# **ZVT** protocol

Several Terminal-Hersteller in Germany use a common protocol to connect the payment terminal and cash register (unfortunately with small differences depending on the manufacturer). The connection is made via a direct serial RS-232 connection to the cash register PC. The terminal can therefore only be used from this PC. With current models, the connection can also be established via TCP/IP over the LAN. Nevertheless, a card payment device should always be assigned to exactly one PC CADDIE cash register.

## Changeover

To operate a payment terminal with ZVT interface with PC CADDIE, you need:

- A terminal with **activated** ZVT interface
- The suitable cable for cash register-integrated operation via RS232/COM, i.e. for connecting
  the terminal to the cash register PC or the fixed IP address and the port number for
  connection via TCP/IP over a LAN
- The terminal ID
- The dealer password



Please contact your bank with the above list.

Also make sure that your cash register PC still has a serial RS-232 interface. These are no longer a matter of course on newer PCs. If the connection is missing, a USB adapter must be used. Your PC supplier can help you here. This is of course not necessary for a modern terminal with a cash register interface via TCP/IP with LAN connection.

### **Models**

We have had good experience with the model **Artema Hybrid** model from Hypercom.

The iCT220 and the iCT250 from Ingenico can also be operated with PC CADDIE.

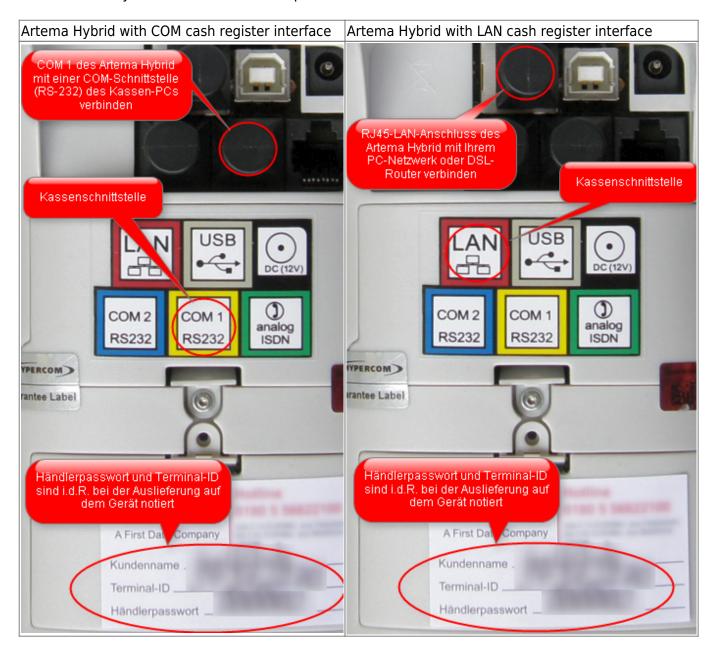
All models mentioned can also be addressed via TCP/IP over a LAN. However, the ZVT protocol must be activated in the terminal and communication must be set to TCPIP. This conversion can only be carried out by the terminal owner or operator. PC CADDIE has no access to the terminal before these settings are made.

If you would like to use another device with a ZVT interface please ask at whether this is supported by PC CADDIE. In order to be able to assess this, we need the exact model designation - this can usually be found on a type plate on the underside.

## Installation

## Connecting the terminal

The terminal is connected to a serial RS-232 interface on the PC using a special cable. The cable is assigned differently from terminal to terminal. Only use the cable that matches your terminal and not a cable that may still be available from a previous terminal.

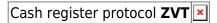


The connections of an Artema Hybrid are shown here. The arrangement of the interfaces may differ for your terminal.

## **Terminal settings**

Please check the settings with the terminal provider's hotline (sticker on the terminal) *Cash register* protocol and cash register interface in the service menu of the device.

