

Electronic coin validator G-13.mft cctalk

Installation and testing instructions for PC applications

11.05 Hns/ds
Edition 1.0
KA.cctalkPC-GB



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1 About these instructions

These instructions describe how to connect the G-13.mft cctalk to a PC and how to test the functions of the device connected using a demo software.



These instructions do not replace the detailed operating instructions of the validator G-13.mft with serial cctalk interface, but rather complete the operating instructions concerning the G-13.mft cctalk functions in a PC environment. In order to use the validator's entire functional range safely the operating instructions must be read carefully (PDF download under www.nri.de). They contain all information on:

- Design and function
- Starting-up
- Operation
- G-13.mft-specific cctalk commands, status and error messages
- Cleaning
- Accessories

2 The PC solutions for G-13.mft cctalk


Variant 1: Connection by means of the RS-232 adapter G-55.0480 (ordering code 25588) (see Fig. 1a)

Variant 2: Connection by means of the USB adapter G-55.0481 (ordering code 25589) (see Fig. 1b)

Variant 3: Connection by means of the integrated USB port (see Fig. 1c)

Power supply

Use a standard wall power supply with the following technical data to supply the G-13.mft cctalk with power for a PC application (e.g. NRI wall power supply, ordering code 26482):

- 12 V, stabilized
- min. 400 mA
- output connector; 5.0 x 2.1, 

Connection to PC

There is a difference in the connection to the PC depending on the variant:

Variant 1: Connection using RS-232 adapter

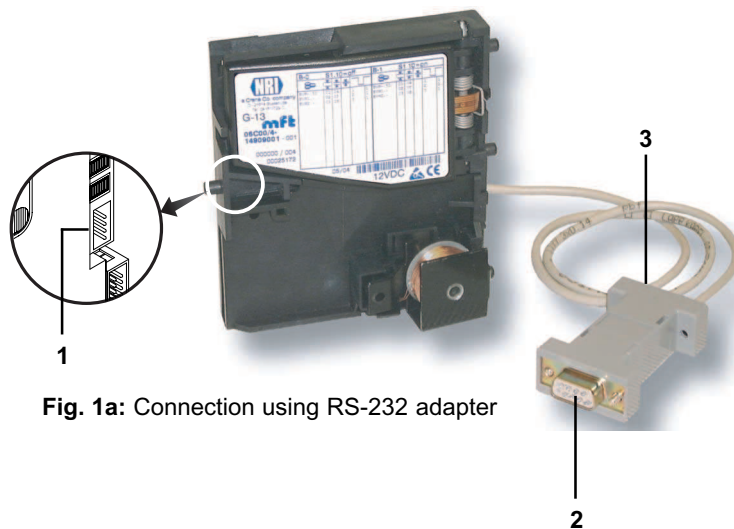


Fig. 1a: Connection using RS-232 adapter

- 1** Connect the NRI RS-232 adapter G-55.0480 (ordering code 25588) to the validator using the 4-pole cctalk interface **1** on the rear of the G-13.mft.
- 2** Connect the adapter to the PC using the RS-232 interface **2**.
- 3** Supply the RS-232 adapter with power using socket **3** and the 12-V power pack.
Now the PC can communicate with the validator.

Variant 2: Connection using USB adapter

- 1** Connect the NRI USB adapter G-55.0481 (ordering code 25589) to the validator using the 4-pole cctalk interface **1** on the rear of the G-13.mft.
- 2** Connect the adapter to the PC using its USB interface **2**.
- 3** Supply the USB adapter with power using socket **3** and the 12-V power pack. Windows identifies new hardware and searches a driver.
- 4** Install driver (see section "Installation of the USB driver" in this chapter).

