SignalPoint

UHF REMOTE RECEIVER
INSTALLATION & PROGRAMMING

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Introduction

The connection of the UHF Remote Receiver (83-5428) to the SignalPoint Control Panel is detailed in the following instructions. The UHF Remote Receiver is hardwired to the Control Panel via 2 core fire resistant screened cable.

The UHF remote receiver capable of receiving UHF signals from a number of transponder units on site. The transponder units are wireless devices, which receive information from detectors and then re-transmit this information to the UHF remote receiver, thus improving the overall range coverage of the system. This information is then sent to the control panel via cable. A maximum of 28 remote receivers can be connected to the Control Panel. A block diagram of a system using the UHF remote receiver is shown in Figure 1.

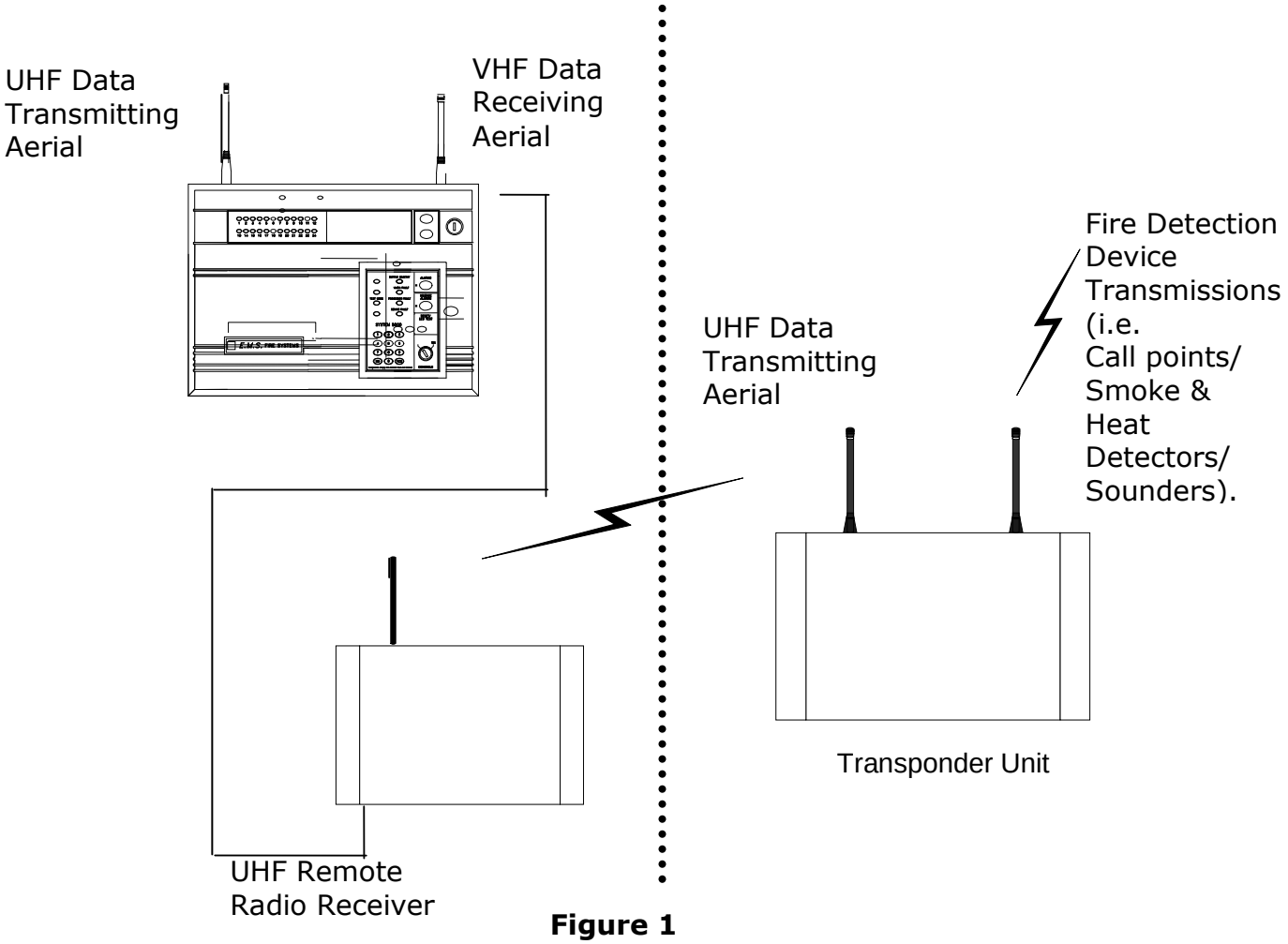


Figure 1

Tools & Test Equipment

Only standard hand tools are required to install the UHF Remote Receiver. No special test equipment is needed when installing the receiver, although signals from devices can be seen if a computer with a terminal programme is connected to the system.

This gives a visual indication that the remote receivers are passing device data to the main control panel.

Receiver Position

The maximum range between remote receiver and any device is dependant upon the environment in which the system is operating. The actual range achieved is determined by local site conditions. For range improvements high gain aerials can be attached to the remote receivers. The table below indicates relevant aerials:-

UHF Remote Receiver Relevant high gain aerials

5-5501	High gain aerial c/w 3 metres of cable and bracket.
5-5501/BP10	High gain aerial c/w 10 metres of cable, wall mounting bracket and extension pole.
5-5501/BP20	High gain aerial c/w 20 metres of low loss cable, wall mounting bracket and extension pole.
5-5501/BP30	High gain aerial c/w 30 metres of low loss cable, wall mounting bracket and extension pole.

Remote Receiver Installation

The UHF remote receiver should be wired as shown in the supplied drawing PO3045.

The following paragraphs outline the installation in a step by step format.

Remove the four lid retaining screws situated on the front cover. The front section of the unit can now be removed.

