

# Paradox alarm systems remote programming via Securecom devices

## Introduction

Remote reprogramming of alarm systems or downloading of event lists can be easily done with Securecom devices that communicate over an IP-based connection and can be managed remotely.

The basis for a flawless and robust connection is the "direct IP link" between the communicator and the remote downloader. This connection is established by the IoT server, which also provides the possibility for remote management. In a so called peer-to-peer, or P2P, connection, the two endpoints communicate directly with each other, with very short response times and minimal data loss, ensuring excellent connectivity.

The following application guide shows you how to easily and quickly connect to remote alarm systems and upload/download their data using Paradox factory programs (e.g. BabyWare).



# **1** Operation

The remote serial access function allows you to program any alarm panel remotely, all you need is a laptop and an internet connection. Many Securecom products support this feature, whether they are wired LAN, wireless WIFI or communicate via a mobile data network.

The physical connection cable is replaced by an Internet data connection, so you can use the programming software in the same way as if the alarm control panel was physically connected to the PC COM port.

All signals (all bits) coming from the alarm system to the physical serial port of the communicator appear on the virtual COM port of the **Remote Serial** software, and vice versa. This "tunnel connection" is routed over the Internet and is established by the PULOWARE IoT server.

## 2 Elements of the link

- Securecom communicator with a serial connector (list at the end of the document)
- Serial cable type of Cable5-PAR that used to connect the alarm to the communicator, which transmits the serial communication from Paradox control panels to Securecom devices.
- On the computer side, you need to install the Remote Serial software, which provides the conversion of serial data to IP packets and vice versa too, as well as the send/receive process. The software is available at: securecom.eu

# **3** Creating remote connection and virtual COM port

- 1. First connect the serial download cable to the serial port of the alarm and to the communicator.
- 2. Then run the Remote Serial application

The software will create a virtual COM port on the PC which will appear as a physical serial port to the program downloading the alarm (BabyWare or WinLoad) (this is visible in the Windows/Device Manager interface as ELTIMA Virtual Serial Port)

🐃 Remote Serial v1.60	. –	×	• Virtual COM port: the COM port selected
Virtual COM port:	COM10		in BabyWare (e.g. COM10 or any COMx)
Device ID: 🔍	90ebe065ec1e64v4		• Device ID: the 16 character unique
Baud rate:	9600 ~		product identifier from the data table
Serial mode	DSC: 🗌 Other: 🗹		• <b>Baud rate:</b> data transfer rate of the alarm
Repeat message:			panel
	CONNECT DISCONNECT		Spectra SP550: 9600Bps
			Magellan MG-6060: 57600Bps
S	erial port activity: RX TX		Digiplex DGP-NE96: 38400Bps
c	onnection type: -		Digiplex DGP-848: 19200Bps
S	ent bytes: 0		• Serial mode: for Paradox the non-DSC
R	eceived bytes: 0		
(A)			snould be selected

## Setting parameters

3. Connecting to the remote communicator via the Internet

Press **CONNECT** to establish a connection between the communicator and the virtual COM port. If you have entered the Device ID correctly and the device is on the network, the connection will be established.

🕸 Remote Serial v1.60	a=	□ ×
Virtual COM port:	COM10	🗸 ок
Device ID: 🔍	3009c6bc5f8947de	🗸 ок
Baud rate:	9600 ~	🗸 ок
Serial mode	DSC: 🗌 Other: 🖌	
Repeat message:		
Se	rial port activity: RX TX	
Co	onnection type: P2P mode	
Se	nt bytes: 0	
Pa	ceived bytes: 0	

- 1. Created a COM10 port on the PC
- 2. Connection to the remote device with the specified ID
- 3. Data transfer rate set to 9600 Bps
- 4. Transmission mode Paradox compliant

Type of connection: P2P (Peer to Peer)

The other connection type is Gateway mode but this does not guarantee robust transmission. If P2P mode fails the first time, try reconnecting again.

If the transmission network does not allow P2P mode at the moment (this depends on the network load), the IoT server enters between the communicator and the virtual COM port and the data is transferred through the server, in this case Gateway mode will be displayed in the connection type field. In this mode, the latency is higher, the response times are longer, and data loss and signal repetition may occur.

It is recommended to try repeatedly pressing the CONNECT button to establish a P2P connection.

## 4 Remote programming or downloading using BabyWare

### 1. Run the BabyWare

#### 2. Set account details

📾 Accoun	its V2.0.31						_				<u></u>		×
<u>File</u> <u>E</u> dit	<u>D</u> atabase <u>S</u> chedu	le/Batch <u>H</u> elp											
Welcom	e, Admin (1 Accou	unts)				🕗 Refresh	E	🔵 Open   Gav	e 🔇 Con	nect 🔒 My Profile 🕯	🍋 Opera	ators 🔤	
Acc 🔺	Label 🔍	Group		Panel Type		Version	1	Connection Opti	Contacts	System Login / Pane	System	/ PC Pass	SW
0058	Távsoros teszt	New	•	SP5500	•	04.7x 🚽	·	Serial 👻					
Add							7						
<													>

Panel Type: Firmware Version: Connection: e.g. SP5500 (the alarm panel tested in this specification) choosing the right or the latest Serial connection should be selected COM port and Baud rate should be set

<ul> <li>Serial</li> </ul>		
COM Port	ELTIMA Virtual Serial Port (COM10)	-
Baud rate	9600 Baud	•

3. Access to the remote alarm system via BabyWare

🖙 System Progress			×	🕸 Remote Serial v1.60		- 🗆 X
Please wait until the software has co Tasks Module Details	mpleted the following tasks.			Virtual COM port: COM1 Device ID: 3009ct	) ibc5f8947de	✓ ок ✓ ок
Description Connecting Serial Panel Identified (SP5500) Initiating panel connection Installer login Loading Block Counters	Progress Completed Completed Completed Completed Processing			Baud rate: 9600 Serial mode DSC: Repeat message: CONI Serial port Connection Sent bytes: Received b	Conter: ✓ IECT DISCONNECT activity: RX TX activity: R	√ ок
Close this dialog box when transfer com	pletes	/ с	IK	()) SE		V

Start the connection to the alarm system on BabyWare and you can then access the control panel remotely in the same way as if it were connected directly to a PC.

## **5** Communicators that support remote programming

All Securecom models with the 5-pin serial connector are supported.

- SINGULAR WIFI, W2G, W4G
- SC-2G, SC-4G
- UNIO WIFI, W2G, W4G
- 18 WIFI, W2G, W4G
- LANCOM