

User manual

HW 8612 US
Radio Device
Version 1.00



HÖFT & WESSEL

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HW 8612 US

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1 Introduction

The wireless HW 8612 Radio Device is the ideal solution when replacing V.24 cables by a radio connection or when addressing different peripheral devices via common interface.

The HW 8612 has a transmission rate of 115kbit/s and is provided with an automatic error correction function; thus data transmission is as reliable as with a common cable connection.

This manual describes the technical details of the HW 8612 as well as its hard- and software. Furthermore, it explains how to take it into operation and how it is currently used.

In case of problems during the installation or during the operation of the HW 8612 that cannot be solved with the information given in this manual, please contact the service department of your local dealer or contact the Höft & Wessel-service line directly under Service-Line@hoeft-wessel.de.

1.1 Attendance and maintenance

The HW 8612 does not require maintenance work or special attendance, except for the instructions mentioned below.



- ◆ Do not operate device within the range of strong electromagnetic fields.
- ◆ Notice the temperature range for operation given in chapter 5. Do especially avoid overheating.
- ◆ Protect device against humidity and dust.
- ◆ Do clean device only with a soft wet cloth and mild cleaning agent.
- ◆ Do not insert objects which do not correspond to the correct application purpose into openings of the device. (This could destroy electronic components).



NOTE!

Do not open the HW 8612

The HW 8612 does not contain parts which can be maintained, exchanged or repaired by the customer or non-authorised maintenance personnel.

Opening the device might damage the electric components. A correct function of the device is no longer guaranteed!

1.2 Special note



NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ◆ Reorient or relocate the receiving antenna.
- ◆ Increase the separation between the equipment and receiver.
- ◆ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ◆ Consult the dealer or an experienced radio/TV technician for help.



The maximum output power of the Base Station transmitter is 100 mW. Though this is a low power level a minimum separation distance of 20 cm from the enclosure of the Base Station to all persons must be kept. The antennas must not be co-located and operating in conjunction with any other antenna or transmitter.

2 Product description

2.1 HW 8612 views



Fig. 1: HW 8612 top view



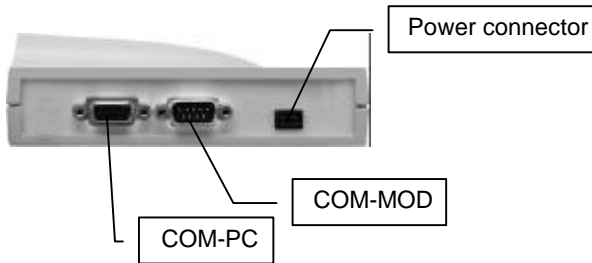
Fig. 2: HW 8612 back view

2.2 Included delivery

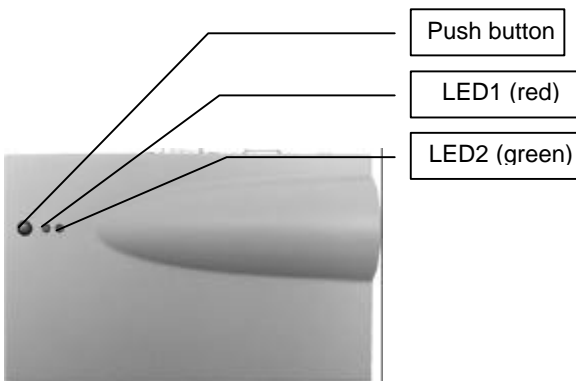
The device is shipped with the following components:

- ◆ HW 8612 Radio Device
- ◆ Power supply unit
- ◆ 1 serial cable
- ◆ Configuration software

2.3 Ports



2.4 LEDs

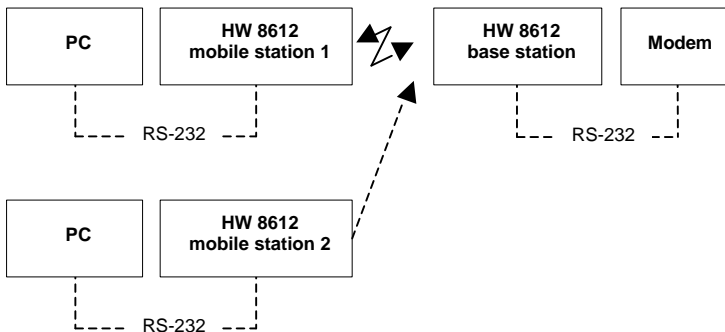


LED2 is pulsating when the power supply is connected. The LED switches to continuous green if the serial interface COM-MOD of the HW 8612 recognises a corresponding counter part (modem or comparable peripheral device) with opened port (DSR has been set). It flickers if data is sent.

If you press the push button for about 3 seconds LED1 and LED2 will flash in turns. The HW 8612 is now ready for subscription.

3 Application example

3.1 Using the HW 8612 as modem cable replacement



This application requires two HW 8612. One is connected to the RS-232 interface of a PC, the other is connected to a commercial modem connected to your phone connection box.

This structure allows for an internet access of your PC without connecting the PC directly to the phone connection box. The actual connection is established between the two HW 8612. Long cables are no longer necessary.

3.1.1 Hardware installation

Step 1:

Connect one serial cable to the serial interface COM-PC of the HW 8612 and the other end of the cable to the serial interface of your PC. Connect the power supply unit to the DC-socket of the HW 8612 and connect the plug of the power supply unit to the mains.

Step 2:

Connect one serial cable to the serial interface COM-MOD of the HW 8612 and the other end to the serial interface of your modem. Connect the power supply unit to the DC-socket of the HW 8612 and connect the plug of the power supply unit to the mains.

