

# Viewline Configuration Software (Version 0.8.0)

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- Programmable Gauges
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- Electrical Connection

# Programmable Gauges

- Tachometer 52, 85 and 110mm without LCD
- Tachometer / Speedometer 85 and 110 mm with LCD
- Sumlog
- Synchronizer
- Exhaust temperature 52mm
- Waste water 52mm
- Ammeter 52mm

# Important notes for programming

- During programming, the Signal input (Pin 5) should not be connected to a sender (Gauge in 0 position).
- After every write access (Download) on the gauge, switch OFF and ON the power supply (Terminal 30 or 31) of the gauge. Otherwise it is possible to damage the gauge permanently.
- While testing the gauge with a sensor signal after programming, the programming port have to be disconnected.

# Important notes for programming

- Threshold value for waste water gauge (fresh water gauge) is 0 – 100% of full scale reading
- Actual Sumlog gauges, warning threshold switch on 1kn to late and switch off 1kn to early (gauge firmware problem, currently under investigation).
- Tachometer without LCD -> depending on the different gauge firmware versions it is possible to program the place after the decimal point. The PC Software will identify if the gauge is able to program the digit after the decimal point.

# Operating: 1. Basic set up

**Options**

**select required language**

**Path to the used data base (automatically configured during the setup)**

**select required serial port**

**Options**

Language selection:  
English

Database:  
C:\Program Files\NAP\nap.mdb

**Communication**

Protocol: XXXX

Port: COM 1

Baudrate: 4800

Data Bits: 8

Parity: none

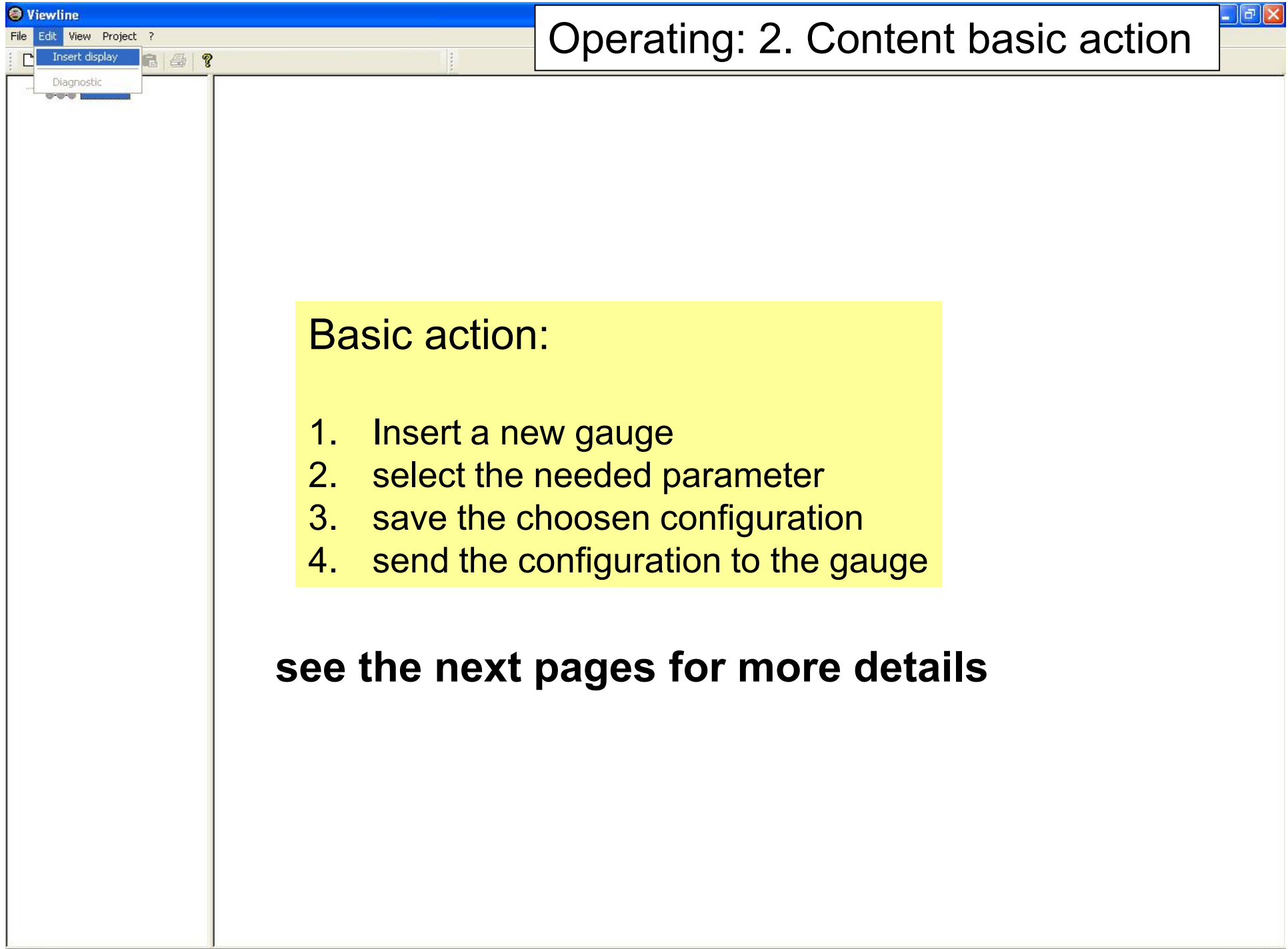
Stop Bits: 1

OK Cancel

To select the User specific Options choose "Project | Options".

In the upper pull down menu select the required language (English, French, German).

In the Field "Communication" please select the serial Port where the level converter is connected.



## Operating: 2. Content basic action

### Basic action:

1. Insert a new gauge
2. select the needed parameter
3. save the choosen configuration