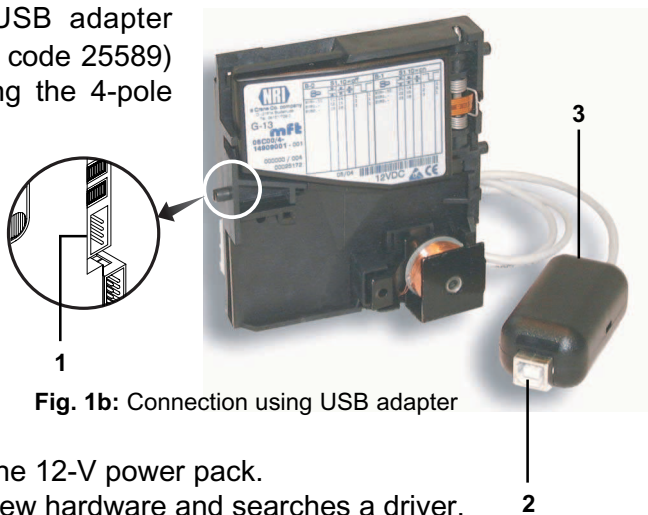


Fig. 1b: Connection using USB adapter

Variant 3: Connection using integrated USB port

- 1** Connect the G-13.mft cctalk to the PC using its USB port and a standard USB cable.
- 2** Supply the G-13.mft cctalk with voltage using its power socket and the 12-V power pack. Windows identifies new hardware and searches a driver.
- 3** Install driver (see section "Installation of the USB driver" in this chapter).

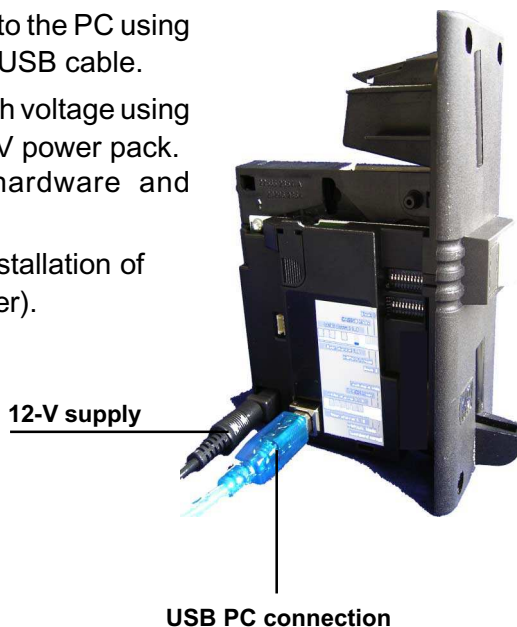


Fig. 1c: Connection using integrated USB port

Installation of the USB driver

If the G-13.mft cctalk is operated using a USB port, you have to install a so-called VCP driver (Virtual COM Port).

The drivers for the Windows versions 95/98/2000/Me/XP are made available to you in a zip-file on our download pages (www.nri.de).

To install:

- 1** Unpack the driver software CP210x.zip into any directory.
- 2** Connect the G-13.mft cctalk to the PC (see section "Connection to PC" in this chapter).
Windows identifies new hardware and searches a driver.
- 3** Select directory, in which you have unpacked the files beforehand.
The driver is installed and the PC can now communicate with the validator.



The driver provides a virtual COM port. When setting up the relevant PC application you are asked to specify this communication port. If there are no further communication devices connected (modem, ISDN, bluetooth, etc.), the G-13.mft cctalk is on the COM3 port.

Otherwise you can determine the port number by means of the control panel (device manager) (entry, e.g.: "CP2101 USB to UART Bridge Controller (COM6)").

3 Demo software

By using the software "cctalk-Demo" the functions of the G-13.mft with cctalk interface connected to a PC can be visualized and tested. Control commands, which are transferred from the PC to the validator during operation, can be simulated.

System requirements

The "cctalk-Demo" software specifies the following minimum hardware and software requirements:

Operating system Windows 95b/95c/98/NT/2000/XP (not CE)

Working memory of at least 32 MB

Graphic resolution 800 x 600 dpi min./High Color



The use of the „cctalk-demo“ software requires basic knowledge of the Windows operating system on the part of the user.

Install demo software

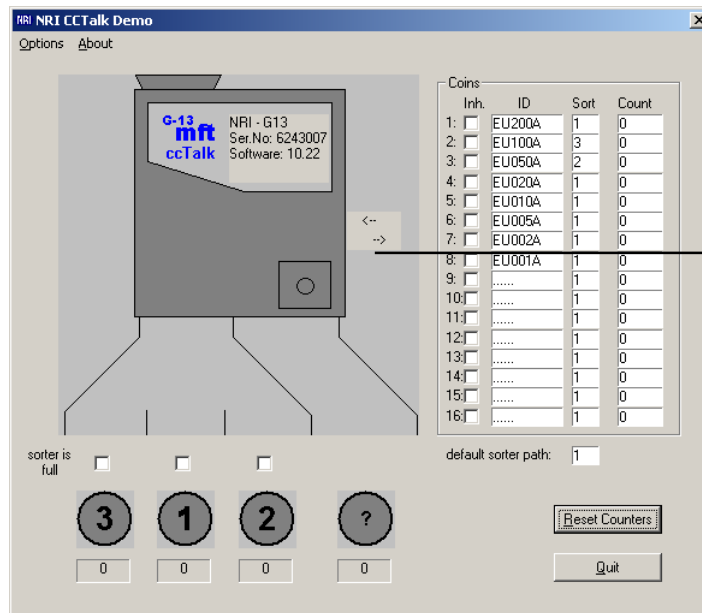
The demo software is made available to you on our download pages (www.nri.de) as freeware.

