



RC01 Infra-Red Controller Instructions

TAKE CONTROL 

RC01 Infra-red Handheld Controller For Ex-Mo

Operation & Maintenance Manual

Unit Manufacturing Data
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
RC01 Intra-red Controller User Handbook

Manufacturer and Approvals Details

The RC01 is manufactured and maintained solely by:
Cable Systems Ltd
2-6 Gawsworth Court
Risley Road, Birchwood
Warrington, Cheshire
WA3 6NJ.
England

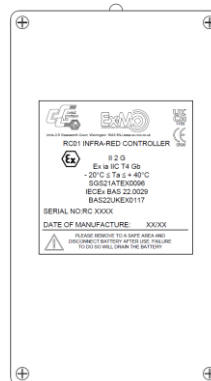
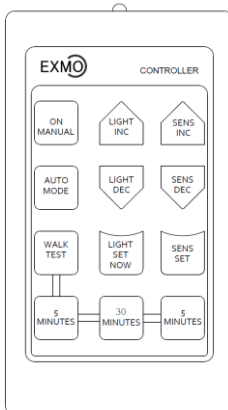
Tel:- +44 (0)1925 852145
email:- sales@cablesystems.co.uk
website:- www.cablesystems.co.uk

The RC01 has the following specific approvals

Name and Type	INFRARED CONTROLLER TYPE RC01
Certificate Numbers	ATEX Certificate SGS21ATEX0096 IECEX Certificate IECEx BAS 22.0029 UKEX Certificate BAS22UKEX0117
Specific Marking of Explosion Protection	Ex ia IIC T4 Gb (-20°C ≤ Ta ≤ +40°C)
ATEX Directive Marking	 II 2 G
Notified body	SGS 0598

General Description

The RC01 handheld infra-red controller is designed for use with the Ex-Mo motion detector. It can be used freely within a hazardous area to calibrate and configure these instruments via a window in their flameproof enclosures without having to purge the area of hazardous gases or liquids. It is not coded to one specific Ex-Mo detector & can be used with any & every Ex-Mo unit.



RC01 Infra-Red Hand—held Controller

Zone of Operation

The RC01 is an intrinsically safe device approved for operation in the following environment according to the specific marking of explosion protection.

Ex ia IIC T4 Gb (-20°C ≤ Ta ≤ +40°C) Ta = ambient temperature

Physical Description

Size - 53mm wide, 113mm high, 31 mm deep

Weight - 0.25kg

Enclosure - die cast aluminium. nylon coated

Switch membrane - polyester

Equipment rating - IP40

First Time Use

The RC01 is supplied fully tested with a battery pack fitted, ready for immediate use

Normal Use

The top end of the RC01 (with the projecting IR emitter) should be aimed at the window in the front of the Ex-Mo. Changes in state of indicators behind the window will show correct reception of the IR pulse train from the RC01.

The RC01 should not be used within 2 metre of a window and it might be necessary to temporarily shade the window under intense ambient light conditions.

Maintenance

The outside of the enclosure can be cleaned using a damp cloth Do not use solvents

Do not unscrew the four enclosure lid retaining screws when a hazard is present

Apart from battery changes there are no user serviceable parts within the RC01. Suspected faulty units must be returned to the Manufacturers.

RC01 Infra Red Hand-held Controller

Changing the Battery Pack

The battery pack will last for up to 1 year with normal use. To prolong battery life we recommend disconnecting the battery when the RC01 is not being used (see safety notes below). Replacement is recommended when the controller fails to communicate with the Ex-Mo

The following work MUST be carried out in a SAFE environment with no hazard present.

- 1) Have the replacement pack to hand
- 2) Remove the four posi-head screws securing the enclosure back
- 3) Remove the enclosure back exposing the battery pack and printed circuit board
- 4) Remove the old battery pack and unplug from printed circuit
- 5) Plug the new battery pack noting the polarising tab on the circuit board connector.
- 5) Replace enclosure back and secure with the four screws.
- 7) Dispose of the old battery pack (manganese) according to local environmental regulations.

RC01 Infra Red Hand-held Controller

Specification


Size	63mm wide, 113mm high, 31 mm deep
Enclosure	die-cast aluminium. nylon coated
Switch membrane	polyester
Enclosure retainers	4 screws M3 x 10 post countersunk
Weight	0.25kg
Equipment rating	IP40
Quiescent current	26 μ A (no key pressed)
Running current	40 μ A (key pressed)
Infra-red wavelength	940nm
Radiated Intensity	15.4mW/sr
Battery Pack terminal voltage	9V nominal
Battery Pack size	52mm long X 28mm wide x 19 5mm deep
Battery Pack connection	Polarised 0.1" 2-way free socket
Battery weight	0,1kg



Declaration of Conformity

Manufacturer: Cable Systems Ltd, 2-6 Gawsworth Court, Risley Road,
Birchwood, Warrington, Cheshire, WA3 6NJ, United Kingdom

Equipment Type: Ex-Mo Infra-Red Remote Controller RC01

Markings:  II 2 G
Ex ia IIC T4 Gb -20°C ≤ Ta ≤ +40°C

We declare, as the manufacturer, the equipment type described above conforms to the following directives and harmonised standards.

European ATEX Directive: 2014/34/EU

UK Statutory Instrument: 2016/1107

Harmonised Standards: EN 60079-0:2018, EN 60079-7:2015+A1:2018, EN 60079-11:2014

Notification Body for
EU-Type Examination: SGS Fimko Oy, 0598, Helsinki, Finland

EU-Type Examination
Certificate: SGS21ATEX0096

Approved Body for
UK-Type Examination: SGS Baseefa, 1180, Buxton, UK

UK-Type Examination
Certificate: BAS22UKEX0117

Approved by:
Mr DJ Rigby:
Managing Director



Date & Place: 24th June 2022, Warrington, Cheshire UK

This declaration certifies compliance with the intended directive but no warranty of properties. For safe and correct use of this product, the information given in the installation and user manual must be followed.

Ex-Mo

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