



## VisionREADER 6400/6500

## 2D-code hand-held scanner

Part No. 501 03 618



- Hand-held scanner for Data-Matrix codes, ECC 200 and bar codes
- High resolution for parts and labels directly marked
- Stable trigger button
- Built-in decoder
- Read-display
- RS 232 interface and PS/2 keyboard interface
- Operating temperature from 0°C through 40°C

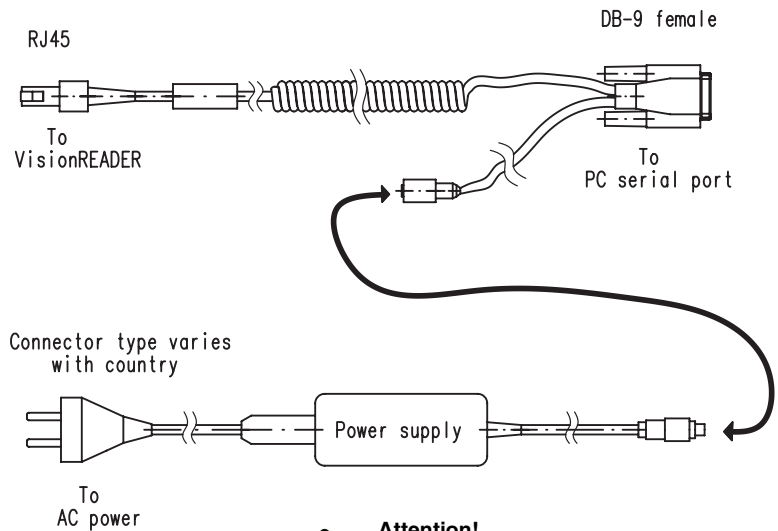


### Accessories:

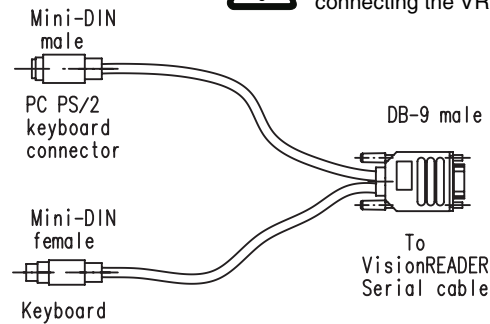
(available separately)

- 230V power supply unit (Part No.: 500 40254)
- Support for VR 6xxx (Part No.: 500 41236)

### Electrical Connection



**Attention!**  
Use only the supplied original cable for connecting the VR 6400/6500!



### Connection assignment

Assignment of the 9-pin Sub-D socket

Pin No	Signal	
1	PS2_KB_Enable	Activate keyboard
2	TXD	Transmit Data
3	RXD	Receive Data
4	NC	Not used
5	GND	Signal Ground
6	PS2_data	Keyboard data
7	CTS	Clear to send
8	RTS	Request to send
9	PS2_Clock	Keyboard clock

Assignment of the 10-pin RJ 48 socket

Pin No	Signal	
1	PS2_KB_Enable	Activate keyboard
2	GND	Signal Ground
3	RXD	Receive Data
4	RTS	Request to send
5	TXD	Transmit Data
6	CTS	Clear to send
7	V+	Voltage supply 12V*
8	V-	Voltage supply Ground
9	PS2_data	Keyboard data
10	PS2_Clock	Keyboard clock

We reserve the right to make changes \* vr\_6400\_e.fm

## Specifications

### Electrical data

Operating voltage 12VDC  
Power consumption 4W

### Interfaces

Interface type RS 232 (Host) for code output, setup and image transmission + PS/2 keyboard interface  
Trigger via scanner

### Code types

Code types Data Matrix ECC 200 (10 x 10 to 64 x 64), QR code  
Bar codes: 2/5 Interleaved, UPC/EAN/JAN, Code 39, Code 128  
Read direction omnidirectional, various tilt and rotational angles up to 20°

### Optical data

Optical system high-resolution pixel array with 1280 x 1024 pixels  
Contrast 15% (black/white)  
Light source VR 6400: Integrated diffuse LED  
VR 6500: Integrated diffuse light-field and dark-field LED  
Focal point (measured from window) VR 6400: 70mm  
VR 6500: 5mm  
Read distance VR 6400: 30 ... 135mm  
VR 6500: 0 ... 60mm

