

FL-433/Beam

Conventional Reflective Beam Detector



EN 54-12
1330a-(cl-13)

Feature and Benefits

- EN54-12 Certified
- LPCB Approved
- Hassle free alignment, built with digital guide display and laser beam pointing
- Employ single-ended design through reflective mirror
- Four ranges wide monitoring from 8-100 meters via encoder
- Three users programming sensitivity adjustment
- Built-in microprocessor
- Self-diagnosis function can monitor for internal faults
- Automatic compensation for factors weakening received signals, such as dust contamination, positional movement and ageing of the transmitter
- Fire and Fault interfacing relays
- Attractive and pleasing appearance
- Real User friendly alignment method

Overview

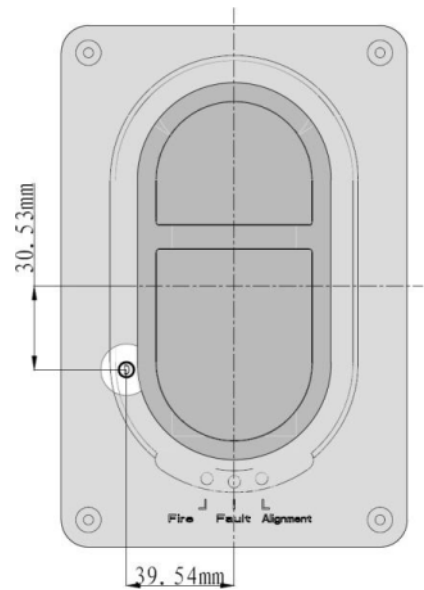
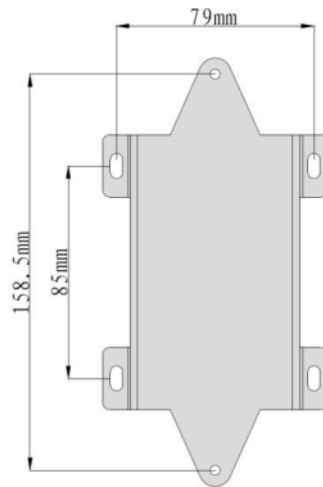
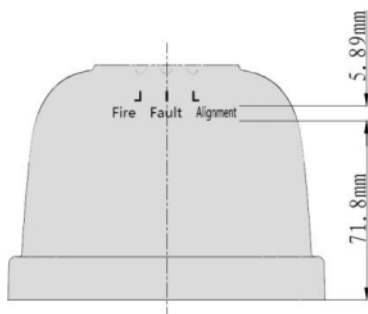
FL-433/Beam Conventional Reflective Beam Detector has built in Laser beam pointing and Digital guide display for real user friendly alignment method. The Laser beam pointing accurately point the exact location where to mount mirror and with additional digital guide display allows to monitor and guide on the actual light intensity between the mirror and detector which cannot be seen by our naked eye making it more easy and convenient in alignment commissioning.

The FL-433/Beam has four adjustable operational ranges of between 8 to 20, 20 to 40, 40 to 70 and 70 to 100 meters beside with three adjustable sensitivity setting ranges from 2.6dB, 3.8dB and 5.8dB to meet the specific environmental requirement. The FL-433/Beam works on the principle of reflective infrared beam obscured. Used in conjunction with a reflector, it will notify the fire alarm panel when the infrared beam is obscured by smoke.

