"now faster and boasting many new useful features this is by far the best beam on the market"

thefirebeam™
protectionsystem**plus**

thefirebeam™

Motorised reflective optical beam smoke detector

Developed to overcome the problems of old outdated technology in beam detection, this motorised beam now means that beam detection can now be used reliably to produce cost effective solutions for protecting large areas.

Building movement and accessibility have in the past, made beam detection unreliable, difficult, time consuming to commission and hard to maintain, but now by using the advanced motorised technology of thefirebeam unreliability is no longer a problem. thefirebeam will self align itself to the centre of the reflector when commissioning and will automatically keep alignment with the reflector when building movement occurs. This intelligent motorisation will mean less false alarms therefore saving time, resources, reputations and ultimately money.

Atriums   Conference Halls   Churches   Museums   Warehousing   Manufacturing Facilities   Airports   Schools   Historic buildings
Sports Centres   Stables   Leisure facilities   Food processing   Roof Voids   Shopping Malls   Exhibition halls   Aeroplane Hangers

New firebeamplus raises the bar even further

Nearly 5 years after launching the original firebeam it has become the professionals choice in beam detection, but there is no point in sitting on your laurels and our world renowned design team have listened to you over the past few years and we have now incorporated many of your comments and added our own new innovations to produce the new 'plus' replacement to the original firebeam. The result has refined further this already extraordinary market leader.

So whats new with the plus version?

five times faster

We have now designed completely new linear stepper motors which have resulted in amazingly fast commissioning and routine maintenance. At 40 meters under test conditions we are recorded an auto align times straight out of the box of 3m 02s and once aligned a routine re-alignment was timed at 1m 07s. This is class leading performance not only in terms of speed but also in terms of advanced robust design built for precise purpose.
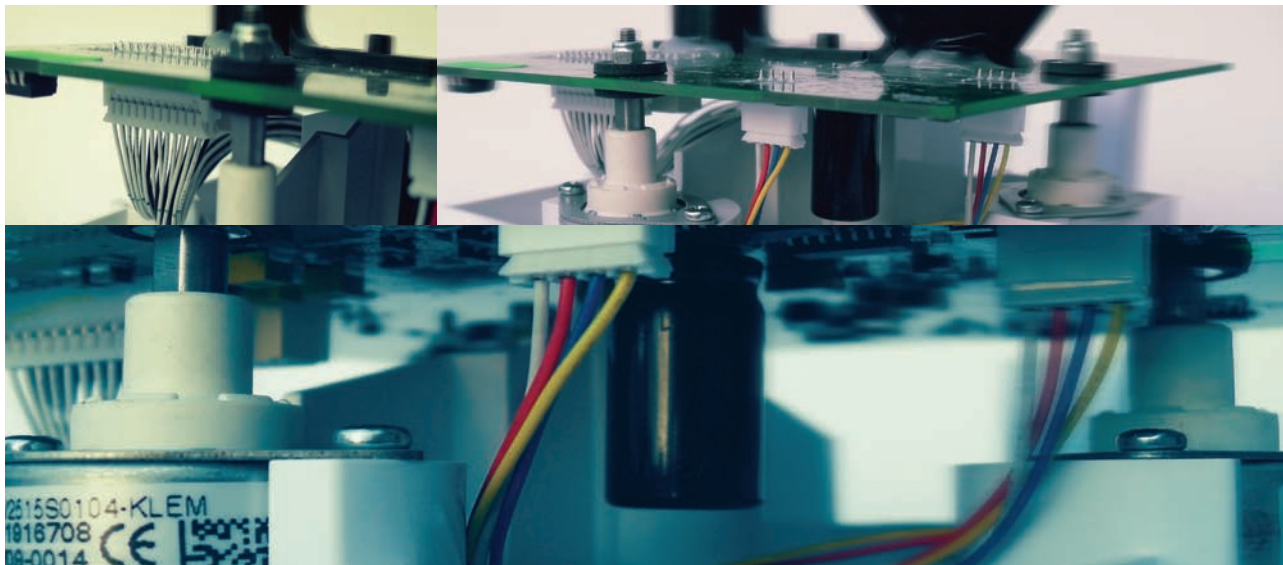
Languages

With thefirebeam plus you can now change the display to seven different languages, English, German, Spanish, French, Italian, Dutch, and Czech. A feature that is welcomed by our ever increasing international customers.

