

CR Protector Product Overview



Cellocator Division
Pointer Telocation Ltd.

Proprietary and Confidential

Version 1.1

Revised and Updated: February 6, 2017



POINTER



Cellocator CR Protector Product Overview



Legal Notices

IMPORTANT

1. All legal terms and safety and operating instructions should be read thoroughly before the product accompanying this document is installed and operated.
2. This document should be retained for future reference.
3. Attachments, accessories or peripheral devices not supplied or recommended in writing by Pointer Telocation Ltd. May be hazardous and/or may cause damage to the product and should not, in any circumstances, be used or combined with the product.

General

The product accompanying this document is not designated for and should not be used in life support appliances, devices, machines or other systems of any sort where any malfunction of the product can reasonably be expected to result in injury or death. Customers of Pointer Telocation Ltd. Using, integrating, and/or selling the product for use in such applications do so at their own risk and agree to fully indemnify Pointer Telocation Ltd. For any resulting loss or damages.

Warranty Exceptions and Disclaimers

Pointer Telocation Ltd. Shall bear no responsibility and shall have no obligation under the foregoing limited warranty for any damages resulting from normal wear and tear, the cost of obtaining substitute products, or any defect that is (i) discovered by purchaser during the warranty period but purchaser does not notify Pointer Telocation Ltd. Until after the end of the warranty period, (ii) caused by any accident, force majeure, misuse, abuse, handling or testing, improper installation or unauthorized repair or modification of the product, (iii) caused by use of any software not supplied by Pointer Telocation Ltd., or by use of the product other than in accordance with its documentation, or (iv) the result of electrostatic discharge, electrical surge, fire, flood or similar causes. Unless otherwise provided in a written agreement between the purchaser and Pointer Telocation Ltd., the purchaser shall be solely responsible for the proper configuration, testing and verification of the product prior to deployment in the field.

POINTER TELOCATION LTD.'S SOLE RESPONSIBILITY AND PURCHASER'S SOLE REMEDY UNDER THIS LIMITED WARRANTY SHALL BE TO REPAIR OR REPLACE THE PRODUCT HARDWARE, SOFTWARE OR SOFTWARE MEDIA (OR IF REPAIR OR REPLACEMENT IS NOT POSSIBLE, OBTAIN A REFUND OF THE PURCHASE PRICE) AS PROVIDED ABOVE. POINTER TELOCATION LTD. EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, SATISFACTORY PERFORMANCE AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL POINTER TELOCATION LTD. BE LIABLE FOR ANY INDIRECT, SPECIAL, EXEMPLARY, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOSS OR INTERRUPTION OF USE, DATA, REVENUES OR PROFITS) RESULTING FROM A BREACH OF THIS WARRANTY OR BASED ON ANY OTHER LEGAL THEORY, EVEN IF POINTER TELOCATION LTD. HAS BEEN ADVISED OF THE POSSIBILITY OR LIKELIHOOD OF SUCH DAMAGES.



Cellocator CR Protector Product Overview



Intellectual Property

Copyright in and to this document is owned solely by Pointer Telocation Ltd. Nothing in this document shall be construed as granting you any license to any intellectual property rights subsisting in or related to the subject matter of this document including, without limitation, patents, patent applications, trademarks, copyrights or other intellectual property rights, all of which remain the sole property of Pointer Telocation Ltd. Subject to applicable copyright law, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise), or for any purpose, without the express written permission of Pointer Telocation Ltd.

© Copyright 2017. All rights reserved.



Cellocator CR Protector Product Overview



Table of Contents

1	Introduction	5
1.1	Overview.....	5
1.2	Abbreviations	5
1.3	References	5
1.4	Revision History	5
2	Product Description.....	6
2.1	Solution Components.....	6
2.2	Features	6
2.3	Benefits	6
2.4	Applications.....	7
3	Technical Specifications	8
4	Setup Instructions	9
5	Installation Tips	12



Cellocator CR Protector Product Overview



1 Introduction

1.1 Overview

The 712-20031 CR Protector is a low cost silicone / rubber cover for the CR family devices, designed to improve the environment and ingress protection of the device from IP40 to IP65, increasing solid-particle-protection from 1 mm to Dust-Tight (No ingress of dust; complete protection against contact) and liquid-ingress-protection from none to water-jets protection.

This dust and water proof solution provides the installer with more flexibility, as the CR unit can now be installed in vehicle cavities other than the passenger compartment or the trunk. The CR Protector is used in conjunction with Molded-harnesses in order to provide perfect protection.

