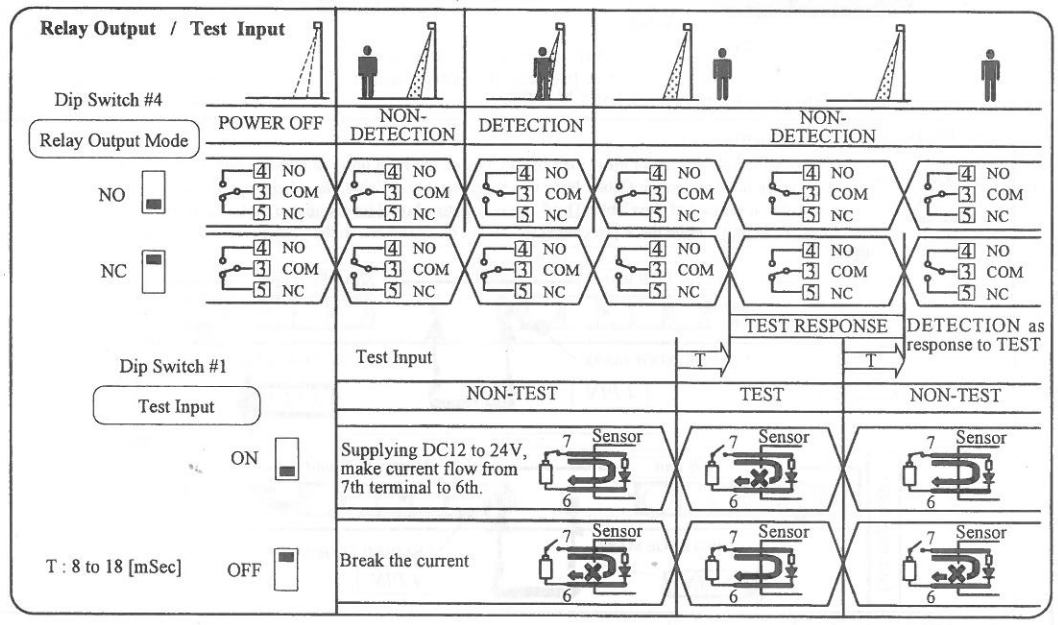
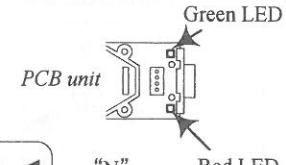
6 Timing chart of events



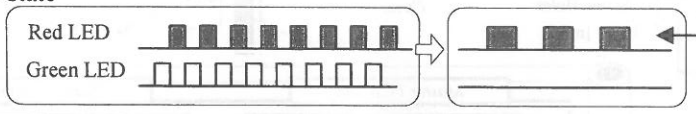
7 LED information

7-1 Normal state

State	Red LED	Green LED
Non-Detect	○ OFF	✲ ON
Detect	✲ ON	○ OFF



7-2 Error state



N	Error category	Cause	Solution
1	Environmental error	Noise occurs on setting environment. The reflection level of the floor is low.	Execute "TEACH" of the Section 8 laying a sheet of white paper on the floor of the detection area.
2	Communication error	Wire connection is no good.	Check the cable connection.
3 over	Other Error	Internal component failure	Change the units.

7-3 Teaching state See Section 8

8 Teaching

Follow next steps without the Filter Cover.

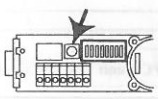
① Check the wiring connection and supply power.

② Execute "TEACHING"

"TEACHING" is necessary to make the sensor work properly, that is to learn the number of sensor units and the distance from a floor.

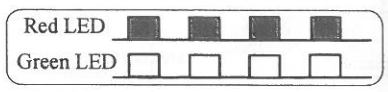
STEP 1.

Press the "Push SW" of the master unit for more than 2 seconds.



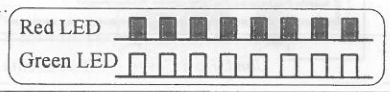
STEP 2.

LED blinks slowly for 10 sec's in a non-detection state. Remove a person or objects (ladder etc) from the detection area during this time.



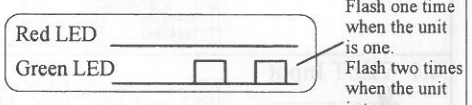
STEP 3.

After STEP2, LED blinks faster and starts " TEACHING". If during this period, a person or moving objects are in the area, try again from STEP 1.



STEP 4.

After LED stops blinking, the number of sensor units is indicated.

