

Low Battery Indication

If the battery runs down to a pre-defined level, the LCD displays the following message, irrespective of what other message it is giving:



The Discovery Programmer has a permanently fitted battery which is charged by a power pack supplied with the programmer. The battery charging cycle is regulated automatically when the power pack is connected; the power pack can thus remain connected for as long as is convenient.

The 'FAST CHARGE/POWER' LED is illuminated red if the programmer is on fast charge and green if it is on trickle charge.

CO Detector Testing

In order to test CO detectors it is necessary to fit an adapter, part no 53832-031, to the base on the programmer. The adapter may be locked to the Discovery Programmer by turning the grub screw. The CO detector is fitted to the adapter and the programmer is used in the manner described above.

All other XP95 and Discovery detectors can be tested with the adapter fitted to the programmer.

Manual Call Points

Note: Prior to connecting any Manual Call Point to the Programmer or Adaptor, please ensure that the address of the Manual Call Point is set to 42 and that the Call Point is **not** in alarm mode, ie the glass is not removed or displaced and the test key is not inserted.

The programmer software is now compatible with manual call points. A call point is connected either to the Discovery adapter or directly to the programmer, using the L1 and L2 terminal screws.

When the programmer is powered up it displays information in the same way as for detectors. The manual call point is tested by inserting the test key supplied. If the call point is operating correctly the programmer will display an analogue value of 64. The glass of the call point should be displaced by the action of inserting the test key.

Note: this user guide should be read in conjunction with the Discovery Engineering Product Guide, Apollo publication number PP2052, which gives full information on the use of Discovery detectors.

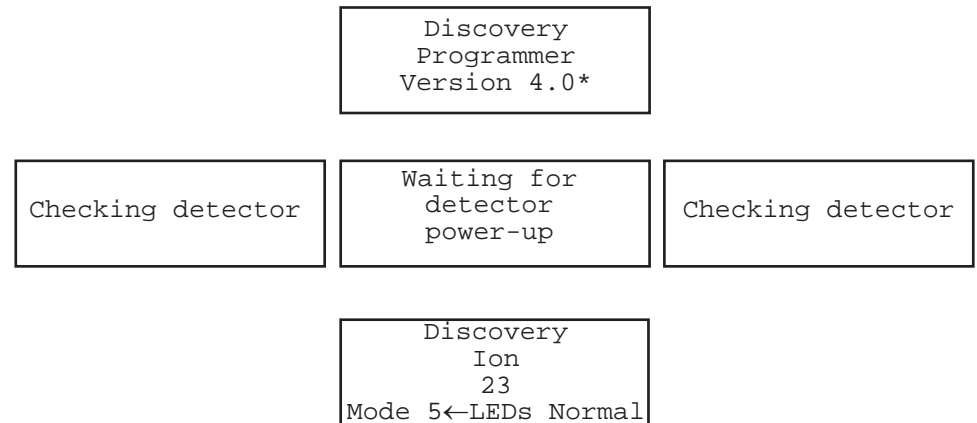


Discovery Programmer User Guide

General

The Discovery Programmer is a hand-held device used to program a Discovery detector to be connected to a loop of analogue addressable detectors controlled by an XP95 panel. It can also be used to test both Discovery and XP95 detectors.

The Discovery Programmer has a detector mounting base permanently fitted to its upper surface. It accepts both XP95 and Discovery detectors and is able to distinguish automatically between both types. The programmer is also compatible with CO detectors and manual call points.



* Version number may be different to the one shown.

Programming and Testing Discovery Detectors

When a normally-functioning Discovery detector is fitted to the programmer the LCD screen automatically displays a series of messages as follows:

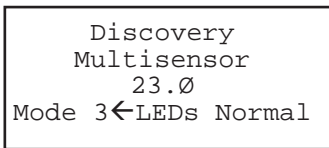
The messages in the first four screens are always identical but the data given in the screen shown in the bottom row on the front page will vary and will show data unique to each individual detector. The information shown is:

- Detector range
- Detector type
- Analogue value
- Mode and LED status

At this point the buttons are enabled and are pressed to view or scroll through data. Each button has specific functions and can be used as required. The messages on screen now depend on the actions of the user. When either button is pressed a bleep acknowledges the action.



