



Beam 200 & Beam 200S

Beam Smoke Detectors

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Description

The Beam 200 and Beam 200S intelligent reflected beam smoke detectors are designed to be used with UL Listed compatible control panels only. Since all of the wiring is connected to one side, the installation of the single-ended reflective design is much easier than dual-ended projected beam detectors. Alignment is accomplished quickly via an optical sight and a 2 digit signal strength meter incorporated into the product. Listed for operation from -22°F to 131°F, the BEAM 200 detector can be used in open area applications to provide early warning in environments where temperature extremes exceed the capability of other types of smoke detection.

The Beam 200 smoke detector includes one wired transmitter / receiver unit and one reflector. When smoke enters the area between the unit and the reflector it causes a reduction in the signal. The alarm is activated when the smoke level reaches the predetermined threshold.

The BEAM200S model is equipped with an added feature, an integral sensitivity test feature that uses a test filter attached to a Servo motor inside the detector optics. Using the remote test station RTS451 / RTS151, the motor is activated and moves the filter in the pathway of the light beam, thereby testing detector sensitivity. This integral sensitivity test feature allows the user to quickly and easily meet the annual maintenance and test requirements of NFPA 72.



Features

- 16 to 328' Protection Range
- Single-ended, Reflective Design
- Easiest alignment in the industry with Digital Display
- 6 Field Selectable Sensitivity Levels
- Optional integral NFPA 72 sensitivity test feature
- Removable plug-in terminal blocks
- Built-in automatic gain control compensates for signal deterioration from dust build-up
- Remote test station available
- Paintable cover
- Optional Heater Kits available

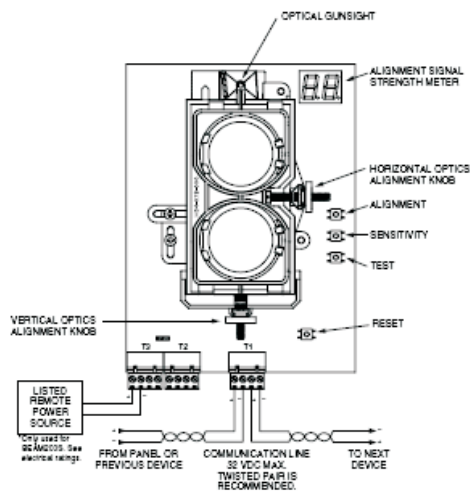
Ordering Information

Model Number	Part Number	Description
BEAM200	BEAM200	Intelligent Beam Smoke Detector with 8" Reflector
BEAM200S	BEAM200S	Intelligent Beam Smoke Detector with 8" Reflector & Integral Sensitivity Test
RTS151	RTS151	Remote Test Station with Magnet
RTS151KEY	RTS151KEY	Remote Test Station with Key

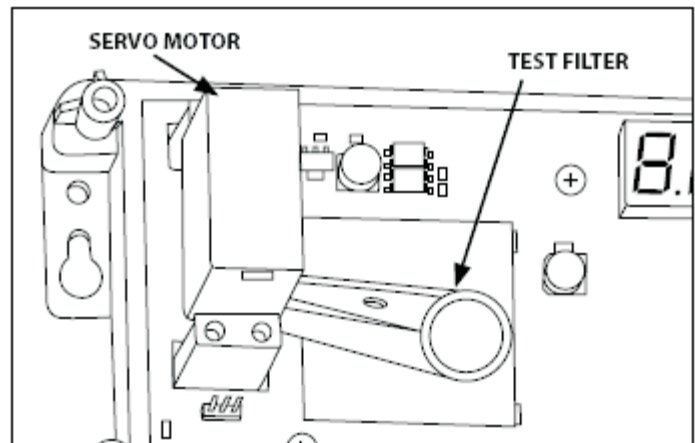
BEAM200 and BEAM200S Specifications

Operational Specifications		Environmental Specifications	
Protection Range	16 ft to 328 ft (5m to 100m)	Temperature	-22°F to 131°F (-30°C to 55°C)
Adjustment Angle	±10 Degrees horizontal & vertical (The optics move independent of the unit)	Humidity	10 to 93% RH Noncondensing
Sensitivity Levels		Electrical Specifications	
	Level 1 - 25%	Voltage	15 to 32VDC
	Level 2 - 30%	Avg. Standby Current (24VDC)	2 mA Max
	Level 3 - 40%	Avg. Current During Testing	500 mA Max
	Level 4 - 50%	Alarm Current (24VDC)	8.5 mA Max
	Acclimate™ Level 1 - 30 to 50%	Fault Current (24VDC)	4.5 mA Max
	Acclimate™ Level 2 - 40 to 50%	Alignment Mode Current (24VDC)	20 mA Max
Fault Condition (Trouble)		Mechanical Specifications	
	96% or more obscuration blockage	Detector Dimensions	10" H x 7.5" W x 3.3" D (254mm H x 191mm W x 84mm D)
	In alignment mode	Reflector Dimensions (16' to 230')	7.9" x 9.1" (200mm x 230mm)
	Improper initial alignment	Reflector Dimensions (beyond 230')	15.7" x 18.1" (400mm x 460mm)
	Self-compensation limit reached	Electrical Specifications (BEAMHK)	
Alignment Aid	Optical gunsight	Voltage	15 to 32V
	Integral signal strength indication	Current	92 mA at 32V
	2 digit display	Power Consumption	1.6W at 24V; 3W at 32V
Alarm Indicator	Local red LED and remote alarm		
Trouble Indicator	Local yellow LED and remote trouble		
Normal Indicator	Local flashing green LED		
Integral Sensitivity Test Filter (BEAM200S only, requires additional external power supply)			
Test/Reset Features		Electrical Specifications	
	Sensitivity filter (Incremental scale on reflector)	Voltage	15 to 32V
	Local test switch	Current	450 mA Max at 32V (per reflector)
	Local reset switch	Power Consumption	7.7W at 24V; 15W at 32V (per reflector)
	Remote test and reset switch (Compatible with RTS151 / RTS151 and RTS151 KEY / RTS151 test station)		
Smoke Detector Spacing	On smooth ceilings, 30 to 60 feet between projected beams and not more than one-half that spacing between a projected beam and a sidewall. Other spacing may be used depending on ceiling height, airflow characteristics, and response requirements. See NFPA 72.		

BEAM200(S) Parts



Activated Test Feature (BEAM200S only)



NOTICE: The information contained in this document is intended only as a summary and is subject to change without notice. The devices described in this document have specific instruction sheets which cover various technical, limitation and liability information. Copies of these instruction sheets and the General Product Warning and Limitations Document, which also contains important information are provided with the product and are available from Harrington Signal Inc. Fire Alarm. Information contained in these documents should be consulted before specifying or using the product. For further information or assistance concerning particular problems contact Harrington Signal Inc. Harrington Signal Inc. Fire Alarm reserves the right to change specifications without notice. Quality manufactured for Harrington Signal by System Sensor.