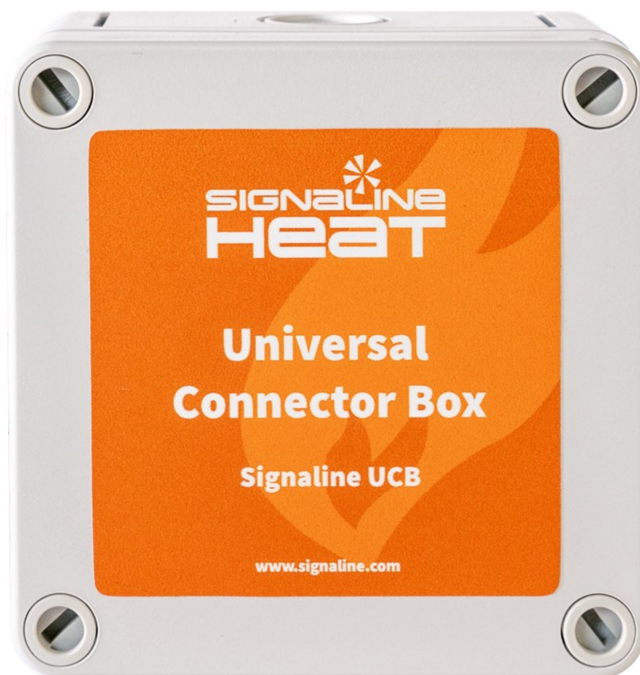


Signaline Universal Connection Box

Linear Heat Detection Connection Box



Installation Manual



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Revision 2 (2025)

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Overview

The Signaline Universal Connector Box (Signaline UCB) is suitable for use with all variants of Signaline FT, FT-R and FT-EN.

A UCB can be used as an end of line enclosure, junction box or an interposing line unit. It is supplied with cable glands, 1x terminal block, 1x 470Ω resistor and 1x 680Ω resistor.

Included resistors allow Signaline FT cable to be connected directly to the zone terminals of most conventional fire control panels.

NB: When using Signaline FT-EN, the Signaline UCB can only be used as a Junction Box or Interposing Line Unit. The Signaline FT-EOL-EN must be used as the EOL Box when using Signaline FT-EN cables.

The Signaline Universal Connector Box (Signaline UCB) consists of a kit of parts that can easily be configured into an End of Line Unit, a Junction Box or an Interposing Line Box. The kit consists of the following;

- 1 x enclosure
- 4 x enclosure lid screws
- 4 x enclosure lid screw caps
- 1 x PG16 cable gland (large)
- 2 x PG9 cable glands (small)
- 2 x PG16 to PG9 reducers
- 2 x locking rings
- 2 x O rings (small)
- 2 x O rings (large)
- 1 x terminal block
- 1 x terminal block holder
- 1 x 470 ohm resistor (colour code: yellow violet brown gold)
- 1 x 680 ohm resistor (colour code: blue grey brown gold)

Please note that the components in this kit have been specially selected to withstand the temperatures higher than the maximum alarm temperature of the Signaline Linear Heat Detection cable.

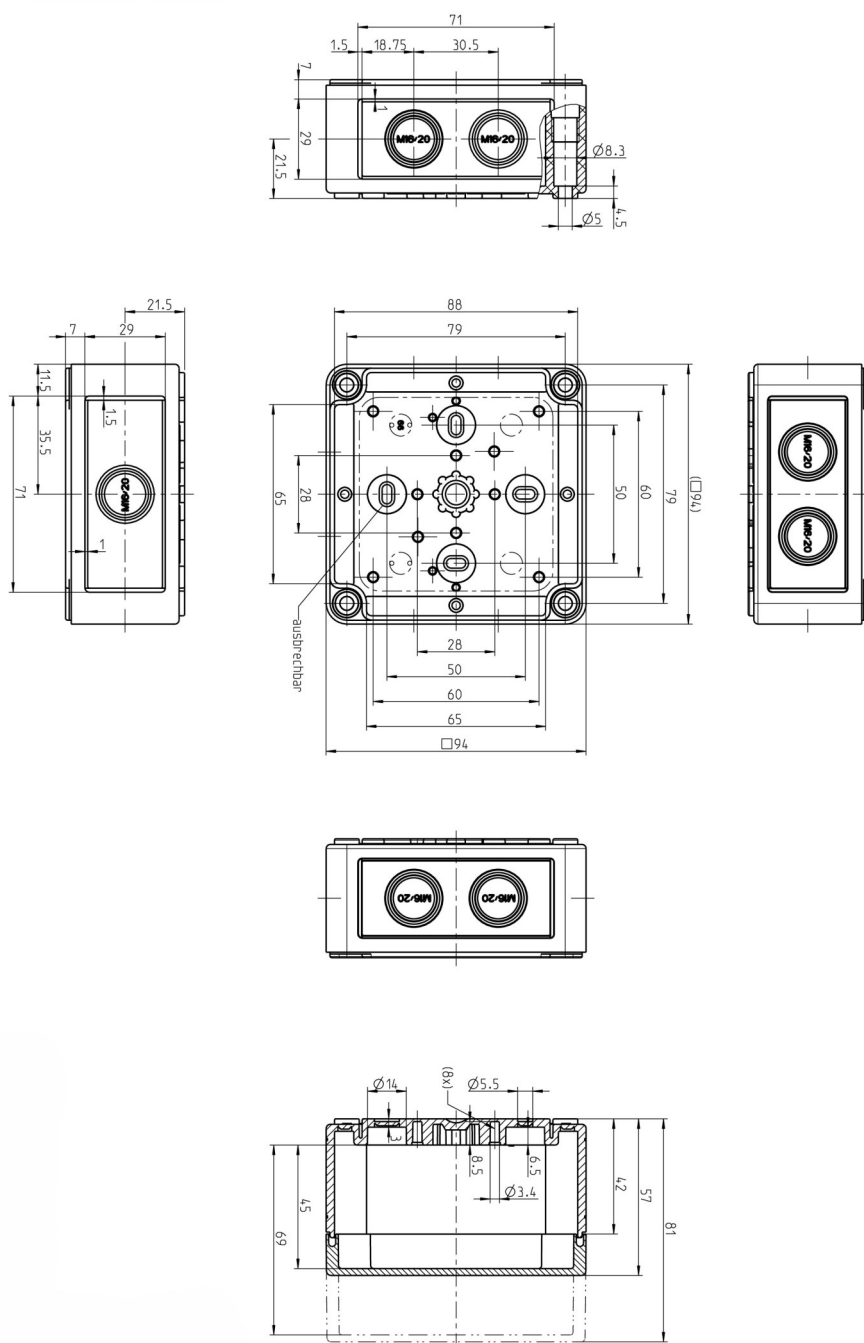
The Signaline UCB is compatible with all types of Signaline FT and Signaline FT-EN cable. It is not for use with Signaline HD+.