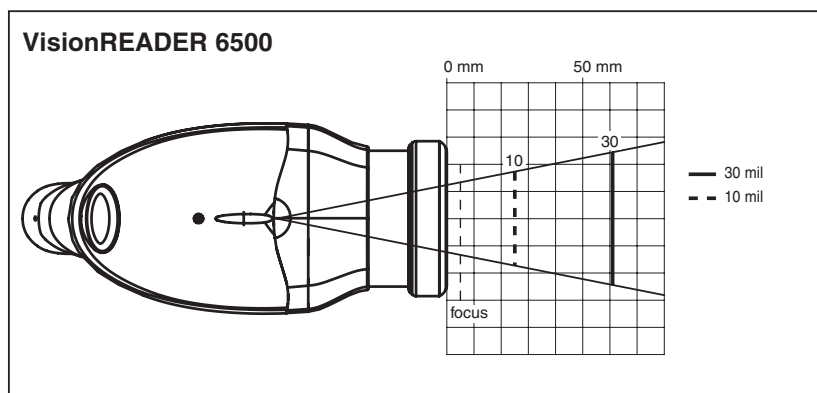
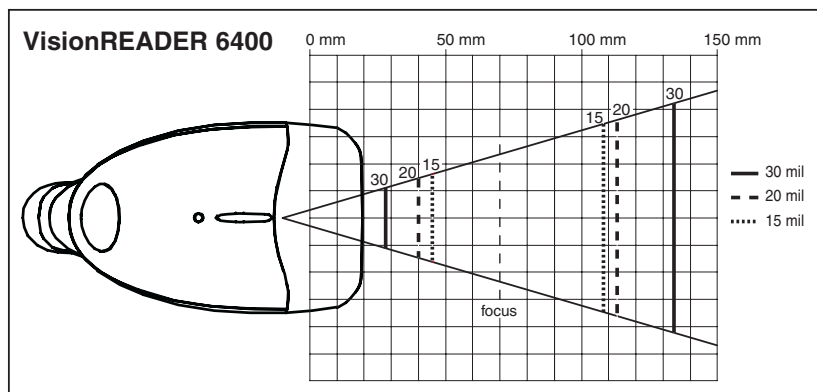
### Mechanical data

Housing polycarbonate/ABS  
Weight VR 6400: 170g  
VR 6500: 240g  
Dimensions VR 6400: 180 x 68 x 90mm  
VR 6500: 180 x 70 x 150mm  
Shock resistance dropped repeatedly from height of 2 m

### Environmental data

Ambient temperature (operation) 0°C ... 40°C  
Relative air humidity 0% ... 90% (non-condensing)

## Reading curves



## Order guide

	Model	Part No.
<b>2D-code hand-held scanner</b>	VisionREADER 6400	VR 6400 kit
	VisionREADER 6500	VR 6500 kit
		501 03142

## Tables

## Remarks

- Ergonomically designed 2D-code hand-held scanner with integrated decoder for direct-marked codes.
- Data transmission via programmable RS 232 interface. Or keyboard-wedge operation via PS/2 keyboard interface.
- The kit contains:
  - VR 6400 or VR 6500
  - RS 232 cable
  - PS/2 adapter
  - Power supply unit with power cable
  - CD-ROM with setup tool



## VisionREADER 6400/6500

## 2D-code hand-held scanner

### Scope of Delivery

Please inspect and ensure that the VisionREADER 6400/6500 set was completely delivered.

The package must include the following:

- VisionREADER 6400 or VisionREADER 6500
- Serial spiral cable with 9-pin Sub-D socket
- Keyboard-wedge connection cable
- Power supply unit 100-230 Volt AC with power cable
- CD-ROM with setup tool
- Quick Reference Guide (this data sheet/package insert)



### Setup Software

The VisionREADER 6400/6500 can be configured with the 'VisionREADER setup tool' setup program contained on the supplied CD. The program is not necessary for operating the VisionREADER, but only for the optimal adaptation to the application. To install the program on your PC, the following are necessary:

#### Operating system:

The following operating systems support operation of the setup tool:

- Windows 98 Second Edition
- Windows Millennium Edition (Me)
- Windows 2000
- Windows XP

#### RAM:

The PC must have at least 32 MB RAM.

