Matchbox Demo User Manual Intelligent Proximity Sensing

Rolf Weber | August 2013



Matchbox Demo Manual

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1. Demo Kit Contents





2. Getting Started

Use the battery pack or USB cable to power the demo.

1a. Battery Pack

- Insert AAA batteries in the battery pack
- Connect the battery pack to the demo
- Switch on battery pack

1b. USB Cable

- Connect the USB cable to demo and a computer
- See 4. Software Installation and 5. Graphical User Interface

2. Operating the demo





3. Modes

Proximity sensing (1", 4" & 6") Place hand over indicator LED at respective distance for on. Remove hand for off.

Slide

Slide finger across the two indicator LEDs for on. Slide finger across in the opposite direction for off.

Rotary

Rotate finger counter clockwise around the three indicator LEDs to increase brightness. Rotate finger clockwise to reduce brightness.







Touch

Tap indicator LED to turn on/off. Hold finger down to increase/ decrease brightness.



Wave hand left- rightleft once for on. Wave a second time for off.

Ambient Light Sensor

Ambient light will increase brightness. The reduction of ambient light will decrease brightness.









4. Software Installation

Go to: http://ledlight.osram-os.com/matchboxdemo



Top Level Application Using Events												
File Edit Operate Tools Window Help												
Calibration: Screen input Write to board Store to EEPROM Write to Board Load Settings Sctidata/Settings.xls Load Settings Scidata/Settings.xls Load Settings Scidata/Settings.xls Load Settings Customer: Customer: Data Retrieval Save Data Data Retrieval Save Data Save Settings Save Settings Scidata/Settings.xls Load Settings Scidata/Settings.xls Load Settings Customer: Data Retrieval Save Data Data Retrieval Save Settings Scidata/Settings.xls Load Settings Customer: Data Retrieval Save Settings Scidata/Settings.xls Scidata/Prox2.xls File Path ALS Save Settings Scidata/Settings.xls Load Settings Scidata/Prox2.xls File Path Prox 2 Bcidata/Prox3.xls Scidata/Prox3.xls Scidata/Prox3.xls												
Store to EEPROM Preset Values default hidden: Store to EEPROM Read EEPROM Write to board Application Mode 255- 240- 220- 200-	-65535 -10000											
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80-	-10											
Average short dist. Short Dist. Prox. 10 x Slide Lamp Long Dist. Prox. Wave 30 x Average long dist. 30 x Average wave 20- 5 x 0- 38977	-1											
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Top Level Application Using Events		-	-						
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ALS Mode Triggered all data Ambient Light Sensor ALS lower Thresh. ALS upper Thresh. ALS Reading 10 20 37				 ALS upper threshold Actual ALS readings in counts Display mode: shows all events shows events above upper or below 					ALS O
LED 3 Proximity Sensor Channels									utput
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LED 2 current Prox 2 Thresh. 50 mA LED 3 current Prox 3 Thresh.	Prox 2 Reading 0 Prox 3 Reading	р	rox Integration I. d.	Opto	SRAM Semiconductor	s <u>V-06-</u>	2013	ALS * * * * PS1 * * * * PS2 * * * *	2
50 mA 🤝 🗍 30	0		1500 us 🔻			Part ID 197		PS3 * * * *	







6. PCB: Top view





6. PCB: Side view



for application mode display



6. PCB: Bottom view





Thank You.



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