Please read this instruction leaflet thoroughly before commencing installation.



Detailed Drawing

The Signaline UCB used an IP66 rated enclosure. Below is the technical drawing for detailed measurements and mounting locations;

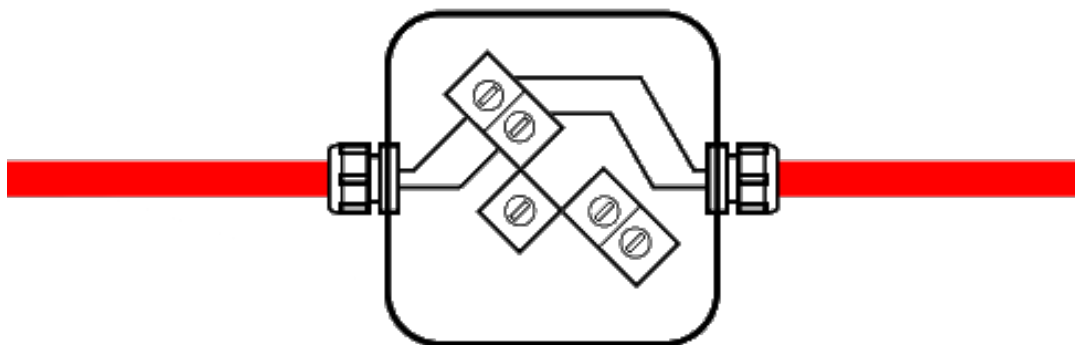




Using Signaline UCB as a Junction Box

Signaline UCB can be used as a junction box to connect a line of Signaline Linear Heat Detector with leader cable or to connect two lengths of Signaline Linear Heat Detector. To use the Signaline UCB as a junction box you will use;

- 1 x IP66 enclosure
- 2 x PG9 cable gland
- 2 x PG16 lock ring
- 2 x PG9 O ring
- 2 x PG16 O ring
- 1 x terminal block
- 2 x PG16 to PG9 reducer
- 1 x terminal block holder
- 4 x enclosure lid screw caps



Fitting instructions

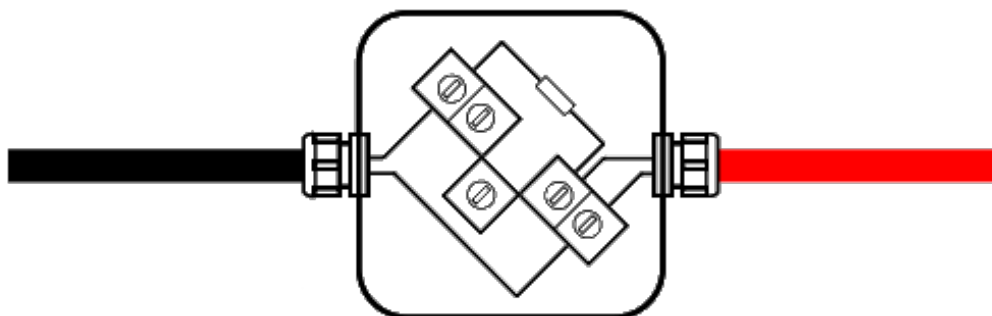
1. Knock out 2 x PG16 holes on opposite sides in the enclosure box
2. Fix the enclosure to its desired location using the knock out slots in the base of the enclosure and cover the holes with the screw covers
3. Fit the large O rings onto the threads of the PG16 to PG9 reducers
4. Assemble the reducers into the enclosure and secure them with the locking rings
5. Fit the small O rings onto the threads of the small PG9 cable glands and screw them tightly into the PG16 to PG9 reducers
6. Place the terminal block holder with the 4 spigots uppermost diagonally across the centre of the enclosure and press into place.
7. Fit the terminal block onto the terminal block holder
8. Connect the Signaline Linear Heat Detection cable as shown above
9. Replace the lid of the enclosure with the screws provided