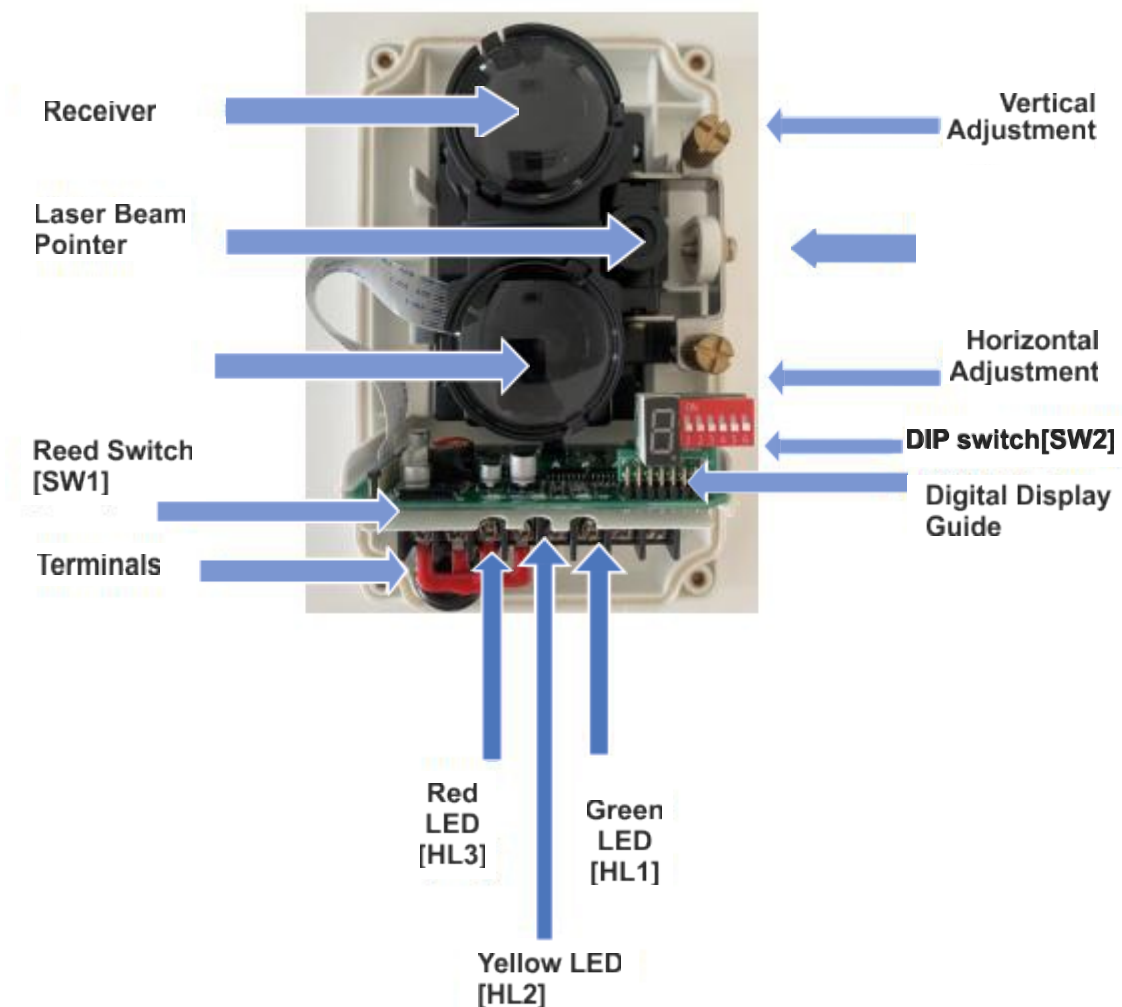
The FL-433/Beam is ideal for use high ceiling and wide areas such as warehouses, large storage, shopping

malls, leisure centers, exhibition halls, hotel lobbies, printing houses, garment factories, museums and prisons, as well as places where slight smoke particles or corrosive gas exist.

Part Number	FL-433/Beam
Standard	
Listed	LPCB
Compliance	EN54-12:2015
Fire Detection and Alarm Systems	BS 5839 Part 1:2002
Specification	
Operating Voltage	20 V to 28 V DC
Current Parameters	Standby:23mA Commission:56mA Alarm:33mA
Beam Sensor Sensitivity [via Encoder]	Level 1: 2.6 dB High Sensitivity Level 2: 3.8 dB Medium Sensitivity Level 3: 5.8 dB Low Sensitivity
Beam Pathway Length [via Encoder]	Span 1: 8 to 20 meters limited Path (1x mirror reflector required) Span 2: 20 to 40 meters Short Path (1x mirror reflector required) Span 3: 40 to 70 meters Normal Path (4x mirror reflector required) Span 4: 70 to 100 meters Long Path (4x mirror reflector required)
Beam Path Angle	± 0.5° Directional
Alignment Guide	Laser Beam Pointer
Digital Display Guide	Nixie Tube
LED Indicator Guide	Red: Fire, Yellow: Fault, Green: Alignment
Reset Time	Less than 2 Second (Power Cut)
Relay Capacity [Fire & Fault]	Normally Open/ 2.0 A, 30 VDC
Physical	
Material / Colour	ABS / White
Dimension / Weight	L:190.87 x W:126.87 x H:91.96 mm / 440 gm
Weight	0.130 Kg with base
Accessories	Mounting Bracket/ FL-433/Beam 4 x R (Mirror Reflector)
Environmental	
Operating Temperature / Protection Rating	-10°C to 55°C / IP30 [IP66 glue seal-For permanent fixing]
Humidity	0 to 95% Relative Humidity, Non condensing



Technical Specification



Note : Terminal S1 and S2 for connecting handheld programmer when setting parameters with it, or connecting to terminal D1 and D2 respectively when monitoring

As shown in the figure of the shell base. Use DIP switch(SW2) to set the parameter set you want (see table below).

Sensitivity Span	Level 1	Level 2	Level 3
Span 1: 8~20m			
Span 2: 20~40m			
Span 3: 40~70m			
Span 4: 70~100m			