### Cash register log



## Cash register interface

COM RS232 connection	or	LAN	TCP/IP connection
×		×	
with 2 stop bits			Port 22000
×		×	

## **PC CADDIE ZVT interface**

On the PC intended for this purpose: switch to the desired account area in PC CADDIE (e.g. **SALES**). Then call up the settings dialogue via the "da" macro. (Later, this dialogue can also be accessed via Settings/Program settings/Card payment).

#### Use at this station

This box must be ticked to activate the interface.

#### **Terminal ID**

You should have received a configuration sheet with your terminal on which the terminal ID is noted. It is also usually written on a sticker on the back or bottom of the device.

If you do not know your terminal ID, please contact your bank.

### **Merchant password**

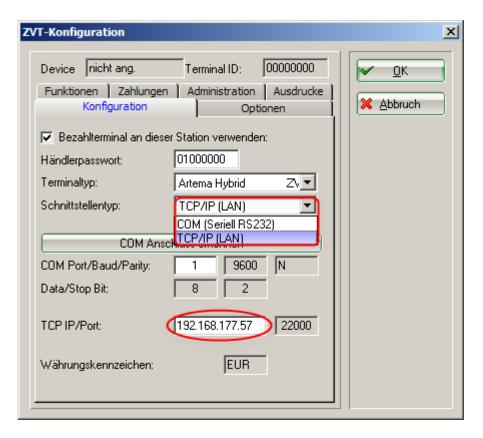
The merchant password can also be found on the configuration sheet. It may also be noted on a sticker on the device.

If you do not know the dealer password, please contact your bank.

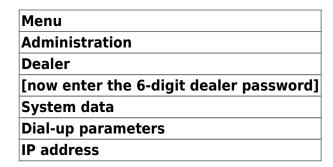
## **COM port**

Enter the number of the COM port of your POS PC to which the terminal is connected. Usually 1, sometimes 2 and rarely a higher number.

#### LAN IP address



If you do not know the IP address of the terminal, you can read it out on the device itself using its menu function:



The current IP address of the terminal is now displayed.

Then press Abbr x times until *Please amount* appears on the display again

#### **Procedure**



#### **PIN** or signature

In the "Terminal decides" setting for girocards, the network operator determines the amount above which the PIN is required. For credit cards, this is determined by the card issuer. It is therefore possible that one credit card only works with a PIN and other credit cards also work without a PIN. It may also be the case that a particular credit card only sometimes requires a PIN to be entered.

If you are not happy with the terminal's decision, please contact your network operator or your bank.

The other setting options (ELV, OLV, PIN-ec-cash) are not supported by all network operators and should no longer be used. If you would still like to try a different setting, please test it with the card types you accept.

## **Payment methods**

#### Create

First switch to the desired **cash account area**e.g. SALES. Then call up the ZVT settings dialogue (macro *there* or via **Settings/Programme settings/Card payment**). Now switch to the tab **Administration** tab and click on the button **Create payment methods for card payment**.

## **Checkout - Set payment method**

Under **Settings/Programme settings/Cash register payment methods** you set the "Contribution" **card payment <DA>** setting. The other payment methods such as **EC card <DA>**, **Mastercard <DA>**etc. are used by PC CADDIE to book the specific card type used after payment has been made. PC CADDIE receives this information from the terminal. In the cash register therefore always the payment method **card payment <DA>** and PC CADDIE then automatically posts the correct payment method depending on the debit/credit card used.

## **Error messages, troubleshooting**

### The terminal does not respond

- Is the RS232 cable connected to the correct COM port on the PC *and* plugged into the correct port on the terminal? (If you are using COM as the cash register interface)
- Is the cash register protocol protocol to **ZVT** in the terminal?
- Is the correct cash register interface interface set in the terminal? LAN-TCP/IP or COM-RS232?
- Does the cash register interface setting in the terminal match the setting in PC CADDIE? Port number? IP address?
- Is the correct dealer password entered?
- Is the Internet connection OK?

#### Licence restriction

## This function is not licensed for this programme version!

• Only the new licence may need to be retrieved. Please contact PC CADDIE Support.