Four fixing holes are available for the unit's installation. These are clearly visible on the outside of the casing.

Offer the back box up to the wall and check that the rear tamper switch operates. Should the micro switch not operate, remove the unit from the wall and carefully adjust the micro switch arm. Once the micro switch operates correctly the unit can be fixed to the wall and all external wiring connections made.

The diagram PO3045 shows the wiring connections required for the remote receiver. Only those cables needed to make the remote receiver function should be routed into the case. The Remote Receiver must NOT be used as a junction box or cable termination point as this will adversely affect the performance of the system.

When all connections have been made to the remote receiver the battery can be connected, the lid can be re-fixed and mains voltage can then be applied.

Software Configuration

To allow the Control Panel and remote receivers to work together, some software configuration will be necessary, the following instructions detail in a step by step format how the configuration should take place for reliable communication. The menu structure indicated at the end of this section locates the menus, which require entering.

1 With the key the "ON" position, the screen will now display:

```
Panel In Access

DATE              TIME
```

2 Press the "0" key. The screen will now display:

```
|  ***  Options  ****  |
 > Passwords        <
|  Time and Date     |
YES = Select        TIME
```

3 Press the "YES" key. The screen will now display:

```
| * PIN's and Access * |
 >User  Log On         <
| View Users           |
YES = Select        TIME
```

4 Press the "YES" key. The screen will now display:

```
 Enter your PIN
For Access >
Then Press YES   TIME
```

5 Enter your PIN number (Engineering default = 221100) and press the "YES" key. The screen will now display:

```
 *************************
* Welcome Engineer *
 *************************
Push any Key       TIME
```

6 Press any key and the screen will display:

```
| ***  Options  **** |
 >Passwords         <
| Time and Date      |
YES = Select        TIME
```

7 Press the "∇" key, until 'the screen displays:

```
|  Logging           |
 >Fire System Opts <
|  Remote Access     |
Yes = select        Time
```

8 Press the "YES" button and the screen will display.

```
|  ** Fire system **   |
 >Dev. Disable/Test  <
|  Net. Disable/Test   |
Yes= Select         Time
```