To install:

- 1** Download the demo software cctalkDemo.zip on the hard disk of the PC that is to operate the G-13.mft cctalk.
- 2** Unpack zip-file.
Installation is completed.

Starting demo software

- 1 If necessary, connect the G-13.mft cctalk to the PC (see section "Connection to PC" in Chap. 2 "The PC solutions for G-13.mft cctalk").
- 2 Open Windows Explorer and double-click the cctalkDemo.exe file.



Communication between PC and validator



If the PC is not able to communicate with the validator, another COM port has to be selected in the demo software:

1 Select **OPTIONS**.

2 *Either*

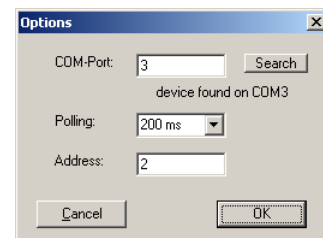
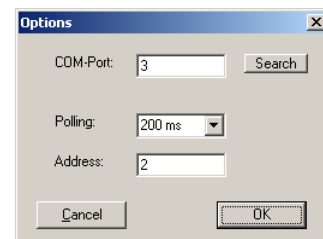
enter the number of the COM port to which the validator is connected behind COM-PORT,

or

*Click **SEARCH**, if you do not know the relevant port.*

The software searches for the port to which the validator is connected, and writes it in the input field.

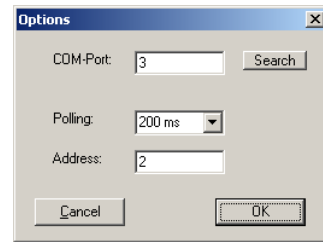
3 Confirm entry with **OK**.



Testing G-13.mft cctalk functions

Please first of all make sure, whether the basic settings of the G-13.mft are useful for your test purposes.

Click **OPTIONS** and behind POLLING is shown, in which frequency the PC polls the validator for information.



Behind ADDRESS you see the cctalk address of the G-13.mft, by which it communicates with the PC. As standard the cctalk protocol provides the address "2" for the validator.



For further information regarding the cctalk protocol please refer to the specification "cctalk Serial Communication Protocol, Generic Specification 4.2" under www.cctalk.org.

All further coin settings are shown clearly within the start window:

| Inh. | ID | Sort | Count |
|--------------------------|--------|------|-------|
| <input type="checkbox"/> | EU200A | 1 | 2 |
| <input type="checkbox"/> | EU100A | 3 | 2 |
| <input type="checkbox"/> | EU050A | 2 | 0 |
| <input type="checkbox"/> | EU020A | 1 | 0 |
| <input type="checkbox"/> | EU010A | 1 | 0 |
| <input type="checkbox"/> | EU005A | 1 | 0 |
| <input type="checkbox"/> | EU002A | 1 | 0 |
| <input type="checkbox"/> | EU001A | 1 | 0 |
| <input type="checkbox"/> | | 1 | 0 |
| <input type="checkbox"/> | | 1 | 0 |
| <input type="checkbox"/> | | 1 | 0 |
| <input type="checkbox"/> | | 1 | 0 |
| <input type="checkbox"/> | | 1 | 0 |
| <input type="checkbox"/> | | 1 | 0 |
| <input type="checkbox"/> | | 1 | 0 |
| <input type="checkbox"/> | | 1 | 0 |

serial and software number of the G-13.mft

cctalk output of the programmed coin

by ticking you can test, if a coin inhibited by the PC is still accepted

cctalk name of the programmed coin

cctalk sorter path of the programmed coin, can be changed by PC

counters for accepted coins

reset all counters of the demo software

exit program

by ticking you can test, if the validator sorts via default sorter path after the PC has transferred a full signal

green, if inserted coin has been sorted via sorter path 1, 2 or 3 (e.g. with NRI 3-fold sorting device), counters count all coins sorted

red, if inserted coin has not been accepted and guided to return area, counter counts all coins rejected

cctalk sorter path for cash-box and alternate sorting, if, for example, a connected payout unit is full, can be changed by PC