Press the left button to check and/or change the operating mode. The screen shows the type of detector, the analogue value, the selected mode and the state of the LEDs:



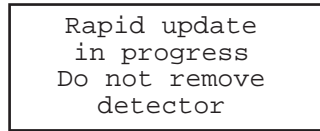
Use the left button to scroll through the mode settings.

Scroll menu

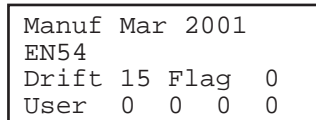
- Mode 1
- Mode 2
- Mode 3
- Mode 4
- Mode 5
- Rapid Update
- Detector Test
- Read Fields

If it is required to change the mode, select the new mode and press both buttons together to enter the selection. The Programmer acknowledges the storing of the new selection by a double bleep.

When scrolling through the modes the option 'Rapid Update' is also available. If this is selected and entered, the screen shows:



followed by the 'Read Fields' sequence.

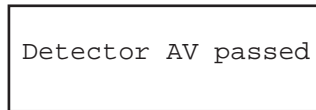


More information will appear as individual fields are read. This information is unique to each individual detector.

Functional Testing—Method 1

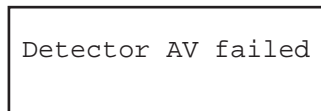
There are two methods of testing detectors. One test is performed by selecting 'Detector Test' from the scroll menu.

If this is selected and entered the programmer sets the Output Bits to '1' to initiate the remote test and switch on the LEDs. If the detector is functioning normally, the programmer will display the following message:



and both the integral and remote LEDs will switch on. Press either button to return to the menu screen.

If the detector is faulty the detector fails the test and the programmer displays the message:



Remove the detector and return it to Apollo's Service Department.

Functional Testing—Method 2

The second method is to fit a detector to the Discovery Programmer and apply smoke or heat as appropriate, once the analogue value is displayed.

If the detector is functioning normally, the analogue value will increase to 55—the alarm level count—or greater.

Note: the second test method will not generate a pass or fail message. The analogue value must be visually checked to determine whether or not the detector has passed the test.

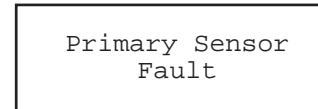


Press the right button to change the LEDs. The message toggles from 'LEDs Normal' to 'LEDs flash'.

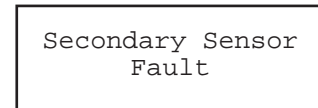
When the desired LED mode has been selected, press both buttons to enter. If the 'LEDs flash' mode has been selected, the LEDs will flash every time the detector is interrogated.

Detector Failure

If a Discovery ionisation, optical or heat detector or the optical sensor of the Multi-Sensor detector fails to report an analogue value of 8 or greater when the left-hand button is pressed, the following message is shown on the LCD screen:



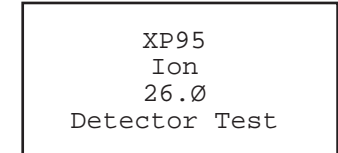
If the heat sensor of the Multi-Sensor detector fails to report an analogue value of 8 or greater, the LCD screen displays:



In either case the detector should be returned to Apollo's Service Department.

Checking and Testing XP95 detectors

When an XP95 detector is fitted to the programmer the first three screen displays are identical to those of the Discovery detectors. The fourth screen indicates the type of detector and shows its analogue value in real time:



The buttons are not *individually* enabled and do not initiate any action if pressed.

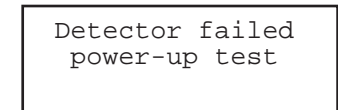
Functional Testing

XP95 detectors are tested in the same way as Discovery detectors. 'Detector Test' appears automatically on the LCD screen when XP95 detectors are fitted to the programmer. For the internally generated test (see Functional Testing—Method 1 above) press both buttons together to initiate the test.

For the test using an external stimulus, follow the instructions above 'Functional Testing—Method 2.'

Detector Failure

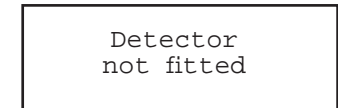
If an XP95 detector fails to provide an analogue value of 1 or greater, the following message is displayed:



The detector should be returned to Apollo's Service Department.

Switching off

The Programmer is switched off simply by removing a detector. The screen then displays the message:



and enters sleep mode after 10 seconds.