4 Taking HW 8612 into operation

4.1 Installing the configuration software

Start the file **setup.exe** from your installation disk, installation CD ROM or installation directory.

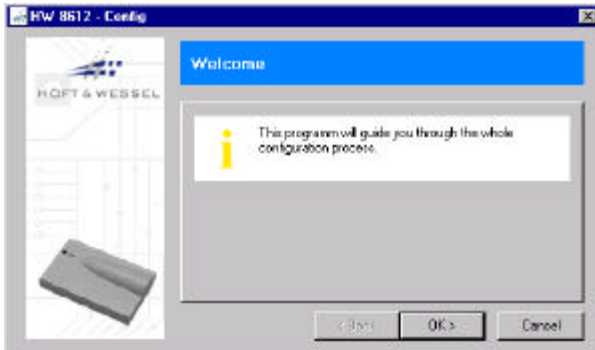
An installation mask will appear to guide you through the steps of installation. Follow the instructions on screen.

4.2 Configuration software



To establish a wireless communication between two HW 8612 setup a base and a mobile station.
The included software guides you through the required configuration process.

4.2.1 Step 1: Welcome



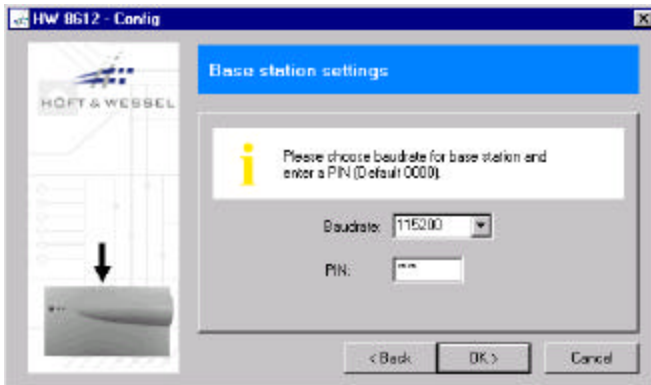
Click button [OK]

4.2.2 Step 2: Connect base station



Connect one HW 8612. Select the COM port the HW 8612 is connected to. Click button [OK]. If the connected HW 8612 is configured as mobile station the software will configure it as base station.

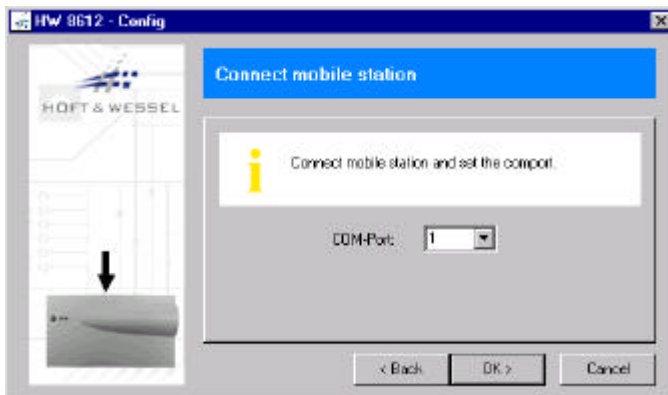
4.2.3 Step 3: Base station settings



Select the baud rate for the base station and enter a PIN.

Click button [OK].

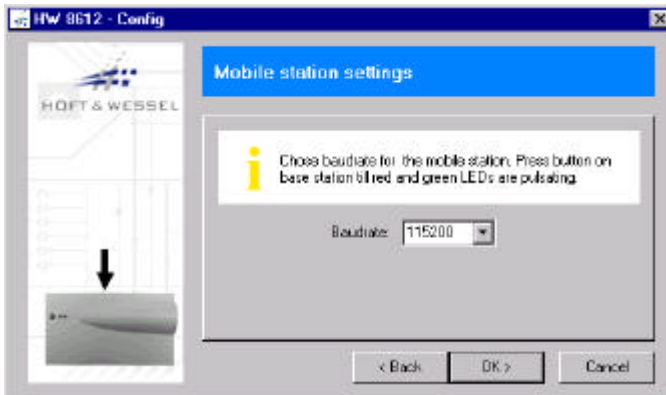
4.2.4 Step 4: Connect mobile station



The base station is ready. Now, connect the other HW 8612 to your PC and select the COM port. Click button [OK].

If there is only one COM port in your system disconnect the base station from your PC. Ensure, the power supply is still connected to the base station.

4.2.5 Step 5: Mobile station settings



Select the baud rate for the mobile station and press the push button on your base station until the red and green LEDs are flashing in turns.
Then, click button [OK].

4.2.6 Step 6: Ready

The base and mobile stations are ready for wireless communication.

5 Technical specification

Dimensions:	approx. 145 x 88 x 46 mm
Weight:	approx. 180 g
Temperature range:	0 .. +55 °C operating
Power supply:	6.5 .. 10.0 V, 300 mA
Interfaces:	RS-232, 115 kBd (max) 2 serial interfaces (9-pin Sub-D connectors, V24)
Frequency:	2.400 .. 2.483 GHz
Output power:	100 mW
Standards:	FCC part 15.247 (low power devices operating at 2400 MHz band) EN 300 328
Modulation:	Gaussian FSK
Mode:	FHSS
Duty cycle:	max. 16.67 %
Data capacity:	115,2 kBd, protected
Antenna system:	integrated diversity antennas
Range:	up to 300 m (free space), up to 30..60 m (in building)
Operational elements:	1 push button 2 LEDs
Casing:	plastic housing, suitable for wall mount or desktop installation
Accessories:	external power supply unit, UL1310 (class 2), 120V prim., 7.5 V, 600 mA sec.