4. send the configuration to the gauge

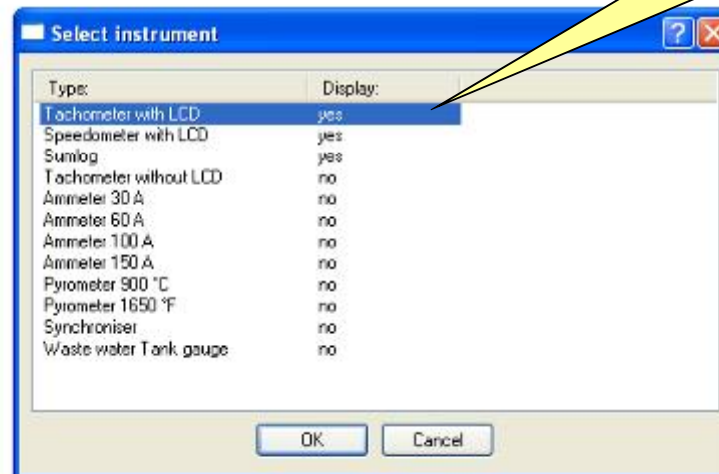
**see the next pages for more details**

## Operating: 2. Basic action

1. choose insert gauge

To start a new project, choose "Edit | Insert display". From the List select the gauge you like to program (here you see the instruments of the database nap.mdb, which is collected with the path done in the basic set up)

2. select the correct gauge from the list



# Operating: 3. Area's for configuration

(Example: Speedo with LCD with maximum configuration possibilities)  
Please note: Depend on the chosen instrument different page contents are shown.

**Dial is just a sample. Did not show the measurement range of the selected gauge.**

**Area Signal source / No. of pulses**

**Area General**

**Area LC-Display settings**

**see the next pages for more details**

Drücken Sie F1, um Hilfe zu erhalten.

## Operating: 3. Configuration

(Example: Speedo with LCD with maximum configuration possibilities)  
Please note: Depend on the chosen instrument different page contents are shown.

**Choose in the pull down "Signal source" the type of sensor signal for Speedometer and Sumlog. You can choose NMEA or Frequency input. If NMEA is selected there is no need to input a "k-Wert".**

**In the field "k-Wert" key in the No. of Pulses (imp/km or Imp/mile) of the vehicle. For Tachometers key in the "m-Wert" (pulses/Revolution) of the tachometer signal source.**

**The valid number of pulses are:**

**Tachometer with LCD:**  
0.5 – 399 pulses / Rev (steps of 0,5)

**Tachometer without LCD:**  
1 – 399 pulses / Rev (steps of 1) or  
0.5 – 399.9 pulses / Rev (steps of 0,5) depending on firmware

**Speedometer and Sumlog:**  
500 – 39999 pulses / km

**Please note that you have access to the "k-Wert" if "Signal Source" FREQUENCY is selected.**

**The Warning threshold is the limit to activate the integral warning LED.**

**The warning threshold value has to be in the measurement range of the gauge.**

**The pull down "Warn mode" select if the integral Warning LED will be activated when the current indication value is above or below the set threshold.**

Drücken Sie F1, um Hilfe zu erhalten.