Using Signaline UCB as a Junction Box between Signaline LINEAR HEAT DETECTOR and Leader Cable

Signaline UCB can be used as a junction box to connect a line of Signaline LINEAR HEAT DETECTOR with leader cable. To use the Signaline UCB as a junction box you will use;

- 1 x IP66 enclosure
- 2 x PG9 cable gland
- 2 x PG16 lock ring
- 2 x PG9 O ring
- 2 x PG16 O ring
- 1 x terminal block
- 2 x PG16 to PG9 reducer
- 1 x terminal block holder
- 470 ohm or 680 ohm resistor as required
- 4 x enclosure lid screw caps



Fitting instructions

1. Knock out 2 x PG16 holes on opposite sides in the enclosure box
2. Fix the enclosure to its desired location using the knock out slots in the base of the enclosure and cover the holes with the screw covers
3. Fit the large O rings onto the threads of the PG16 to PG9 reducer and the large PG16 cable gland
4. Assemble the PG9 to PG16 reducer into the enclosure and secure with the locking ring
5. Fit the small O ring onto the thread of the small PG9 cable gland and screw tightly into the PG16 to PG9 reducer
6. Place the terminal block holder with the 4 spigots uppermost diagonally across the centre of the enclosure and press into place.
7. Fit the terminal block onto the terminal block holder
8. Connect the Signaline Linear Heat Detection cable as shown above
9. Fit the resistor as shown above. The choice of resistor will depend on the characteristics of the fire control panel. Refer to panel manufacturers instructions for further information. If using Signaline FT-EN range do not fit resistor as shown.
10. Replace the lid of the enclosure with the screws provided



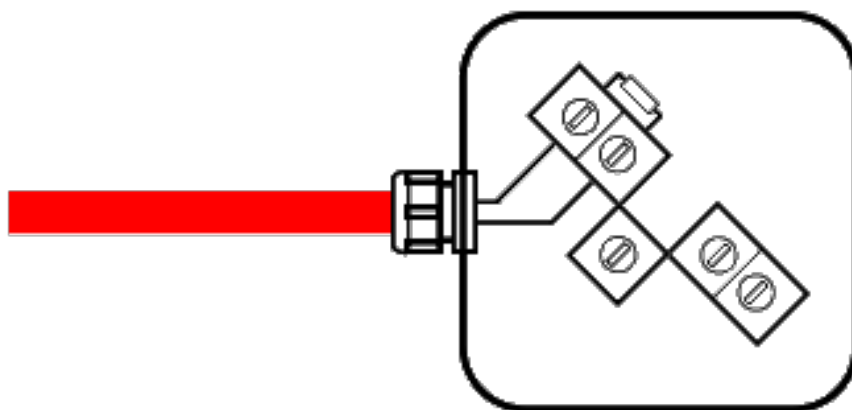
Using Signaline UCB as the EOL

Signaline UCB can be used as an End of Line box to terminate Signaline FT, FT-R or FT-X Linear Heat Detection.

For Signaline FT-EN installations the Signaline FT-EOL-EN must be used. For Signaline FT installations we recommend the use of the Signaline FT-EOL.

To use the Signaline UCB as a End of Line box you will use;

- 1 x IP66 enclosure
- 2 x PG9 cable gland
- 2 x PG16 lock ring
- 2 x PG9 O ring
- 2 x PG16 O ring
- 1 x terminal block
- 2 x PG16 to PG9 reducer
- 1 x terminal block holder
- 4 x enclosure lid screw caps



Fitting instructions

1. Knock out a single PG16 hole on one side only of the enclosure box
2. Fix the enclosure to its desired location using the knock out slots in the base of the enclosure and cover the holes with the screw covers
3. Fit the large O ring onto the thread of the PG16 to PG9 reducer
4. Assemble the reducer into the enclosure and secure with the locking ring
5. Fit the small O ring onto the thread of the small PG9 cable gland and screw tightly into the PG16 to PG9 reducer
6. Place the terminal block holder with the 4 spigots uppermost diagonally across the centre of the enclosure and press into place.
7. Fit the terminal block onto the terminal block holder
8. Connect the Signaline Linear Heat Detection cable as shown above
9. Fit the end of line component supplied by the fire control panel manufacturer as shown above.
10. Replace the lid of the enclosure with the screws provided



For product support, contact us at technical@lgmproducts.com

Or call 01252 725257 to speak to our sales team

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