9 Press the "∇" key, until 'the screen displays:

```
|  System Mode         |
>  Engineers Config  <
|  Printer Options     |
 Yes= Select         Time
```

10 Press the "YES" key and the screen will display:

```
| ** Eng.  Config **  |
 >Device Database   <
| Sounder Options    |
Yes= Select         Time
```

```
| Reset Security      |
 >Reset System      <
| Lan Options         |
 Yes= Select        Time
```

11 Press the "∇" key, until 'the screen displays:

12 Press the "YES" key followed by the "0" key on the keypad the screen will now display:

```
|  **  Main Menu **   |
 >Pins & Access      <
| System Support     |
Yes= Select        Time
```

13 Press the "∇" key, until 'the screen displays:

```
| System Support     |
> Serial Comms       <
| Pager Setup        |
Yes= Select        Time
```

14 Press the "YES" button and the screen will display:

```
| ** Serial Comms ** |
 >Device Table       <
| Re-start Bus       |
YES = Select       TIME
```

15 Press the "∇" key, until 'the screen displays:

```
|  Re-online Device   |
 > Bus Master Setup <
|  Bus Remote Setup |
 Yes= Select       Time
```

16 Press the "YES" button and the screen will display:

```
|  ** Master Setup**  |
 >Polling Baudrate  <
| Auto Re-online     |
 YES = Select      TIME
```

17 Press the "∇" key, until 'the screen displays:

```
|  Auto Re-online     |
 > Port to use       <
|  ^^^^^^^^^^^^^     |
Yes= Select        Time
```

18 Press the "YES" button and the screen will display:

```
 Master Port = 0
 0 = Off, 1 = RS485
 2 = PAGER 232 > _
 YES = Finish    TIME
```

19 Press the "1" key followed by the "YES" key and the screen will display:

```
|  Auto Re-online     |
 > Port to use       <
|  ^^^^^^^^^^^^^     |
Yes= Select        Time
```

20 Press the "NO" key once and the screen will display:

```
|  Re-online Device   |
 > Bus Master Setup <
|  Bus Remote Setup |
 Yes= Select       Time
```

21 Press the "Δ" key until the screen displays:

```
| Device Table       |
 >Re-start Bus       <
| Re-Online Device   |
 YES = Select      TIME
```

22 Press the "YES" button and the screen will display:

```
Re-initialising Bus
Please wait....* *
Push any key    TIME
```

23 Once completed the screen will display:

```
Re-initialising Bus
Please wait....*Done*
Push any key    TIME
```

24 Push any key and the screen will display:

```
| Device Table        |
>Re-start Bus         <
| Re-Online Device    |
YES = Select      TIME
```

25 Press the "∇" key, until 'the screen displays:

```
| Printer Redirect    |
>Monitor Comms        <
| Delete Device       |
YES = Select      TIME
```

26 Push any key and the screen will display:

```
HEAP00  AUX=00  PGR=00
REM000  MAS010  T00-00
 I00   L00   R00   S00   C00
Push any Key      TIME
```

The above display can be used to check how many remote receivers are communicating with the Control Panel. For each remote receiver that is connected, the MAS number shown will increase by 10. I.e. if one is connected the MAS will show MAS010 if two receivers are connected the MAS will show MAS020.

27 Press the "No" key twice. The screen will change to display:

```
| System Support     |
> Serial Comms       <
| Pager Setup        |
Yes= Select       Time
```

28 Press the "∇" key, until 'the screen displays:

```
| Logging            |
>Remote Rxers        <
| Ext. Comms         |
Yes= Select       Time
```

29 Press the "YES" button and the screen will display:

```
|* Remote Receivers *|
>Receivers Found     <
| Enable Receiver    |
Yes= Select       Time
```

30 Press the "∇" key, until 'the screen displays:

```
| Enable Receiver    |
>Enable Collector    <
| Monitor Traffic    |
Yes= Select       Time
```