# Operating: 3. Configuration

(Example: Speedo with LCD with maximum configuration possibilities)  
Please note: Depend on the chosen instrument different page contents are shown.

**selection of Illumination intensity**

**selection of time format**

Use the pull down "Illumination" to choose the default illumination intensity at first boot of the gauge. It is possible to change this setting on the gauge itself by using the external push button.  
Please note, that this function is not available on all gauges.

In the section "Units" you can change the time format for the internal clock.

Please note, that not all settings are available for all gauges. It is possible to change this setting on the gauge itself by using the external push button.

Ready

10



# Operating: 3. Safe of configuration in the Instrument (Download)

(Example: Pyrometer).

Choose "Project | Write gauge Settings" to save the current configuration to the gauge.

**Write the configuration**


**Please note:**

1. that the programming could take between 2 and 10 seconds.
2. **After each writing into the gauge, a power supply reset, Trm.30 or Trm.31 has to be done, before next writing action. It is necessary, otherwise you may damage the gauge permanently.**
3. **Confirm you correct configuration with „Read Gauge Settings“**

**Viewline - Unbenannt**

File Edit View Project ?

Read Gauge Settings  
Write Gauge Settings  
Project Properties  
Options



Gauge setting:

Signal source:  
Tacho (Frequency)

m-Wert: 0 Imp./U.

Warn threshold: 0 U/min

Warn Mode: Increasing

General:

Illumination:  
0 %

Units:

