Principle of Operation

102C-315FR1 Series

Hand Held Transmitter Encoder

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Contents

1.0 Amendment Record

Amend No.	Date	Description	Authorised By	Signature

2.0 Product Identification and Principles of Operation

2.1 Product Identification

This Technical Construction File covers the products identified as follows:

Brand Name	Keeloq Remote Control System	
Model Range	102-315F Series Radio Hand Held Transmitter Encoder	
Part Numbers	102C1-315FR1	1 switch version
	102C2-315FR1	2 switch version
	102C4-315FR1	4 switch version
Manufacturer	RF Solutions Limited Unit 21 Cliffe Industrial Estate South Street Lewes East Sussex BN8 6JL	

2.2 Principles of Operation

The principles of Operation of the 102C-315FR1 range of hand held devices are given in datasheet number DS102-4 Oct '02, which is appended to this document. A copy of the datasheet is included with each product despatched.

A copy of the RF Solutions Sales Catalogue, which provides an overview of the Company and its products, is included in Appendix A of this document.

3.0 Design, Manufacture and Quality

3.1 Design and Manufacture

The 102C-315FR1 series of hand held transmitter encoders are available in 1, 2 or 4 switch product options. The product uses a commercially available transmitter module. The Keeloq encoder chip and the remaining circuitry are the same as is used on the AM-110C-433 range of pocket keyfob transmitter encoders (see Technical Construction File RFSL-TCF-001).

The design and manufacture of both options is described in the following documents, which are appended to this section of the Technical Construction File:

- SCH102-6 schematic circuit diagram covering 1 and 4 switch product options.
- A separate bill of materials for both product options.
- TID102-6 PCB layout drawing covering 1, 2 and 4 switch product options.
- FWD027_1 firmware control sheet for the HCS360/SN surface mount Keeloq encoder chip.
- TS102_2 end-of-line test specification, which includes the 1, 2 and 4 switch product options for the 102C-315R1 series of hand held transmitter encoders.

3.2 Quality System

RF Solutions is currently working towards achieving ISO 9001:2000 accreditation for its Quality System. The target date for accreditation is December 2002. A copy of the Company Quality Manual is included in Appendix B to this Technical Construction File.

4.0 Product Marking

4.1 Marking

Each product is labelled with a product ID sticker. The format is below

Part No: 102C1-315FR1 WO No: 9649/1-001 Date : 1st Jan '02

There are three fields:

Part No: refers to the product part number this can be

102C1-315FR1
102C2-315FR1
102C4-315FR1

WO No: refers to the Internal Manufacture Works Order Batch number from which the product can be traced.

Date: refers to the date the product was manufactured

4.2 Other Marking

In accordance with the requirements of Annex VII to the European R&TTE Directive 1999/5/EC, products are CE marked.

In accordance with clause 5 of Annex VII of the R&TTE Directive 1999/5/EC, products are also marked with an equipment class identifier. This takes the form of the Alert symbol as required by the UK Radiocommunications Agency.

Appendix A

Sales Catalogue

Appendix B

Quality Manual