39214-498/2008/Issue 1

Troub le shooting

Before investigating individual units for faults, it is important to check that the system wiring is fault free. Earth faults on data loops or interface zone wiring may cause communication errors.

Many fault conditions are the result of simple wiring errors. Check all connections to the unit. Do not overtighten screws when mounting the backbox.

Fault Finding

Proble m

Possible Cause

No response or missing

Incorrect address setting
Loop terminal incorrectly fitted

Incorrect loop wiring

Alarm condition

Glass or element incorrectly fitted or broken

Test key not removed

Routine testing

Insert the test key into the hole at the bottom of the call point and push home. Observe routine test requirements as specified in EN54–11: 2001 or the applicable local code.

Re se tting

After testing, reset the call point by removing the test key and pushing up the front cover until it clicks home.

Ea rthing

An earthing plate is provided for continuity of metal conduits. This must be placed behind the back box prior to fixing the box to the wall.

Important Information

The use of lubricants, cleaning solvents or petroleum based products should be avoided. The O-ring should be replaced when refitting or replacing the Waterproof cover.

Transparent hinged cover

To provide additional protection against accidental operation, a transparent hinged cover with a locking tag, part no 26729-152, is available.

Please note that the call point does not conform to EN54-11: 2001 when this lid is fitted and secure d with the locking tag supplied.

For further information, please refer to the Discovery Engineering Product Guide, PP2052. For isolator operation information refer to PP2090. Both documents are available on request.

© Apollo Fire Detectors Limited 2006-2008

Apollo Fire Detectors Limited, 36 Brookside Road, Havant, Hampshire, PO9 1JR, UK
Tel: +44 (0) 23 9249 2412 Fax: +44 (0) 23 9249 2754
Email: techsales@apollo-fire.co.uk Website: www.apollo-fire.co.uk





Discovery Marine Waterproof Manual Call Point (EN54) Installation Guide

General

The Discovery Marine Manual Call Point (EN54) is available in two versions:

- part no. 58100-975, non-isolated red Manual Call Point.
- part no. 58100-976, isolated red Manual Call Point.

Insta lla tio n

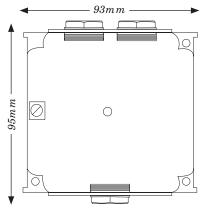
- 1. Fit the backbox to a flat surface using the three fixing holes and screws provided. The cable entry holes should be in the vertical plane. The backbox can be mounted with either the single or double entry holes at the top. (Fig 1).
- Remove terminal blocks from the PCB. Run the cables from the loop into the backbox and connect them to the terminal blocks as shown in Fig 2. Ensure that functional earth/screen continuity is maintained. Screens should be connected to the yellow terminal block marked 1-4 on the PCB cover.
- 3. If a loop continuity test is to be done, it should be carried out before securing the call point to the backbox (step 5). Insert the continuity links supplied with the backbox (Fig 4) into the terminal blocks before testing. After testing for continuity, remove the connectors and store for re-use.
- 4. Set the unit address on the DIL switch in accordance with the address table overleaf.
- 5. Reconnect the terminal blocks to the PCB and ensure that the O-ring is correctly seated in the channel. Place the cover squarely over the backbox and carefully push the cover until the locating clips have engaged, use the 4 fixing screws to lock the cover in place. **Do not use excessive force, do not over tighten screws.**
- 6. To remove the cover, undo and remove the four cover fixing screws. The four retaining clips also need to be released. To do this place a large flat bladed screwdriver into the slot between the cover and backbox and gently twist until the clip disengages (Fig 3). Repeat this for the three remaining clips and pull the cover away from the backbox.

1

The Discovery Marine Waterproof Manual Call Point (EN54) is a 'type A' call point and is suitable for outdoor use.

Wiring Details

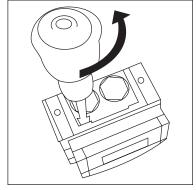
To maintain the integrity of the enclosure it is essential that suitable IP67 cable alands be used.



Loop connections functional earth/screen connections

Fig 1 Backbox

Fig 2 Terminal block connections and address 78 set



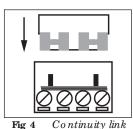


Fig 3 Coverre moval

Maximum Loop Current Consumption at 24V

Operating temperature Quiescent Alarm Current IP ratina

-30°C to +70°C 100µA 4mA IP67

LED Indicator

- Illuminated red (under CIE control) when call point is operated
- Illuminated yellow when short-circuit isolator has operated (version with integrated isolator)
- Flashing red (under CIE control) when MCP is polled by the control panel.

Address Setting

The address of the Manual Call Point is set using the DIL switch. All segments of the switch are set to 0 or 1, using a small screwdriver or similar tool.