31 Press the "YES" button and the screen will display:

```
Collector: ENABLED
Push Yes to change
Push No to escape
Yes= Select       Time
```

32 The collector should be set to "ENABLED", press the "YES" key to change its status. Once set to "Enabled" press the "NO" key. The screen will display:

```
| Enable Receiver    |
>Enable Collector    <
| Monitor Traffic    |
Yes= Select       Time
```

33 Press the "NO" key once and the screen will display:

```
| Logging            |
>Remote Rxers        <
| Ext. Comms         |
Yes= Select       Time
```

34 Press the "∇" key, until 'the screen displays:

```
|  Checksum Data     |
> Network Router     <
|  Radio Lan         |
Yes= Select       Time
```

35 Press the "YES" button and the screen will display:

```
| * NETWORK ROUTER *|
>Setup local NUA      <
| View network NUA    |
Yes= Select         Time
```

36 Press the "YES" button and the screen will display:

```
Local NUA :
Input Local NUA_

Yes= Finish         Time
```

37 Enter "00" followed by the "YES" key. The screen will display:

```
_ _SET AS MASTER _ _


Push Any Key     Time
```

38 Push any key and the screen will display:

```
|  * NETWORK ROUTER*|
 > Setup local NUA    <
|  View network NUA   |
Yes= Select         Time
```

39 Press the "▽" key, until 'the screen displays:

```
|  Network Name       |
 > Control Routing   <
|  Send Test          |
Yes= Select         Time
```

40 Press the "YES" button and the screen will display:

```
Routing : DISABLED
Push YES to change
Push NO to escape
Yes/No              Time
```

41 The router should be set to "ENABLED", press the "YES" key to change its status. Once set to "Enabled" press the "NO" key. The screen will display:

```
|  Network Name       |
> Control Routing    <
|  Send Test          |
Yes= Select         Time
```

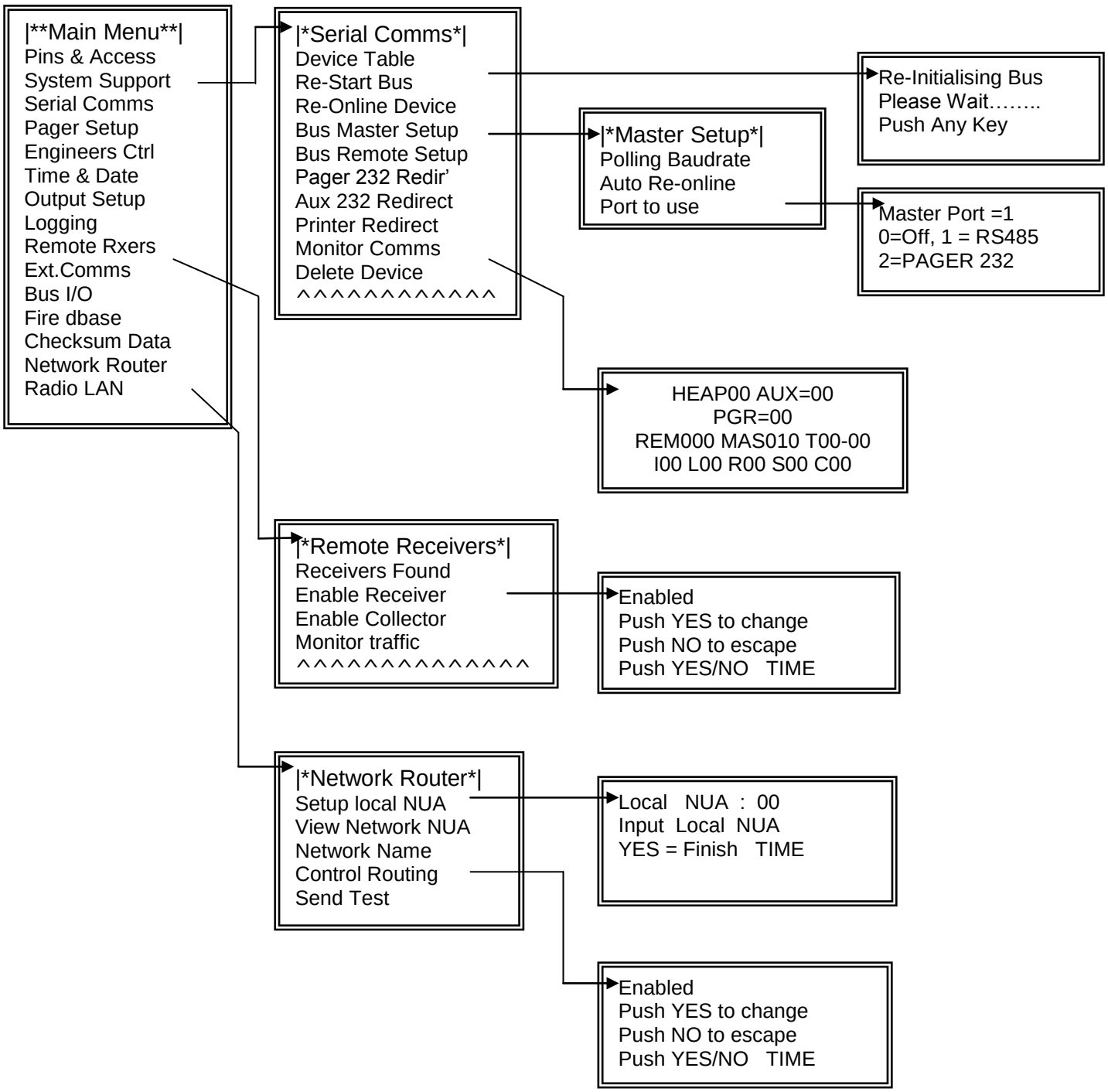
42 Press the "NO" key twice and the screen will display:

```
      Panel In Access

Date                Time
```

