



## C4 RED Quick Manual

iDTRONIC GmbH  
Donnersbergweg 1  
67059 Ludwigshafen  
Germany/Deutschland

Phone: +49 621 6690094-0  
Fax: +49 621 6690094-9  
E-Mail: [info@idtronic.de](mailto:info@idtronic.de)  
Web: [idtronic.de](http://idtronic.de)

Issue 1.3  
– 09. February 2017 –

Subject to alteration without prior notice.  
© Copyright iDTRONIC GmbH 2017  
Printed in Germany

## Contents

<b>1</b>	<b>Features and Structure .....</b>	<b>4</b>
<b>2</b>	<b>Basic Operation .....</b>	<b>4</b>
2.1	Wake up .....	4
2.2	Shutdown .....	4
2.3	Software Installation and Data Transfer with a PC .....	4
2.4	Uninstall Apps .....	5
2.5	Add Google Playstore Account .....	5
2.6	Remove Google Playstore Account .....	5
2.7	Remove WLAN Access .....	6
2.8	Useful Resources .....	6
<b>3</b>	<b>Demo Software .....</b>	<b>7</b>
3.1	Demo-Software KeyTest51 .....	7
3.2	Scan 2D Server .....	7
<b>4</b>	<b>Technical Data .....</b>	<b>8</b>
<b>5</b>	<b>Troubleshooting .....</b>	<b>10</b>
5.1	Camera already in use by other app .....	10

## 1 Features and Structure



## 2 Basic Operation

### 2.1 Wake up

System would enter standby mode automatically after the default 1 minute idle status, or we can press the power button to enter the standby mode forcibly; For tablets in standby mode, please the power button slightly to wake it up;

### 2.2 Shutdown

Press the power button for seconds and select the option of “Power off” to shutdown the terminal. Please save the data before shutting down the system, otherwise the unsaved data would be lost.

### 2.3 Software Installation and Data Transfer with a PC

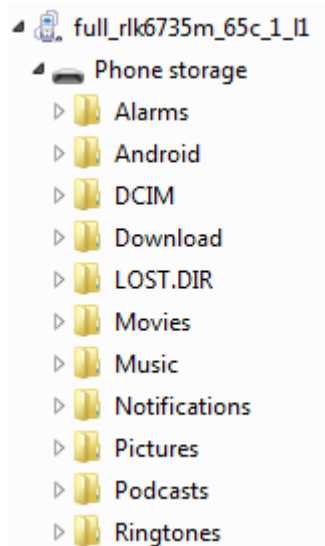
Plug in the USB connection. An information should appear with one of this texts:

- “Connected as a USB Storage”
- “Connected as a media device” (MTP)
- “Connected as a camera” (PTP)
- “USB Charge Only”
- “Connected as an installer” (external USB CD-ROM drive)

You can also try to pull this information from the top of the screen. Double touch on this information; this will open the USB computer connection settings.

Only MTP and PTP provide read/write access from your PC to the C4. The C4 will appear in Windows Explorer as portable device labelled "full\_rlk6735m\_65c\_1\_l1".

- MTP allows access to a number of folders.
- PTP allows access only to the folders "DCIM" and "Pictures".



Copy software installation file (e.g. "UhfSDKdemo.apk") in any of these folders (e.g. "Download").

Open the "File Manager" app, navigate to the folder "Download". Select the software installation file; this will lead to an installation screen.

## 2.4 Uninstall Apps

Open "Settings" => go to section "Device" => open "Apps" => select desired app, this will open an information and action screen.

## 2.5 Add Google Playstore Account

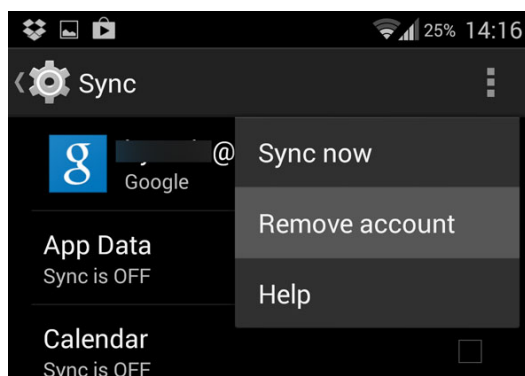
If you open Google Playstore for the first time, you are requested to input the e-mail address and password of your Google Playstore account. Next step is to provide your payment method. Do not ignore this step! Otherwise Google Playstore may crash. Select "Remind me later" if you don't want to set your payment method.

## 2.6 Remove Google Playstore Account

Open "Settings" => go to section "Personal" => open "Accounts" => open "Google" => click on first entry with E-Mail

Now you should see the settings of your google account sync settings.