A complete list of address settings is shown in the following table.

addr 1234567 ad	switch ing
2 0100000 12 0011000 22 0110100 32 0000010 42 0101 3 1100000 13 1011000 23 1110100 33 1000010 43 1101 4 0010000 14 0111000 24 0001100 34 010010 44 0011 5 1010000 15 1111000 25 1001100 35 1100010 45 1011 6 0110000 16 0000100 26 0101100 36 0010010 46 0111 7 1110000 17 1000100 27 1101100 37 1010010 47 1111 8 0001000 18 0100100 28 0011100 38 0110010 48 0000 9 1001000 19 1100100 29 1011100 39 1110010 49 1000 51 1100110 61 1011110 71	0
3 1100000 13 1011000 23 1110100 33 1000010 43 1101 4 0010000 14 0111000 24 0001100 34 0100010 44 0011 5 1010000 15 1111000 25 1001100 35 1100010 45 1011 6 0110000 16 0000100 26 0101100 36 001001 46 011 7 1110000 17 1000100 27 1101100 37 1010010 47 1111 8 0001000 18 0100100 28 0011100 38 0110010 48 0000 9 1001000 19 1100100 29 1011100 39 1110010 49 1000 10 0101000 20 0010100 30 0111100 40 0001010 50 0100 51 1100110 61 1011110 71	010
4 0010000 14 0111000 24 0001100 34 0100010 44 0011 5 1010000 15 1111000 25 1001100 35 1100010 45 1011 6 0110000 16 0000100 26 0101100 36 0010010 46 0111 7 1110000 17 1000100 27 1101100 37 1010010 47 1111 8 0001000 18 0100100 28 0011100 38 0110010 48 0000 9 1001000 19 1100100 29 1011100 39 1110010 49 1000 10 0101000 20 0010100 30 0111100 40 0001010 50 0100 51 1100110 61 1011110 71 1110001 81 1000101 91 1101 52 0010110 62 0111110 72	010
5 1010000 15 1111000 25 1001100 35 1100010 45 1011 6 0110000 16 0000100 26 0101100 36 0010010 46 0111 7 1110000 17 1000100 27 1101100 37 1010010 47 1111 8 0001000 18 0100100 28 0011100 38 0110010 48 0000 9 1001000 19 1100100 29 1011100 39 1110010 49 1000 10 0101000 20 0010100 30 0111100 40 0001010 50 0100 51 1100110 61 1011110 71 1110001 81 1000101 91 1101 52 0010110 62 0111110 72 0001001 82 0100101 92 0011 53 1010110 63 1111110 73	010
6 0110000 16 0000100 26 0101100 36 0010010 46 0111 7 1110000 17 1000100 27 1101100 37 1010010 47 1111 8 0001000 18 0100100 28 0011100 38 0110010 48 0000 9 1001000 19 1100100 29 1011100 39 1110010 49 1000 10 0101000 20 0010100 30 0111100 40 0001010 50 0100 51 1100110 61 1011110 71 1110001 81 1000101 91 1101 52 0010110 62 0111110 72 0001001 82 0100101 92 0011 53 1010110 63 111110 73 1001001 83 1100101 93 1011 54 0110110 64 0000001 74	010
7 1110000 17 1000100 27 1101100 37 1010010 47 1111 8 0001000 18 0100100 28 0011100 38 0110010 48 0000 9 1001000 19 1100100 29 1011100 39 1110010 49 1000 10 0101000 20 0010100 30 0111100 40 0001010 50 0100 51 1100110 61 1011110 71 1110001 81 1000101 91 1101 52 0010110 62 0111110 72 0001001 82 0100101 92 0011 53 1010110 63 1111110 73 1001001 83 1100101 93 1011 54 0110110 64 0000001 74 0101001 84 0010101 94 0111 55 1101101 65 1000001 75	010
8 0001000 18 0100100 28 0011100 38 0110010 48 0000 9 1001000 19 1100100 29 1011100 39 1110010 49 1000 10 0101000 20 0010100 30 0111100 40 0001010 50 0100 51 1100110 61 1011110 71 1110001 81 1000101 91 1101 52 0010110 62 0111110 72 0001001 82 0100101 92 0011 53 1010110 63 1111110 73 1001001 83 1100101 93 1011 54 0110110 64 0000001 74 0101001 84 0010101 94 0111 55 110110 65 1000001 75 1101001 85 1010101 96 0000 57 1001110 67 1100001 77	010
9 1001000 19 1100100 29 1011100 39 1110010 49 1000 10 0101000 20 0010100 30 0111100 40 0001010 50 0100 51 1100110 61 1011110 71 1110001 81 1000101 91 1101 52 0010110 62 0111110 72 0001001 82 0100101 92 0011 53 1010110 63 1111110 73 1001001 83 1100101 93 1011 54 0110110 64 0000001 74 0101001 84 0010101 94 0111 55 110110 65 1000001 75 1101001 85 1010101 96 0000 57 1001110 66 0100001 77 1011001 87 111001 97 1000 58 0101110 69 0100001 78	010
10 0101000 20 0010100 30 0111100 40 0001010 50 0100 51 1100110 61 1011110 71 1110001 81 1000101 91 1101 52 0010110 62 0111110 72 0001001 82 0100101 92 0011 53 1010110 63 1111110 73 1001001 83 1100101 93 1011 54 0110110 64 0000001 74 0101001 84 0010101 94 0111 55 1110110 65 1000001 75 1101001 85 1010101 95 1111 56 0001110 66 0100001 76 0011001 86 0110101 96 0000 57 1001110 67 1100001 78 0111001 87 1111001 97 1000 58 0101110 69 1010001 79 <td>110</td>	110