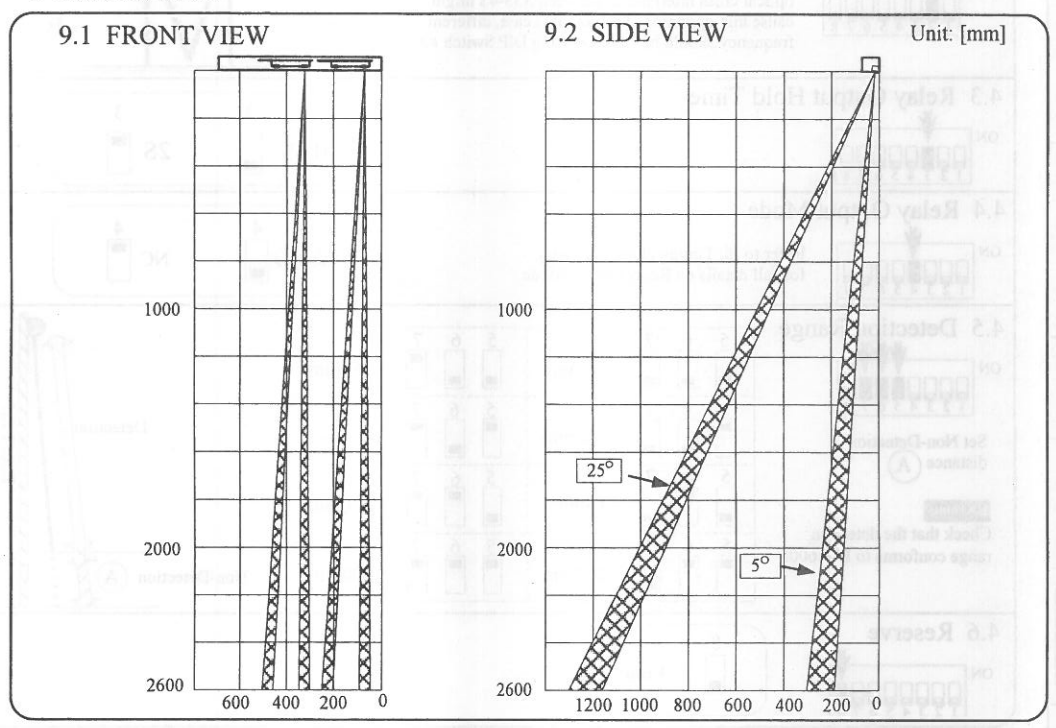


Note

If the number of units installed and the time(s) the LED flashed are not the same, check the connection of cable, and re-start "TEACHING".

③ Check the adjustments , range and other setting.

9 Detction Area



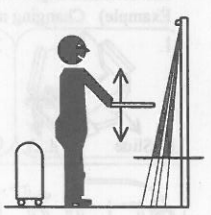
10 Detection Range Check without Filter Cover

Check the detection range without setting Filter Cover.
Put a test object in the detection area to check the detection patterns and other Dip Switch settings. The test conforms to local standards should be carried out.

After this check, Turn power off.

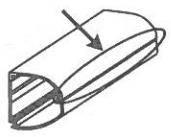
EN16005 Check that the detection area conforms to EN16005

When the test is completed, go to Section 11 to install the Filter Cover and Side Cover.
When an error occurs, re-check the settings referring to Section 3.

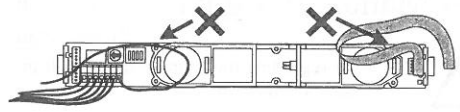


11 Replacing the Filter Cover and Side Cover

1 First fit the upper side of the *Filter Cover* along the full length of the *Aluminum Case*.

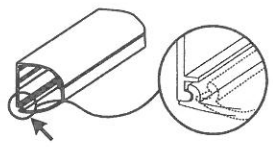


CAUTION

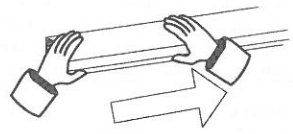


Be careful not to obstruct the optical components with wires.

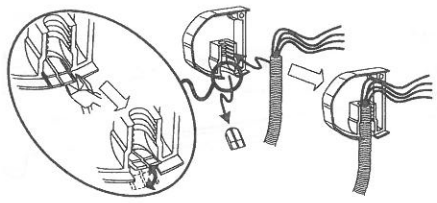
2 Slightly bend the *Filter Cover* at one end to latch it onto the bottom lip of the *Aluminum Case*.



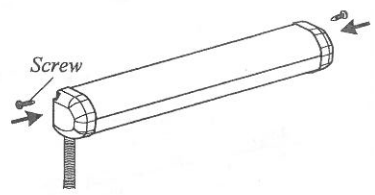
3 Press the *Filter Cover* firmly and slide your hand along the bottom of it to lock the *Filter Cover* onto the *Aluminum Case* all along the length of the *Case*.