43 Now turn the control keyswitch to the "OFF" position and the screen will display: The Remote Receiver is now programmed to the System.

```
      Status Normal

Date                Time
```

Control Panel Engineers Menu Structure



Testing The System

If the system is not performing as expected in terms of range, monitoring the Comms between the main and remote receivers may well indicate the cause of the problem (see Control Panel Engineers Menu Structure).

For example, a large number of Time-outs by a particular remote indicates a poor connection, poor screening, or the cable passing near enough to a data cable to introduce interference onto the bus.

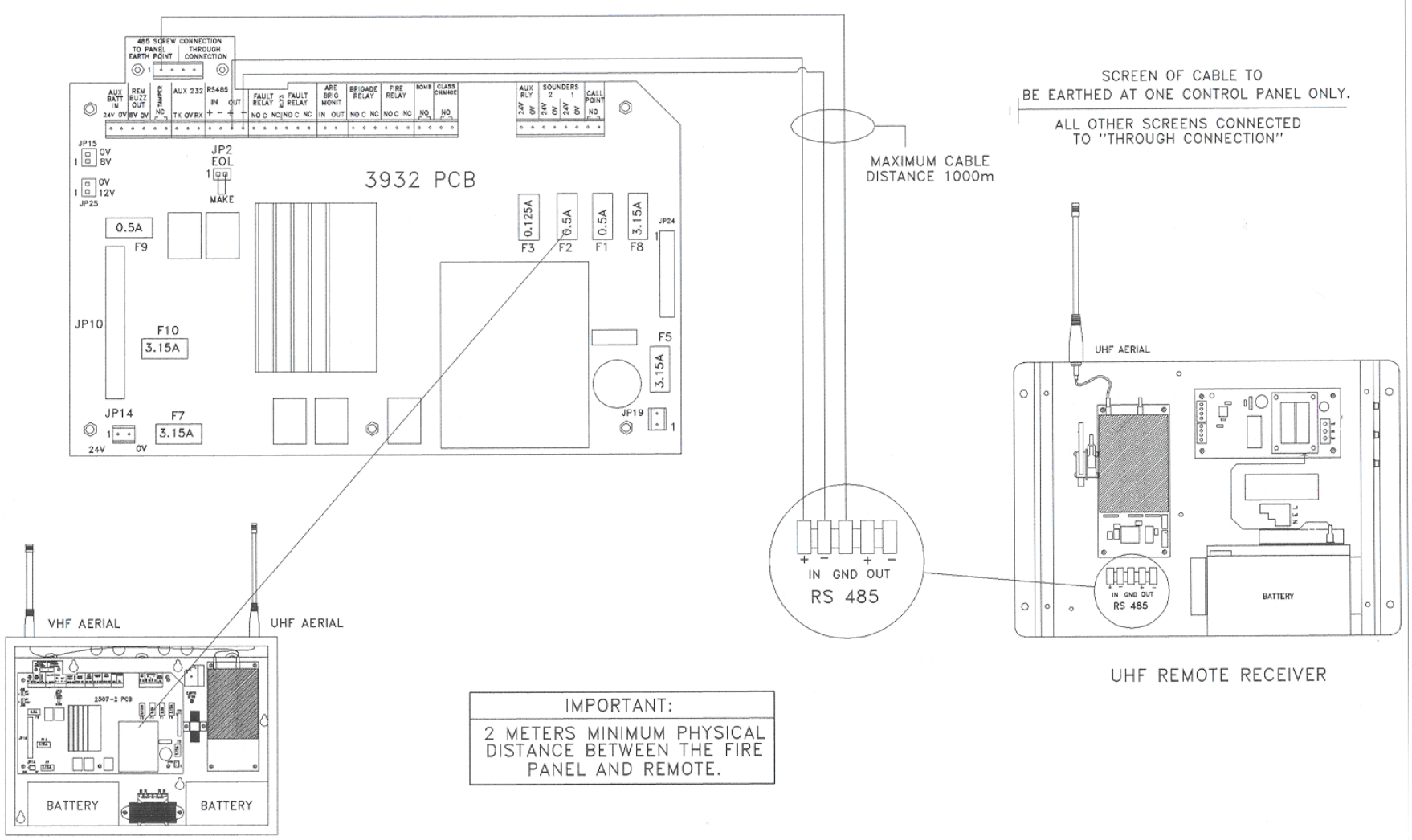
Once UHF Remote receivers have been installed and are communicating with the Control Panel, the transponder units which will send device information to the remote receiver should be installed (see transponder installation instructions for details).

SignalPoint

DWG NO. P03045