Distance: km

Temperature: °C

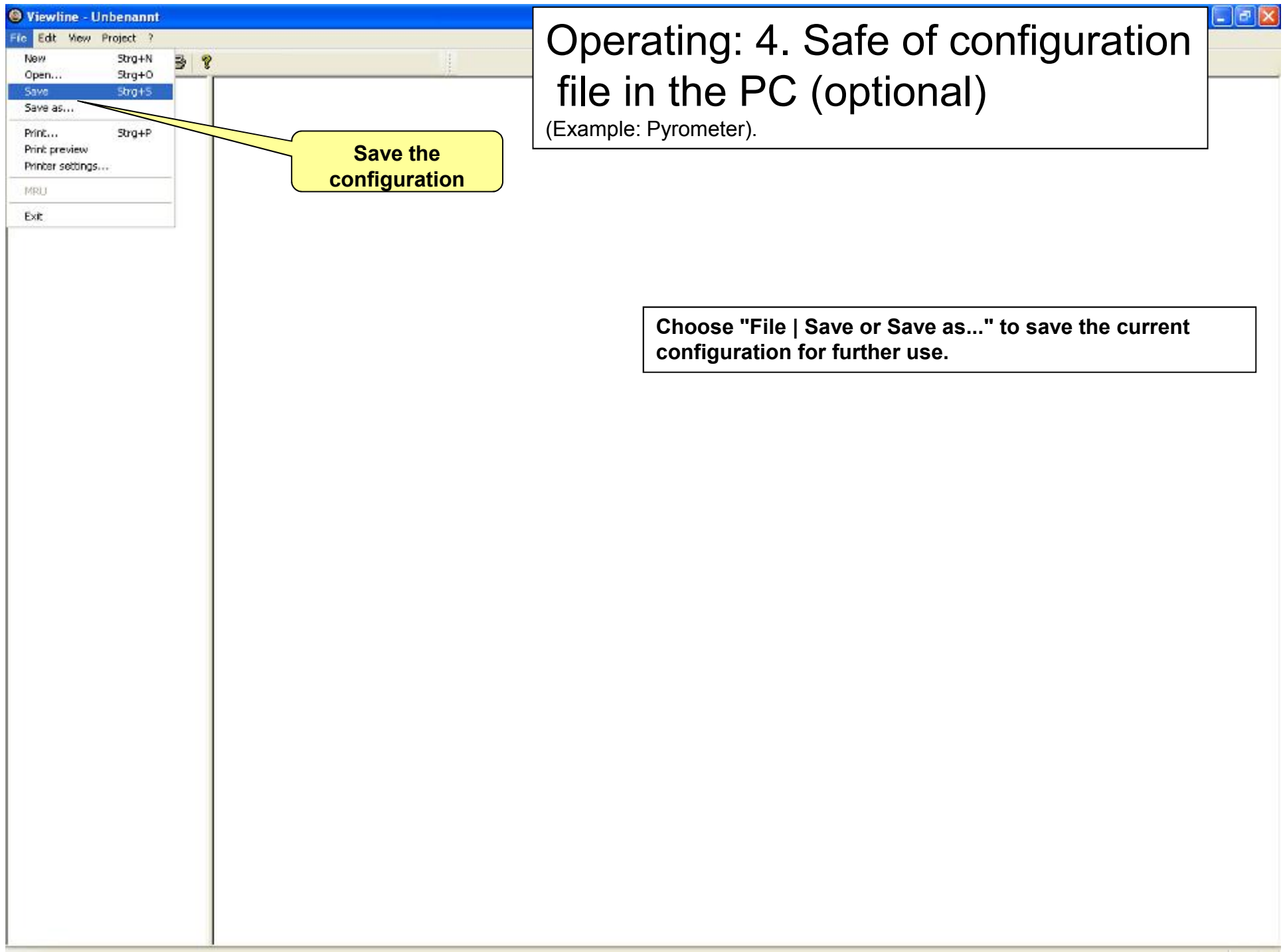
Time: 24 h

Depth: m

Display settings:

Selection:

<input type="checkbox"/> Engine hours	<input type="checkbox"/> Volt
<input type="checkbox"/> Trip hours	<input type="checkbox"/> Odo total
<input type="checkbox"/> Clock	<input type="checkbox"/> Trip distance
<input type="checkbox"/> Water temperature	<input type="checkbox"/> Depth



# Connection of the gauge to a PC

- Requirements:
  - PC with serial port RS232 or
  - PC with UBS port
  - Power supply 12V to supply gauges

# Level converter

**The level converter converts the voltage level of the RS232 port (+/-12V) to TTL level (+5V).**

Possible solutions:

- VDO K-Line Adapter (CAN Cockpit, E-Gas)
- X11 602-000-009 or 010, X12-397-041-001 or - 601,
- X12-397-046-001

(additional connection of the Viewline supply harness necessary)

or

- USB to TTL Konverter A2C59514543

**VDO K-Line Adapter (CAN Cockpit, E-Gas)  
X11 602-000-009 or 010, X12-397-041-001 or - 601,  
X12-397-046-001**

- modification necessary according  
MI\_K-Line Adapter\_ViewLine.pdf (TU00-0752-7807120)  
(see next page)
- Connection to the serial RS232 port

## MONTAGEANLEITUNG / INSTALLATION INSTRUCTIONS

VDO

<b>K-Line Adapter</b> X12-397-041-601, X12-397-041-001, X12-397-046-001 X11-602-000-009, X11-602-000-010	TU00-0752-7807120	02/2010	1-1 1
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**Modifikation des K-line Adapters für die Verwendung mit ViewLine**

Benötigte Komponenten:

- K-line Adapter
- ViewLine Aftermarket Kabel A2C59512675 oder A2C59512947 (verpackt)

Öffnen Sie mit einem Schraubendreher das Gehäuse des K-line Adapters und entfernen Sie die Leiterplatte.

Verlöten Sie die Kabel des ViewLine Kabels wie unten dargestellt mit den entsprechenden Lötunkten.

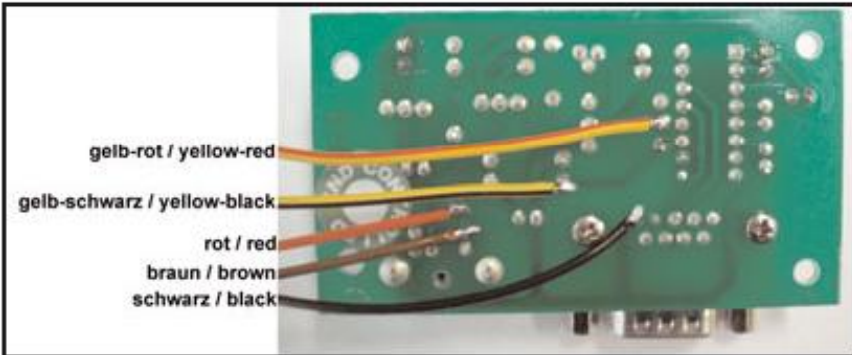
**Modification of K-line adapter for use with ViewLine**