Open right top Menu [Remove Account]



## 2.7 Remove WLAN Access

Open "Settings" => select "Wi-Fi" => click on connected network => select [FORGET] in bottom left corner

## 2.8 Useful Resources

- [androidtipsandhacks.com](http://androidtipsandhacks.com)
- [androidcentral.com](http://androidcentral.com)

### 3 Demo Software

#### 3.1 Demo-Software KeyTest51

Let you test the left/right buttons and the 6 keypad buttons.  
The “Handle Button” is from the pistol grip of the C4 Red UHF GUN.

#### 3.2 Scan 2D Server

This software provides a keyboard emulation for 2D code readings.

- Scan switch enable/disable keyboard emulation
- Prefix send additional button before the code reading
- Suffix send additional button after the code reading
- Voice unknown
- Scan key settings select key to start 2D code reading

## 4 Technical Data

Physical Characteristics	
Dimension	170 × 85 × 23 ±2 mm (H × W × D)
Weight	Net Weight :370 g (including battery & wrist strap)
Display	Gorilla Glass 3 9H 5.0 in. TFT-LCD (720 × 1280) touch screen with backlight
Backlight	LED backlight
Keypads	3 TP keys, 6 function keys, 4 side buttons
Expansions	2 PSAM, 1 SIM, 1 TF
Battery	Rechargeable li-ion polymer, 3.7 V, 4500 mAh
Performance Characteristics	
CPU	Quad A53 1.3 GHz quad-core
Operating System	Android 5.1.1
Storage	2 GB RAM, 16 GB ROM, MicroSD (max 32 GB expansion)
Environmental Conditions	
Operating Temperature	-20 to +50 °C
Storage Temperature	-20 to +70 °C
Humidity	5 to 95 % relative humidity (non-condensing)
Drop Specifications	5 ft./1.5 m drop to concrete across the operating temperature range
Sealing	IP65, IEC compliance
ESD	±15 kV air discharge, ±8 kV direct discharge, ±8 kV indirect discharge
Development Environment	
SDK	HHW Software Development Kit
Language	Java
Environment	Android Studio or Eclipse
Data Communication	
WWAN	TDD-LTE Band 38, 39, 40, FDD-LTE Band 1, 2, 3, 4, 7; WCDMA(850/1900/2100MHz); GSM/GPRS/Edge 850/900/1800/1900MHz);
WLAN	2.4/5 GHz Dual Frequency, IEEE 802.11 a/b/g/n/ac
WPAN	Bluetooth Class v2.1+EDR, Bluetooth v3.0+HS, Bluetooth v4.0
GPS	GPS(embedded A-GPS), accuracy of 5 m
Accessories	
Standard	1 × Power Supply 1 × Lithium Polymer Battery 1 × DC charging cable 1 × USB data cable
Optional	Magnetic charging cable Carrying case



**Data Capturer****Barcode Reader (Optional)**

1D Barcode	1D laser engine	Symbol SE955
	Symbologies	All major 1D barcodes
2D Barcode	2D CMOS Imager	Honeywell N6603
	Symbologies	PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode, Postal Codes, US PostNet, US Planet, UK Postal, Australian Postal, Japan Postal, Dutch Postal. etc.

**Color Camera**

Resolution	8.0 megapixel
Lens	Auto-focus with LED flash

**RFID Reader (Optional)**

LF RFID	Frequency	125/134.2 kHz (FDX-B/HDX)
	Protocol	ISO 11784 & 11785
	R/W Range	2 to 10 cm
HF RFID	Frequency	13.56 MHz
	Protocol	ISO 14443A & 15693
	R/W Range	2 to 8 cm
UHF RFID	Frequency	865~868 MHz or 920~925 MHz
	Protocol	EPC C1 GEN2/ISO 18000-6C
	Antenna Gain	Circular antenna (2 dBi)
	R/W Range	1 to 1.5 m (tags and environment dependent)
Active 2.45 GHz	Read range more than 200 m	
433 MHz	Read range more than 200 m	

**ZigBee (Optional)**

Protocol	IEEE 802.15.4
Reading Range	100 m to 200 m

**Fingerprint Reader (Optional)**

Sensor	TCS1ST
Sensor type	Capacitive, area sensor
Resolution	508 DPI
Performance	FRR < 0.008 %, FAR < 0.005 %
Capacity	1000

**PSAM Security (Optional)**

Protocol	ISO 7816
Baudrate	9600, 19200, 38400, 43000, 56000, 57600, 115200
Slot	2 slots(maximum)

## 5 Troubleshooting

### 5.1 Camera already in use by other app

This happens because 2D and camera share the same physical hardware connection, so they cannot be open at the same time. You need to close one hardware module before opening the other one. This limitation exists in all the 2D devices including devices from the other manufacturers.