

Dallas Reader with LED and Push Button (AR0200)

Overview



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1 Introduction

1.1 Overview

The Dallas Reader with LED and Push button (PN AR0200) contains a Dallas reader, a push button and a two colour LED. This means that now only one device is installed, instead of three different devices.

The Dallas reader is used for the Driver ID report. The push button is used for special events such as private / business trip reports, while the LED is used for status indications controlled by the Cellocator unit.

The Cellocator unit reports to the Control Center (CC) application when the Driver ID is received from the Dallas receiver and upon changes in the push button status. It also activates the LED in up to three different colours according to commands sent by the CC Application via Over the Air (OTA) commands.

The product can be used for applications such as driver working hour reports or vehicle private / business usage reports. The driver identifies themselves by using the Dallas button and then presses the button, reporting the relevant event. The application activates the LED indicating to the driver that the report has been accepted and that the relevant status has been changed. The driver terminates the special status by pressing the button once again.

Note that the LED circuit is optimized for 12V operation.

1.2 Highlights

- ◆ Saves installation of 3 different devices: Dallas reader, push button and led.
- ◆ Easy to install.
- ◆ Ideal for private / business report applications.

1.3 Compatibility

The product can be used with any Compact unit supporting a 1-wire Dallas interface, with at least one digital input and one output.

1.4 Abbreviations

Abbreviation	Description
PN	Part Number
LED	Light Emitted Diode



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1.5 References

#	Reference	Description
1		

1.6 Revision History

Version	Date	Description
1.0	18/8/2009	First draft of system description
1.1	04/02/2010	Modified for sales support
1.2	23/06/2010	1st draft of system overview

2 Product Description

2.1 Cellocator Unit Integration

The product has 4 wires for integration with the Cellocator unit.

- ◆ One wire connects the Dallas receiver to the Cellocator unit Dallas interface.
- ◆ The second wire connects the push button to one of the Cellocator digital inputs.
- ◆ The third and fourth wires connect the two-coloured LED to one or two of the Cellocator unit outputs. The two LED wires provide 3 colours and blank while one LED wire provide one colour (red or green) and blank.

The wires are described in the Connection Table in the following section.

2.2 Connection Table

Wire Name	Wire Number	Wire Color	Connection
GND	1	Black	Vehicle GND
Red LED	2	Brown	Cellocator unit output
Dallas Reader	3	White	Cellocator unit 1 wire interface
Push Button	4	Blue	Cellocator unit digital input
Green led	5	Green	Cellocator unit output
Power	6	Red	Vehicle battery



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3 Installation Instructions

The device should be installed according to the following instructions:

1. Connect the device wires to the car battery, car ground and the Cellocator unit harness according to the Connection Table.
2. Install the device cradle, either using the screws or the double sided 3M tape, on the car panel.
3. Mount the device on its cradle.

4 Technical Specifications

4.1 Electrical Specifications

Parameter	Value
Operating voltage	6 V - 32 V
Maximum Current consumption	14 mA at 12V 34 mA at 24V
Reverse Polarity Protection	Yes

4.2 Physical Specifications

Parameter	Value
Dimensions	55.5mm x 29.5mm x 16.5mm
Enclosure Material	ABS
Working Temperature	-20 °C to 60 °C
Wires length	50 cm
Certification	RoHS