Mode change enhancements

Auto align on/off rarely needed this facility allows you to turn off the auto alignment in normal service, should the environment be liable to occasional contamination (such as theatres with fake smoke) as motorised beams work by seeing the reflector and are unable to because of unavoidable obscuration they can fall out of alignment trying to find the obscured reflector. thefirebeam plus will remain in perfect alignment in these environments simply by not trying to realign itself. Auto alignment will still continue to work in commissioning modes. This facility is best suited to beams that are mounted on solid surfaces that are not susceptible to building movement at all. For buildings that are liable to movement (such as metal warehouses etc) we have also built in a new delay function that can be used instead, detailed below

Auto align time delay again this facility is useful in environments that are liable to occasional short term obscuration. Building in a delay means that the beam will not check for alignment if the received signal drops for a predetermined time. Pre set at four hours this can be altered to 0 to 12 hours if required to allow the environment to clear.

Beam phasing It is possible that beams that face each other will cause problems as their sample rates could coincide and result in unreliable readings, meaning false auto alignment and unreliably in service. With the introduction of phasing it is now possible to mount beams facing each other with reflectors in between. There are up to 7 different sampling rates to choose from alleviating any cross talk problems.
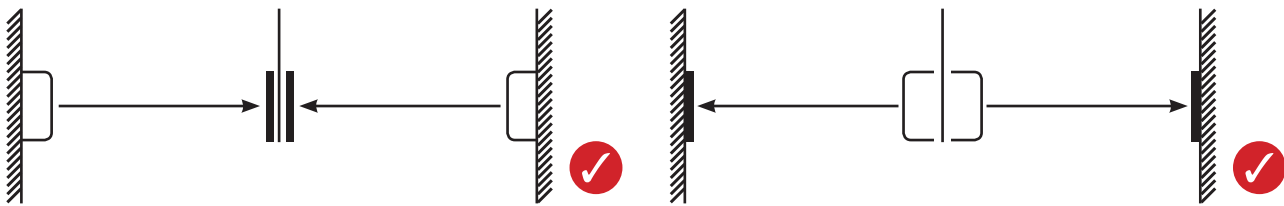
Hysteresis Changing the hysteresis will change the delay in returning from a fire state back to a normal state, for example, the beam is factory set at 15% so if the beam falls into fire at 65% (35% threshold) it has to recover 15% to 80% before it returns to normal. This action prevents small fluctuations in returned signal causing the beam to fall in and out of a fire state. This can be adjusted anywhere between 1% and 40%. The hysteresis can be adjusted from this new menu.

A low level controller means you can do everything from the safety of ground level. When using thefirebeam you simply know what's going on.

An easy to follow menu system is so important to a successful installation.

The firebeams plus system has evolved with the end user in mind, movement is measured in degrees and settings in understandable percentages - "what you see is what you get" - no guess work no meaningless numbers. No two environments are the same so the importance of easily being able to make and understand adjustments is imperative and so easily done with thefirebeam. To illustrate this lets quickly run through the menu systems here and see exactly how versatile and easy to use thefirebeam is.

thefirebeamplus menu system

Commisioning Menu
From here you will perform all the actions required to commission the beam.

normal / fast using the fast mode lets you commission the beam at ultra fast speeds.

Pre-alignment sets the power for the distance to be covered (anywhere from 5 to 100 metres).

Manual alignment allows you to move the beam up down and left right.

Auto alignment will align the beam automatically to the centre of the reflector.

This can take as little as 3 minutes in fast mode. Once alignment is complete and fault and fire tests are carried out, your firebeam is commissioned.

Mode Change Menu
From here you can make all the fine tuning adjustments to your firebeam.

Threshold Here you can increase or decrease the beams sensitivity. This sensitivity can be adjusted anywhere between 25% (sensitive) to 50% (less sensitive).

Time to fire Here you can adjust how long the beam has to be in fire before the fire relay is triggered. This is factory set at 10s, you may want to increase this if there is something that may momentarily obscure the beam path (birds / forklift truck) this can be adjusted between 2 and 30 seconds.