E.M.S. Ltd UNIT 11 Sea St. Herne Bay, Kent CT6 8JZ Tel : 01227 369570

DO NOT SCALE.



IMPORTANT:
2 METERS MINIMUM PHYSICAL DISTANCE BETWEEN THE FIRE PANEL AND REMOTE.

SIMILAR TO P03045

ISS.NO.	4		
MOD No.			
	INIT.	SIG	DATE
DRAWN	CDU		
CHECKED			
APPROVED.			

EMS HERNE BAY, KENT CT6 8JZ

MATL. N/A

FINISH. N/A

TOLERANCES UNLESS OTHERWISE STATED ABOVE
GENERAL +/-0.3mm
HOLE CRS. +/-0.1mm

DESCRIPTION.
SIGNALPOINT TO UHF REMOTE RECEIVER WIRING DIAGRAM

USED ON

DWG No. P03045

SHT. OF.

Controller Information

TECHNICAL INFORMATION FOR THE UHF Remote Receiver

Dimensions:	390mm x 320mm x 80mm
Operating Frequencies:	UHF 458.5 – 459.5 MHz (Receiver)
Operating Temperature:	-10 to +55 degrees C
Humidity:	Up to 75% non-condensing.
Channel Spacing:	25 kHz
Supply:	230v 50Hz
Current Consumption:	154mA in standby
Battery space:	1 x 12volt 7Ah batteries (supplied) EMS only recommend: Yucel Model No: NP7-12 or a battery of equivalent specification
Recommended battery replacement intervals:	5 years