



Part Number ORB-MB-00002-APO

**ORBIS
TIMESAVER LX**



Part Number ORB-RB-10004-APO

**ORBIS
RELAY BASE®**



Part Number ORB-SW-10005-APO

**ORBIS
SAV-WIRE BASE®**

The TimeSaver Base® is a design that provides installers with an open working area with fixing holes shaped to allow a fast mounting procedure.

The relay base incorporates a single-pole voltage-free changeover contact for switching ancillary equipment. The maximum contact rating is 30V 1A.

When the detector changes to the alarm state, the relay is energised, causing the contact to change state. The contact will remain in this condition until the detector is reset.

A base is available which allows Orbis detectors to be used in ‘Sav-Wire’ detection and alarm systems. Care should be taken to connect Sav-Wire bases correctly as shown in fig 9.

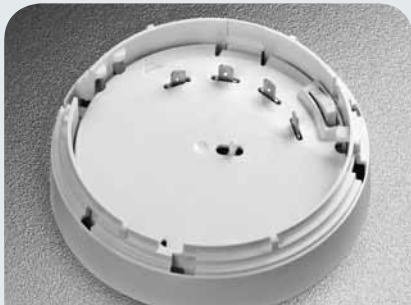
The Orbis Heater base is designed to be used in cold climates where environmental conditions could result in either icing or condensation affecting the operation of detectors. It



Part Number ORB-HB-00020-APO

**ORBIS
HEATER BASE**

is recommended that the heater base be used in conjunction with either a Waterproof Base Cover or Deckhead Mounting Box to minimise moisture ingress.



Part Number ORB-BA-10008-APO

**ORBIS
ADAPTOR**

An adaptor can be used to enable Orbis detectors to be fitted to Series 60/65 bases.

TimeSaver relay base wiring connections

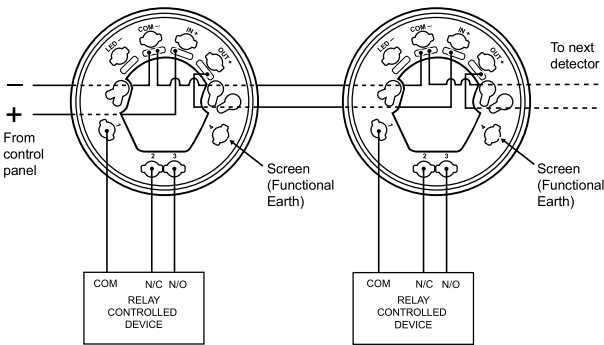
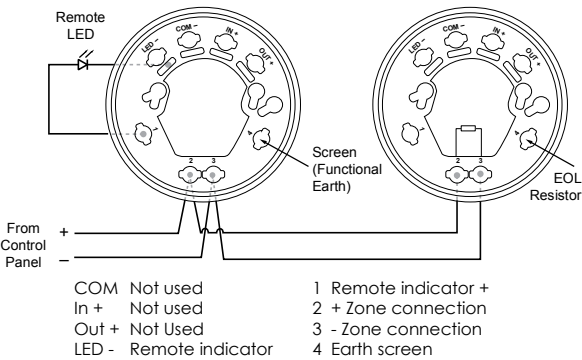


Figure 8

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Sav-Wire base wiring connections



NOTE: This Sav-Wire Base may be used only with compatible control panels.

Figure 9

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COMMISSIONING MADE EASY

Orbis has been designed with a number of features that make commissioning easier and that save time.

StartUp

When Orbis detectors are powered up they automatically enter a phase known as StartUp and in which they stay for 4 minutes. After this they revert to normal operation. If the detector is reset, ie, if power is disconnected for one second or longer, the detector will always enter StartUp for the first four minutes after power has been restored. The detector LED flashes red once a second to indicate that it is in StartUp.

What StartUp indicates

StartUp is used to check that the positive and negative cables are connected in the correct polarity and that power has been applied to the detector. If this is the case, the LED will flash red once a second.