`Time → Fault 10s` **Time to fault** Here we can adjust the time to fault between 2 and 60 seconds. For a beam to go into fault the beam path must be totally blocked within ONE second.

`Alarm AutoReset` **Auto reset** The beam is factory set to auto reset when the received signal raises above the fire threshold. This can be set to latching if required. `Alarm Latching`

`AutoAlign ON` **Align on / off** You may want to turn the auto alignment function off, for example, in an environment that often gets filled with welding smoke, the auto align function kicks in when the received signal drops below 90%, the point that the beam automatically checks for building movement. The beam will try to align through the smoke which could be a problem if it `AutoAlign OFF` is unable to see the edges of the reflector.

`Align Time 4h` **Align time** This is factory set to 4hrs, you can adjust this between 0 to 12 hours depending on your environment.

`Green Flash ON` **Green flashing light on / off** You can turn the green flashing LED `Green Flash OFF` on the head and controller on or off here. This is a useful way of identifying the beam head that you are working with.

`Phase 0` **Phase** When using multiple beams that face each other the beam `Phase 4` output signals could phase together and can cause unreliable readings, by setting each beam to phase differently alleviates this problem. Give each beam a different phase pattern (length between output beam sample times) you can choose anywhere between 0 (default setting) and 6.

`Hysteresis 15%` **Hysteresis** Changing the hysteresis will change the delay in returning from a fire state back to a normal state, for example, the beam is factory set at 15% so if the beam falls into fire at 65% (35% threshold) it has to recover 15% to 80% before it returns to normal. This action prevents small fluctuations in returned signal causing the beam to fall in and out of a fire state. This can be adjusted between 0% and 40%.

`Comp End Fire* Fault` **Comp fire – fault** When dirt compensation has reached its maximum you can choose whether the beam signals fault or fire, this is factory set to fault. `Comp End Fire Fault*`

Beam Maintenance Menu

`Dirt Comp + 0%` **Dirt Comp** This screen shows how much the beam has compensated for dust build up on the beam head and reflectors, ALWAYS take a note of this value as part of your routine maintenance to see any build up pattern, if you see figures above +50% you should clean both the lens face and the reflectors (once cleaned you should instigate an auto alignment to re-calibrate the beams settings) You may see a negative number here, this can happen when the firebeam has been commissioned in a 'dirty' atmosphere such as builders dust which, once cleared, the beam then compensates for.

`Alarm Events 0 Fault Events 0` **Event counts** Here we can see how many times the beam has gone into fire or fault since the beam was commissioned or since the events log was last cleared.

`Air Quality 100%`
`Test`

Self test Press enter enter to perform a fire test, this works by running a test algorithm to lower the output power, the receiver sees this as obscuration. When the received signal drops below the threshold point the beam will trip the fire relay – this relay will not trip until the time to fire has passed which could be anything between 2 to 30 seconds.

`Air Quality  97%`
`Test In Progress`

`Air Quality  27%`
`Test ** FIRE **`

`Beam ON`

On / off This enables the beam to be turned on and off using the right and left keys should there be something needing to be maintained in the beam path, this will show as a fault on the panel.

`Beam OFF`

Diagnostics Menu

`Air Quality 100%`
`IRpower   9.2%`

IR power This screen shows the amount of output power that is being transmitted. It can be increased or decreased here.

`Air Quality 100%`
`RxSense   5.0%`

RX sensitivity This screen shows the receiver sensitivity and can be changed here.

`Temperature +22C`
`TC +  0 G1 128`

Temperature Here we can see the temperature at the beam head and the amount of compensation being made for temperature (no adjustments can be made here).

"Some things just look and feel right, you know even before using it, it will work and work well! The sheer quantity of workmanship, materials used and pure ease of use with technician friendly qualities all make this by far the best beam available"

"now selling in 32 countries, thefirebeam is protecting lives and property in thousands of locations around the globe"

"using thefirebeam saves time and money"

Beam detection has always been seen as the most economical way to protect large areas but in the past, was seen as unreliable. Only now, with the introduction of thefirebeam's advanced technology, reliability is no longer a problem and can be used with complete confidence. This also means that great cost savings can be made over spot and air sampling systems, for example just one beam can be used instead of 16 spot detectors. Cost savings can be considerable. Wiring to a single head is more cost effective than fitting yards of air sampling tubing.