1.2 Abbreviations

Abbreviation	Description
IP40	Ingress Protection 40
IP65	Ingress Protection 65

1.3 References

All the reference documents listed in the following table can be downloaded from the Knowledge Base section of the Cellocator website (<http://www.cellocator.com>).

#	Reference	Description
1.	CelloFamily Hardware Installation Guide	
2.	Harness Selection Wizard	

1.4 Revision History

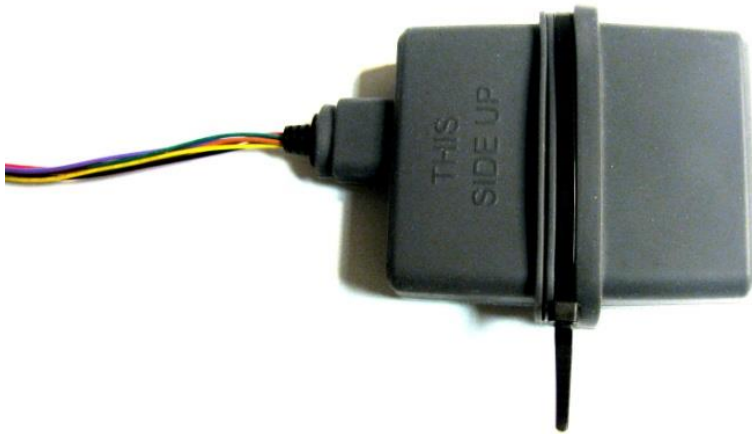
Version	Date	Description
1.0	17/04/2013	Initial version
1.1	7/2/2017	Adapted to CR family units and harnesses

2 Product Description

2.1 Solution Components

The CR Protector includes 2 silicon / rubber parts and a cable tie. The waterproof solution also requires CR harnesses utilizing molds. The IP65 compliance is dependent on following the instructions provided in this document. The two silicon / rubber parts are shown in the pictures below.

The unit and molded harness, covered by the protector and ready for installation, is shown in the pictures below.



The CR molded harnesses that support the CR Protector is can be found in the [Harness Selection Wizard](#).

NOTE: IP65 compliance has been tested in accredited lab for its compliance with [IEC 60529](#).

2.2 Features

- ◆ IP65 compliance
- ◆ Low cost
- ◆ Provides an additional level of impact protection thanks to the silicone shock absorption attributes
- ◆ Smart and professional look
- ◆ Convenient, easy set-up and installation
- ◆ Compliant with CR Family devices

2.3 Benefits

- ◆ Enables installation of the CR unit in vehicle cavities other than the passenger compartment or the trunk. For example:



Cellocator CR Protector Product Overview



- Under/behind the front/rear bumpers
- Under the mirror plastic covers
- ◆ Extends the solutions range supported by the CR Family, allowing it to compete in applications where regular CR units cannot.

2.4 Applications

The CR Protector can enhance the application range supported by the CR Family for advanced fleet management and security in logistics, delivery, transportation and trucking segments where the installation of the device inside the passenger compartment is inconvenient or not feasible.

In addition, there is a growing market of fleet management and security applications for **motorcycles** where the tracking device must be installed under the plastic covers, an area which is not hermetically protected against dust and water. In such cases, the CR Protector provides the perfect solution.

The third vertical market in which the CR Protector may provide an adequate solution is the **Heavy and Agriculture machinery** segments, where a power source is available but the structure of the vehicle does not enable installation in a hermetic environment.



Cellocator CR Protector Product Overview



3 Technical Specifications

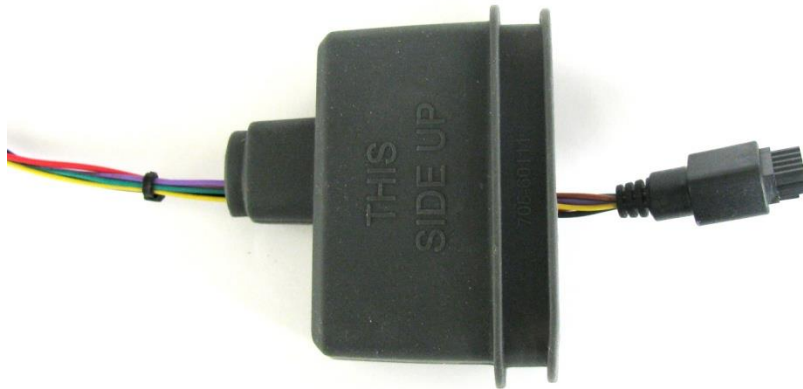
Parameter	Value
Dimensions of unit covered with the protector	116 x 88 x 28 mm
Weight	~70 g
Material	Silicone rubber
Material Flammability Rating	UL 94 - HB
Temperature range	-40 to 200 °C
RoHS	Supported
IP Rating	IP 65