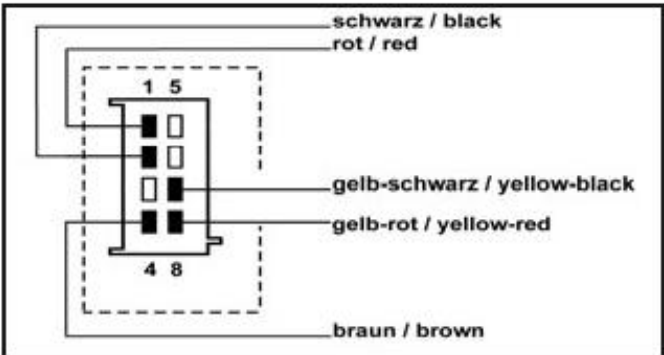
Required Components:


- K-line Adapter
- ViewLine Aftermarket Cable A2C59512675 or A2C59512947 (packed)

Open the K-line adapter's housing with a screwdriver and remove the pcb.

Solder the wires of the ViewLine cable to the designated soldering points as shown below.








Bringen Sie zur Durchführung der Kabel eine Nut im unteren Gehäuseteil des K-line Adapters an. Verwenden Sie hierfür z.B. ein scharfes Messer.

*Create a wiring duct by cutting a small groove into the K-line adapter's lower housing part. Use e.g. a sharp knife.*



Montieren Sie den K-line Adapter in umgekehrter Reihenfolge und schliessen Sie das Gerät an den **seriellen Anschluss RS232** des PC's an. (Montageanleitung TU00-0777-5107120 beachten)

*Reassemble the K-line adapter and connect it to the PC's serial RS232 port. (refer to installation instructions TU00-0777-5107120)*

TU00-0752-7807120

Technische Änderungen vorbehalten - Technical details subject to change

## USB to TTL Converter

- Typ: TTL-232R (5V)
- Supply source (Internet Links):

Germany:

<http://www.embedded-projects.net/index.php?module=artikel&action=artikel&id=138>

FTDI Online Shop UK:

[http://apple.clickandbuild.com/cnb/shop/ftdichip?productID=49&search=usb+ttl&op=catalogue-product\\_info-null](http://apple.clickandbuild.com/cnb/shop/ftdichip?productID=49&search=usb+ttl&op=catalogue-product_info-null)

- Connection to USB Port  
(additional connection of the Viewline supply harness necessary see page 19)



## FTDI USB to TTL Converter (manufacturer information)

**Contact FTDI**  
**Head Office -**  
**Future Technology Devices**  
**International Ltd.**  
373 Scotland Street,  
Glasgow G5 8QB,  
United Kingdom  
Tel. : +(44) 141 429 2777  
Fax. : +(44) 141 429 2758  
E-Mail (Sales) :  
**sales1@ftdichip.com**  
E-Mail (Support) :  
**support1@ftdichip.com**  
E-Mail (General Enquiries) :  
**admin1@ftdichip.com**  
**Regional Sales Offices -**

**(USA)**  
5285 NE Elam Young  
Parkway, Suite B800  
Hillsboro,  
OR 97124-6499  
USA  
Tel.: +1 (503) 547-0988  
Fax: +1 (503) 547-0987  
E-Mail (Sales): **us.sales@ftdichip.com**  
E-Mail (Support): **us.support@ftdichip.com**  
E-Mail (General Enquiries): **us.admin@ftdichip.com**

**Future Technology Devices International Ltd. (Taiwan)**

4F, No 16-1,  
Sec. 6 Mincyuan East Road,  
Neihu District,  
Taipei 114,  
Taiwan, R.o.C.  
Tel.: +886 2 8791 3570  
Fax: +886 2 8791 3576  
E-Mail (Sales): **tw.sales@ftdichip.com**  
E-Mail (Support): **tw.support@ftdichip.com**  
E-Mail (General Enquiries): **tw.admin@ftdichip.com**

Website URL : **<http://www.ftdichip.com>**

# FTDI USB to TTL Converter