This advanced technology will also greatly reduce commissioning time, it is common to see 25 beams fully commissioned in less than one day. You simply start one beam off and move onto the next and then the next all from ground level. Spending hours working at height trying to align beams is a thing of the past.

Self alignment in normal service means not having to go back and re-align the beam after building movement - again saving time and the expense of lifting equipment, not to mention the disruption this causes your customers.

What else sets it apart...

Very low power, using only 3.5mA any state opens up a whole world of options. In some cases you can zone power the beam, for instance using an Apollo xp95 switch monitor with isolator allows you do just that and turns the conventional firebeam into an addressable unit.

IP65 means no ingress whatsoever makes thefirebeam ideal for hostile environments such as food processing halls as it can be hosed down and IP65 also means nasty little creatures can't set up home inside and jeopardise the effectiveness of the detector.

Easy clean lenses the firebeam has been designed to be easily cleaned with its flat surfaces. Unlike other beams all the moving optics are safely encased inside the waterproof enclosure and you are not going to knock the beam out of alignment. This means thefirebeam can easily be cleaned from ground level using something like a no-climb pole and suitable attachment.
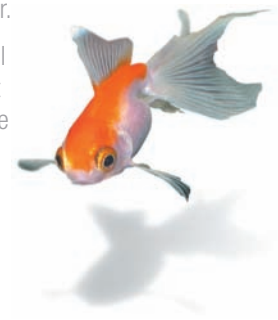
Approvals...

VDS and CPD approval means thefirebeam is fully approved and quality audited.

Awards......

Winner of the International fire industry award for product innovation

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of the fire Industry award for innovation

product innovation award sponsored by the
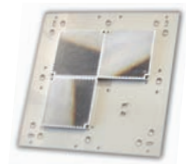
The range...

The firebeam plus

Use the firebeam plus for distances over 5 metres and up to 40 metres.
Comes complete with head, low level controller, user manual and 3mm allen key.

Mid range distance kit

Use this for distances over 40 metres and up to 80 metres (simply add the single reflector from the standard firebeam).

Long range distance kit

Use this for distances over 80 metres and up to a maximum of 100 metres (simply add the single reflector from the standard firebeam).
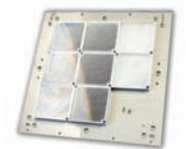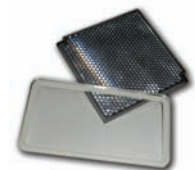
Unistrut adapter

Specially designed to screw to the back of thefirebeam head, this adapter allows you to easily use Unistrut fixing systems.
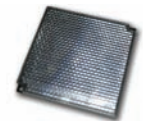
Anti fog kit

Specially developed to overcome the problems of condensation, this special kit contains a reflector and lens cover that have been treated with a special Nano technology finish that will not mist over.

Anti fog reflector

A single reflector with a nano technology finish, sold singularly.

Adjustable wall fixing

A very high quality aluminium fully adjustable bracket that can accommodate both the beam head and the reflector / reflector kits.

Power supply

Specially designed to be used with thefirebeam these 24v 1.5amp power supplys have full VdS approval to EN54-4. this supply also suits any other fire or security device requiring a dedicated power supply.

Wall cages

Designed to protect the beam head and controller these cages are specially designed for thefirebeam, produced in steel and powder coated these cages come in particularly useful in sports halls etc.
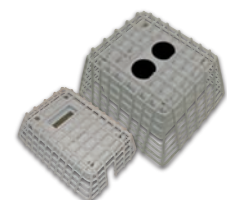
"performance that stands the test of time"

The advanced technology, simplicity of design, and ease of use have resulted in the most reliable optical beam detection available today. Backed by a five year guarantee and industry acclaimed technical support, using **thefirebeam** means years of trouble free service that can be relied upon.

**Visit the web site for latest information
and technical details**

www.thefirebeam.com