51 1100110 61 1011110 71 1110001 81 1000101 91 1101 52 0010110 62 0111110 72 0001001 82 0100101 92 0011 53 1010110 63 1111110 73 1001001 83 1100101 93 1011 54 0110110 64 0000001 74 0101001 84 0010101 94 0111 55 110110 65 1000001 75 1101001 85 1010101 95 1111 56 0001110 66 0100001 76 0011001 86 0110101 96 0000 57 1001110 67 1100001 77 1011001 87 1110101 97 1000 58 0101110 68 0010001 78 0111001 88 0001101 98 0100 59 1101110 69 1010001 79 <td>110</td>	110
52 0010110 62 0111110 72 0001001 82 0100101 92 0011 53 1010110 63 1111110 73 1001001 83 1100101 93 1011 54 0110110 64 0000001 74 0101001 84 0010101 94 0111 55 1110110 65 1000001 75 1101001 85 1010101 95 1111 56 0001110 66 0100001 76 0011001 86 0110101 96 0000 57 1001110 67 1100001 77 1011001 87 1110101 97 1000 58 0101110 68 0010001 78 0111001 88 0001101 98 0100 59 1101110 69 1010001 79 1111001 89 1001101 99 1100 60 0011110 70 0110001 80 <td>110</td>	110
53 1010110 63 1111110 73 1001001 83 1100101 93 1011 54 0110110 64 0000001 74 0101001 84 0010101 94 0111 55 1110110 65 1000001 75 1101001 85 1010101 95 1111 56 0001110 66 0100001 76 0011001 86 0110101 96 0000 57 1001110 67 1100001 77 1011001 87 1111001 97 1000 58 0101110 68 0010001 78 0111001 88 0001101 98 0100 59 1101110 69 1010001 79 1111001 89 1001101 99 1100 60 0011110 70 0110001 80 0000101 90 0101101 100 0010	101
54 0110110 64 0000001 74 0101001 84 0010101 94 0111 55 1110110 65 1000001 75 1101001 85 1010101 95 1111 56 0001110 66 0100001 76 0011001 86 0110101 96 0000 57 1001110 67 1100001 77 1011001 87 1110101 97 1000 58 0101110 68 0010001 78 0111001 88 0001101 98 010 59 1101110 69 1010001 79 1111001 89 1001101 99 1100 60 0011110 70 0110001 80 0000101 90 0101101 100 0010	101
55 1110110 65 1000001 75 1101001 85 1010101 95 1111 56 0001110 66 0100001 76 0011001 86 0110101 96 0000 57 1001110 67 1100001 77 1011001 87 1110101 97 1000 58 0101110 68 0010001 78 0111001 88 0001101 98 0100 59 1101110 69 1010001 79 1111001 89 1001101 99 1100 60 0011110 70 0110001 80 0000101 90 0101101 100 0010	101
56 0001110 66 0100001 76 0011001 86 0110101 96 0000 57 1001110 67 1100001 77 1011001 87 1110101 97 1000 58 0101110 68 0010001 78 0111001 88 0001101 98 0100 59 1101110 69 1010001 79 1111001 89 1001101 99 1100 60 0011110 70 0110001 80 0000101 90 0101101 100 0010	101
57 1001110 67 1100001 77 1011001 87 1110101 97 1000 58 0101110 68 0010001 78 0111001 88 0001101 98 0100 59 1101110 69 1010001 79 1111001 89 1001101 99 1100 60 0011110 70 0110001 80 0000101 90 0101101 100 0010	101
58 0101110 68 0010001 78 0111001 88 0001101 98 0100 59 1101110 69 1010001 79 1111001 89 1001101 99 1100 60 0011110 70 0110001 80 0000101 90 0101101 100 0010	011
59 1101110 69 1010001 79 1111001 89 1001101 99 1100 60 0011110 70 0110001 80 0000101 90 0101101 100 0010	011
60 0011110 70 0110001 80 0000101 90 0101101 100 0010	011
	011
101 1010011 106 0101011 111 1111011 116 0010111 121 1001	011
	111
102 0110011 107 1101011 112 0000111 117 1010111 122 0101	111
103 1110011 108 0011011 113 1000111 118 0110111 123 1101	
104 0001011 109 1011011 114 0100111 119 1110111 124 0011	111
105 1001011 110 0111011 115 1100111 120 0001111 125 1011	111
126 0111	111

The switch in Fig 2 shows address setting 78 as an example of how to set the address

Commissioning

The installation must conform to applicable local codes.

Ensure that a glass or deformable element is fitted to each call point before testing. Use the test key provided to check the operation of each device. An XP95 Test Set, part no. 55000-870, may be used to carry out functional testing of individual units. The test set can also perform data integrity tests of an entire system.

Note: the test key must remain inserted for at least 2 seconds to ensure the correct CIE re sponse.