4 Setup Instructions

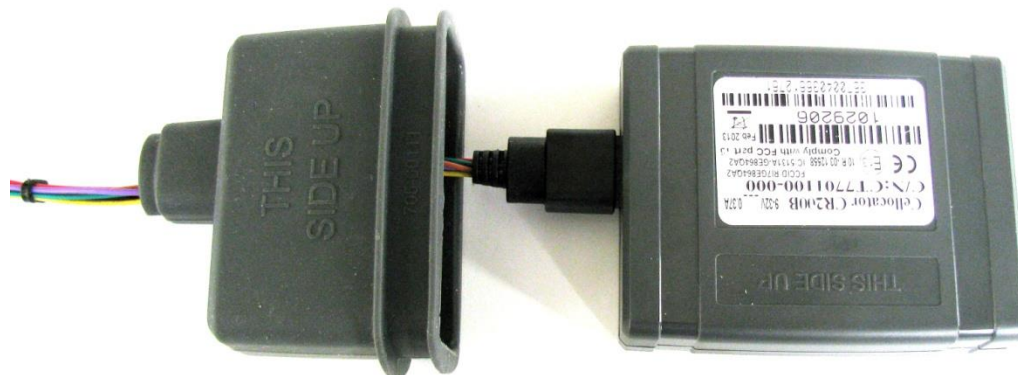
The following procedure describes how to set up the CR unit with the CR Protector.

➤ **To set up the CR unit with the CR Protector:**

1. Insert the harness wires through the protector hole of the part with the notation 'THIS SIDE UP', as shown in the picture below.



2. Connect the harness to the unit, as shown in the picture below. Make sure that the unit and the cover are with the notation 'THIS SIDE UP' in the same direction as shown in the picture below.



3. Cover the CR unit with the protector part and ensure that it covers the mold tightly, as shown in the picture below.



4. Cover the remaining part of the unit with the other part of the protector, as shown in the pictures below.

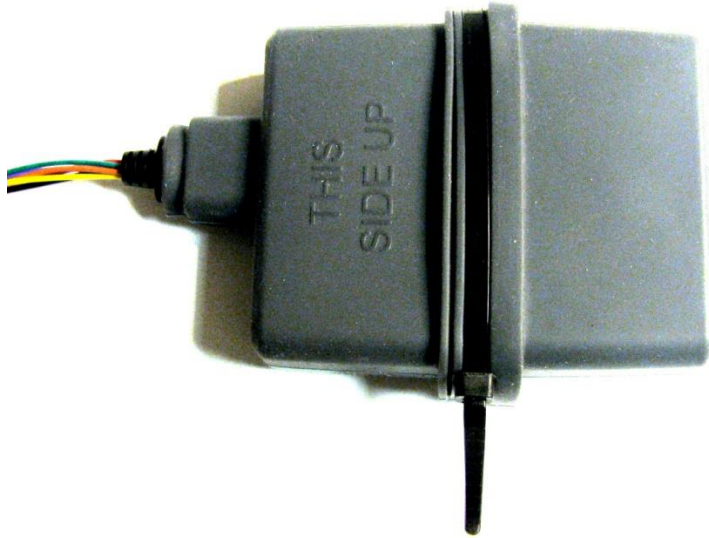




Cellocator CR Protector Product Overview



5. Attach the two parts of the protector using a cable tie, as shown in the picture below.



6. The setup is complete and the unit is ready for installation.



Cellocator CR Protector Product Overview



5 Installation Tips

- ◆ For full installation instructions, please refer to the [CelloFamily Hardware Installation Guide](#).
- ◆ To attach the device to its location use a thick, two sided, adhesive tape, to connect between the device and the fixed support, and then use two plastic straps (cable ties) to secure the device to its location. Make sure the device is well positioned and will not work itself loose (it may either fall or create irritating noises if not properly secured).
- ◆ The unit covered with the CR Protector cannot be installed in a high temperature environment or next to a heat source such as the engine compartment or the exhaust system.
- ◆ The CR Protector is not immersion protected and cannot be installed where water flooding is expected or may happen.