71 2D 8D 01 ED 08 43 07 0F 7E (detach / low bat error)

71 2D 8D 01 ED 08 47 07 06 7E

W2-SVP-630 71 60 1A 03 C3 04 0F 09 0A 7E

71 60 1A 03 C3 04 07 09 06 7E – no motor

71 60 1A 03 C3 04 05 09 0D 7E 71 60 1A 03 C3 04 15 09 00 7E – no motor

**Emergency Events | 11 bytes | Constants: A=50, E=02**

A | Base Event | 1 byte | 50=Emergency Event

B | Device ID | 3 bytes

C | Trigger type | 1 byte | 81=fire, 41=CO, FF=Both

E | ? | 2 bytes |

F | Count | 1 byte | counts from 00-0F

G | End | 1 byte | Always 7E

WST-630(b) 50 06 F9 3E 81 02 02 06 7E

**Missing Device report**

D2 2A 38 41 00 EF 60 1A 03 00 00 09 40 7E

This ‘missing device report’ is part of what makes the FireAngel gateway so bad!

Other alarms in the network are expected to report if they detect an alarm is missing.

So if they all disappear, who tells the gateway that an alarm is missing!?

**Transmit Data (from Alarm, into Radio)**

**Test Button Part1 | 9 bytes | Constants: A=70, D=01**

A | Test Signal | 1 byte | 70=Test, 91 on 2nd command

B | Device ID | 3 bytes

C | Trigger type | 1 byte | 81=fire, 41=CO, FF=Both (seems to take first command)

D | ? | 1 byte | Always 01 when first byte = 70

E | Model ID | 3 bytes | ED08=connected, 1103=wst, 7803=CO, C304=Strobe

F | End | 1 byte | Always 7E

A | Reply 2 bytes | 417E=OK, 467E=retry

**Test Button Part1 | 11 bytes | Constants: A=90, E=05**

A | Test Signal | 1 byte | 70=Test, 91 on 2nd command

B | Device ID | 3 bytes

C | Model ID | 3 bytes | ED08=connected, 1103=wst, 7803=CO, C304=Strobe

D | Trigger type | 1 byte | 81=fire, 41=CO, FF=Both (seems to take first command)

E | ? | 1 byte | Always 05 when first byte is 91

F | No idea. Additional status flags? Battery, etc?

G | End | 1 byte | Always 7E

**Tx Rx Tx**

WST-630(b) 70 06 F9 3E 81 01 11 03 7E 41 7E 91 06 F9 3E 11 03 81 05 00 02 7E

WST-630(a) 70 13 F4 3E 81 01 11 03 7E 41 7E 91 13 F4 3E 11 03 81 05 00 02 7E

fp2620w2 70 2D 8D 01 81 01 ED 08 7E 41 7E 91 2D 8D 01 ED 08 81 05 00 01 7E

W2-SVP-630 70 60 1A 03 FF 01 C3 04 7E 41 7E 91 60 1A 03 C3 04 FF 05 01 01 7E

**Emergency Event | 9 bytes | Constants: A=70, D=01**

A | Test Signal | 1 byte | 70=Test, 91 on 2nd command

B | Device ID | 3 bytes

C | Trigger type | 1 byte | 81=fire, 41=CO, FF=Both (seems to take first command)

D | ? | 1 byte | Always 01 when first byte = 70

E | Model ID | 3 bytes | ED08=connected, 1103=wst, 7803=CO, C304=Strobe

F | End | 1 byte | Always 7E

A | Reply 2 bytes | 467E

**Tx Rx**

fp2620w2 50 2D 8D 01 81 00 7E 46 7E

fp2620w2 50 2D 8D 01 81 02 7E 46 7E

**Silence Emergency Event**

**Tx Rx**

fp2620w261 2D 8D 01 80 01 7E 46 7E

**Get Pairing Status**

**Tx Rx**

D3 03 7E D4 03 FF ?? 00 00 00 00 00 00 7E

D3 03 7E D4 03 00 00 00 00 00 00 00 00 7E

**Pairing Mode (only works if radio is currently unpaired)**

**Tx RX**  **Tx**

D3 12 01 7E 46 7E 41 7E 91 60 1A 03 C3 04 FF 05 01 01 7E

<LED comes on solid. Now press test button on another device>

<LED flashes / goes out>

**Erase Pairing (rarely works, better to use button)**

**Tx RX Tx**

D3 19 01 00 7E 46 7E D4 10 00 00 00 00 00 00 00 00 40 7E

D3 19 50 00 7E 46 7E D4 10 8C 02 00 00 00 00 00 00 0C 7E

Arduino Requirements:

**Transmit**

Transmit Fire / CO Emergency

Transmit Fire / CO / Both Test

Transmit Silence Emergency

Trigger Pairing mode

**Receive**

Receive Fire / CO / Both Test

Receive Fire / CO Emergency

Receive On / Off Base status

Receive ID of originator

DeviceID

DeviceModel

Erroneous RX data

D2 62 6C 70 00 DF 2D 8D 01 00 00 0E 40 7E – Following W2-SVP-630 test 71 60 1A 03 C3 04 07 09 06 7E – Following W2-SVP-630 test with motor disconnected

71 60 1A 03 C3 04 05 09 0D 7E71 60 1A 03 C3 04 15 09 00 7E – Following W2-SVP-630 test with battery disconnected

D2 62 6C 70 00 DF 2D 8D 01 00 00 0E 40 7E

D2 2A 38 41 00 EF 60 1A 03 00 00 09 40 7E

D2 2A 38 41 00 EF 60 1A 03 00 00 09 40 7E

D2 2B 37 41 00 EF 60 1A 03 00 00 09 40 7E

D2 2B 37 41 00 EF 60 1A 03 00 00 09 40 7E

D2 2A 38 41 00 EF 60 1A 03 00 00 09 40 7E

D2 2B 37 38 00 EF 60 1A 03 00 00 09 40 7E

70 2D 8D 01 81 00 ED 08 07 0E 7E