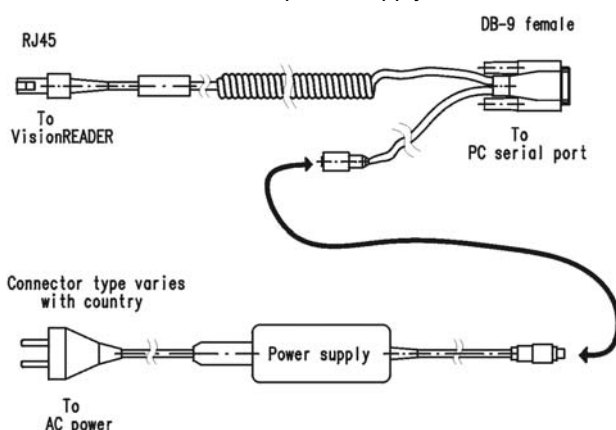
#### Java Runtime Environment

A Java Runtime Environment is necessary for operating the setup tool (Version 1.4.2\_03 is included on CD-ROM). During the automatic installation, the system determines whether a Java Runtime Environment is already installed on the PC. If not, the installation program requests that the version on the CD be installed.

### Connection information

#### Connecting via a serial RS 232 cable

To configure the VisionREADER 6400/6500, a connection to your PC must be established via the serial cable. The following sketch illustrates the cable and the power supply unit.



Please connect the VisionREADER in the following order:

1. Connect the 9-pin Sub-D socket to the serial interface of your PC.
2. Connect the RJ48 connector to the VisionREADER 6400/6500.
3. Connect the power supply unit to the connection on the spiral cable and screw down.
4. Connect the power supply unit to a suitable power cable and connect it to the power outlet of your power supply.



#### Attention!

Please use only this supplied original cable for connecting the VR 6400/6500!

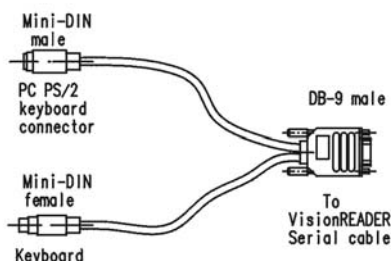
**Pin assignments of the serial cable**

Plug connector	Pin No	Signal	Meaning	Pin No	Plug connector
	Connector housing	SHIELD	Shield	Connector housing	
Sub-D socket, 9 pin	1	PS2_KB_Enable	Activate keyboard	1	RJ48 socket, 10-pin
	2	TXD	Transmit Data	5	
	3	RXD	Receive Data	3	
	4	NC	Not used	-	
	5	GND	Signal Ground	2	
	6	PS2_data	Keyboard data	9	
	7	CTS	Clear to send	6	
	8	RTS	Request to send	4	
	9	PS2_Clock	Keyboard clock	10	
3-pin circular connector	1 + 3	V-	Voltage supply Ground	8	
	2	V+	Voltage supply +12VDC	7	

**Connecting via the PS/2 keyboard-wedge cable**

To work with the VisionREADER 6400/6500 in Keyboard-Wedge mode, the VR 6400/6500 must first be configured. The PS/2 interface must be activated with the setup tool. Select "Keyboard-Wedge" when working with the keyboard and "Keyboard-Emulation" when working without a connected external keyboard (for example on a notebook).

The following sketch illustrates the keyboard-wedge cable:


**Attention!**

*The PS/2 interface does not support the connection of a new device while under voltage (no hot swap functionality). To install the cable between the keyboard and PS/2 interface of the PC, please switch off the PC.*

Please connect the VisionREADER in the following order:

1. Connect the RJ48 connector to the VisionREADER 6400/6500.
2. Connect the power supply unit to the connection on the spiral cable and screw down.
3. Connect the power supply unit to a suitable power cable and connect it to the power outlet of your power supply.
4. Connect the 9-pin Sub-D socket to the connector of the keyboard-wedge cable.
5. Connect the PC keyboard to the socket on the keyboard-wedge cable.
6. Connect the keyboard-wedge cable to the PC.
7. Restart the PC.

**VisionREADER setup tool**

The VisionREADER setup tool allows you to optimally configure the VisionREADER for your application.

**Installing the VisionREADER setup tool**

**Notice!**

*You must have administrator privileges in order to install the setup tool!*

Please observe the following procedure:

1. Start Windows and insert the CD. The CD starts automatically with the language selection. You then enter the product selection. Here, select VisionREADER. Below this, you will find the configuration program which you can install after clicking.
2. Follow the installation routine and, if necessary, also install the Java Runtime Environment.
3. Upon conclusion of the installation, there will be an icon on your desktop and an entry in the Start menu for starting the VisionREADER setup tool.
4. Double-click the icon to start the setup tool and allow the program to query the interface. Here, select the COM port to which the VR 6400/6500 is connected and click OK.
5. You can now configure the VisionREADER and save the settings in the device with the function **Configuration -> Apply**.