StartUp will not check whether the IN+ and OUT+ connections have been transposed. This is not a problem if standard bases are used as the detector will operate normally.

If, however, diode bases are used and a detector is removed from a base with transposed positive connections none of the detectors beyond this point will operate.

FasTest®

Orbis detectors incorporate a test facility known as FasTest®.

In normal operation Orbis smoke detectors do not change to the alarm state at the first sensing of smoke. If they did, they could be too sensitive and cause false alarms. Algorithms determine the point at which the detector changes to alarm.

This could slow down routine maintenance during which detectors are tested by means of smoke or a smoke-simulating substance.

In order to avoid such a problem Orbis detectors have FasTest, a facility which is automatically available during StartUp and which modifies algorithms so that testing is possible within 4 seconds.

The problem of testing is even more acute in the case of heat detectors as they absorb a great deal of heat during testing. Orbis heat detectors also incorporate FasTest®.

In the case of heat detectors a fast test is defined as a sample which recognises a rise of 10°C within one minute. Since sampling takes place every 2 seconds an Orbis heat detector will respond within about 4 seconds.

Smoke or Heat Testing

Smoke or heat testing Orbis detectors is aided by the FasTest® feature. A detector will react rapidly to the correct stimulus if applied within 4 minutes after power up.

Choose the appropriate test function on the control panel and reset the detector circuit. This should place the detectors into FasTest®. Apply smoke or heat as appropriate and the detector should enter the alarm state within 4 seconds. The panel may sound the alarm and reset the zone automatically (refer to control panel's instructions). If not, silence the alarm and reset the panel. Repeat the procedure as necessary.

Note that the multisensor detector will respond to either smoke or heat while in FasTest®.

MAINTENANCE AND SERVICING

Detectors should be checked regularly at the intervals indicated by the locally applicable code of practice. Apollo recommends that detectors be checked at least once a year.

One of the features of Orbis is FasTest® which makes it possible to carry out a functional test, using smoke or heat, within about four seconds. If detectors appear not to be functioning correctly they should be returned to Apollo for testing.

If detectors are externally dirty they can be cleaned carefully with a damp cloth using a small amount of industrial alcohol.

DirtAlert™

Orbis detectors have drift compensation to compensate for changes caused by the environment. The most usual change is contamination.

If the detector is dirty to the point where it can no longer compensate, its LED will flash yellow while it is in StartUp. Maintenance checks should therefore include removing a detector from its base and re-inserting it or pressing reset on the panel to initiate StartUp.

A flashing yellow LED is not a sign that the detector needs to be replaced immediately. The decision to replace should be taken by the service engineer, taking the environment of the detector into account. If the detector is not replaced it will eventually cause false alarms.

When deciding how long to leave the detector on site in such a case, the following rule of thumb may be used:

installation time + 25%

For example, if a detector had been installed for four years when the LED flashed yellow, it could be left in place for up to 12 months.

Dirty detectors can be returned to Apollo for cleaning and recalibration.

APPROVALS AND REGULATORY COMPLIANCE

The Orbis range of detectors is approved by a large number of certification bodies. These include approvals to EN54:200 with LPCB, Vds, DIBT, BOSEC and FG. For further information on approvals held by Apollo contact the Sales Department or visit our website (details on page 2).

EU DIRECTIVES

Orbis complies with the requirements of a number of European New Approach Directives such as the EMC Directives 2004/108/EC and the Construction Products Directive 89/106/EEC. Visit the Apollo website to download EC certificates of conformity issued by the Notified Body, LPCB. Copies of Declarations of Conformity issued by Apollo for all applicable New Approach Directives are available on the Apollo website or from Apollo on request.

All Orbis products comply with the marking requirements of the WEEE Directive, 2002/96/EC. For further information on disposing of applicable electrical and electronic waste contact Apollo.