4 Cut out the *Side Cover*' s wiring point and insert the *Wire Sheath* into it.



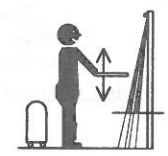
5 Attach the *Side Cover* with *Screws* provided.



12 Final Detection Range Check

After the *Filter Cover* fitted confirm that the detection range is as expected and conforms with local regulations.

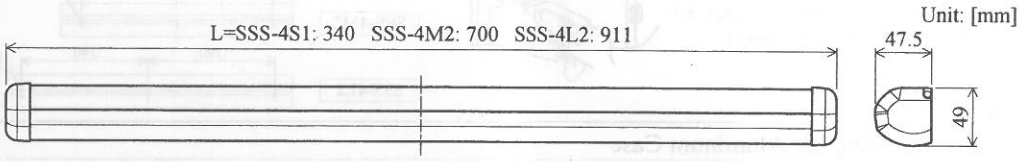
EN16005 Check that the detection area conforms to EN16005



13 Technical Data

MODEL	Safety Sensor for Swing Doors **SSS-4**		
TECHNOLOGY	COMPLETE STATIONARY DETECTION with PSD DISTANCE MEASUREMENT		
POWER SUPPLY	AC/DC 12~24[V] ±10%	BEAM ANGLE ADJUSTMENT	5 , 10 , 15 , 20 , 25 [degrees]
CURRENT CONSUMPTION	65 [mA] @ DC12[V] 35 [mA] @ DC24[V] 1.3 [VA] @ AC12 [V] 1.7 [VA] @ AC24[V] (per each PCB unit)	RESPONSE SPEED	LESS THAN 100 [mSec]
		OUTPUT HOLD TIME	0.5 [Sec], 2 [Sec]
RELAY OUTPUT	DC 50V 0.1 [A] NON VOLTAGE 1C	DIP SW FUNCTIONS	TEST INPUT : 1 [BIT] OPTICAL INTERFERENCE : 1 [BIT] RELAY OUTPUT HOLD TIME :1 [BIT] RELAY OUTPUT MODE :1 [BIT] DETECTION RANGE:3[BIT]
TEST INPUT	6 [mA] Max. at 24 [VDC]		
MOUNTING HEIGHT	2.6 [m] Max	OPERATING TEMPERATURE	-20 ~ +60 [°C]
DETECTION RANGE	0 - 2.6 [m] Max	WEIGHT	SSS-4S1: 350[g] APPROX. SSS-4M2: 700[g] APPROX. SSS-4L2: 850[g] APPROX.

14 Dimensions



15. EC DECLARATION OF CONFORMITY

Description of Product:
SSS-4 Safety Sensor for Swing Doors .
Complete stationary detction with PSD distance measurement.

Directives Fulfilled:

DIRECTIVE 2006/42/EC	Machinery Directive
DIN 18650-1:2010	Powered pedestrian doors Part 1: Product requirements. Chapter 5.7.4
EN12978:2003 +A1:2009	Industrial, commercial and garage doors and gates - safety devices for power operated doors and gates - Requirements and test methods.
EN62061:2005	Functional safety of electrical/electronic/programmable electronic safety-related systems.
EN ISO 13849-1:2008	Safety of machinery - Safety-related parts of control systems.
EN 16005:2012	Power operated pedestrian doorsets - Safety in use - Requirements and test methods. Chapter 4.6.8

EC type examination No. 44 205 13738001

Above EC Type Directives Certified by:	**Harmonized Standards Used:**	**Other Technical Standards Used:**
TUV NORD CERT GmbH Langemarckstr.20 45141 Essen Germany Identification No: 0044	EN ISO 13849-1:2008	DIN 18650-1:2005 EN16005:2012

Compiler of Technical File (EC Community)	**Location of Declaration (Manufacture)**	**Declaration made by**	**Date**
David Morgan / Hotron Ireland Ltd 26 Dublin Street, Carlow, Ireland Ph: +353 5991 40345 Fax: +353 5991 40543	Honda Electron Co. Ltd 1-23-19 Asahi-Cho,Machida-City, Tokyo, Japan	Osamu Ishii Quality Assurance Manager	4 April 2014

<Disclaimer> The manufacturer cannot be held responsible for below.

1. Misinterpretation of the installation instructions, miss connection, negligence, sensor modification and inappropriate installation.
2. Damage caused by inappropriate transportation.
3. Accidents or damages caused by fire, pollution, abnormal voltage, earthquake, thunderstorm, wind, floods and other acts of providence.
4. Losses of business profits, business interruptions, business information losses and other financial losses caused by using the sensor or malfunction of the sensor.
5. Amount of compensation beyond selling price in all cases.

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