





# Protocol Converter V3.

# Hardware documentation

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#### Mounting the converter:

The converter is housed in a DIN rail housing, suitable for mouting on a DIN rail. To place the converter on the DIN rail, hook it up on the top side, and press firm on the bottom side until a click is heard.

To remove the converter, press the unit upwards, and take it off the DIN-rail.



# Connecting the converter



# Connecting the converter:

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	00		00000	
Serial in	5. Cts input 5. Cts input 5. Rts output 8. Rxd input 2. Txd output 1. GND (isola	t ated)		

All 3 serial inputs are connected the same way. The GND's are not directly coupled to each other.

The use of the hardware handshake is setup via the Configuration Tool. If the hardware handshake is not used, leave pins 4 and 5 open.

When there is data communication on the serial ports, the according led (on the right top side of the converter, indicated with the yellow arrow) indicates this.

# LED indicators on the Converter:



Linked:	Not used
Cmd:	Not used
SwRun:	This red led flashes to indicate that the software in the converter is running ok. If a call is inside the buffers of the converter, the flash changes into a 'long' flash.
OK:	This blue led indicates that the FAIL out relay is energised and the status is OK. If a failure occurs, the relay is de-energised, and the fail output is enabled.
TxD1: RxD1:	Indicates data transmission on serial port 1
TxD2: RxD2:	Indicates data transmission on serial port 2
TxD3: RxD3:	Indicates data transmission on serial port 3

Diagnostic information on the display:



Converter V3	
V1.00 29 –01-2019	

After power is applied to the converter, the LCD display shows the firmware version in use.



If the converter is idle, the name of the software and the Status OK is indicated. The "O" alters with 'o' to indicate the converter is running..

If a call arrives from the fire panel, that will be shown on the display, including the status of the call. A complete list is shown on page 9.

Out1	ln1	In2	
Fail	Fail	Fail	

If a failure occurs on the incoming or outgoing ESPA 4.4.4. signals, that is indicated on the display. If the problem remains than the fail-relay can be de-energised, according to the settings in the converter, to pass the failure through to a connected system.

## Diagnostic information on the display:

Press the Item button, the text "Diagnose" appears in the display. If the item button is pressed again: "Setup" and finally the firmware version appears in the display. Press Item again, so "Diagnose" is visible and press Enter Diagnose Setup Firmware version V1.00 29-01-2019

Com1:	txd	rxd
ESPA OUT	cts	rts

After pressing ENTER, the status of the first serial port is shown.

The left-bottom side shows alternating the function of the port (ESPA-OUT), the status of the port (LINK-OK) and the hardware (RS232).

The txd, rxd, cts and rts indicate a inactive line. If data is send, the txd changes into uppercase TxD.

By pressing "Item" again, the status of COM2, and Com3 are shown.

Com2:	txd rxd
ESPA IN	cts rts
Com3:	txd rxd
ESPA IN	cts rts

By pressing "Item" again, the hardware setup of Com1 is shown briefly:

Indicating that Com1 is used at 9600 baud, 8 bits, no parity and 1 stop bit. Without handshake

By pressing "Item" again, the same is shown for Serial Port 2 and 3.

Finally the Diagnose Level is displayed. That is the amount of log data send out to the USB port.

Press "Cancel" twice to leave the menu, or after 20 seconds the menu times out.

DiagnoseLevel: No diagnose

Serial Port 1:

9600 8N1 no-hs

# Diagnostic information on the display:

The converter uses 10 internal buffer positions to store ESPA messages. Once messages are stored into the buffer, the display shows the status of the calls indicated by a dot, or a character indicating the status:

• Position is not in use / empty

- N New, needs to be send.
- Q Queue, waiting to be send
- P Message send and paged.
- A Message send, user absent.
- T message not send, Terminated.
- S waiting for status.
- E Error, message not send.

Status ..NQP ATSE.

#### Setup contrast and diagnose level:

A few settings can be changed using the menu on the converter:

- contrast
- Diagnose level via USB port

To enter the setup, press the "Item" button twice, until the display shows: "Setup".

Press "Enter" here to enter the setup menu. The current contrast level is indicated.

To change the Diagnose level, press "Item".

Setup

Set contrast: 15

Set DiagLevel: No diagnose

To change the value, press "+" or "-" until the required value is indicated.

Press "Enter" to save the value Press "Cancel" to cancel the adjustment. Values changed and saved.

If no diagnose information is required, select "No diagnose" in the setup. This reduces the amount of unnecessary data to be send by the converter.

# Configuration port:



The converter can be configured using the ConfigTool via the USB connection (indicated above). The use of the ConfigTool is explained in the ConfigTool documentation.