User Manual

WIB2B for PC/USB

CE

NAVTEX-receiver on 518kHz in English language and
on 490 kHz in national language
Barograph

This manual contains important information for correct using of this device.
Please read the manual carefully before start up.

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An liability for the correctness of the contents of this publication cannot be taken over.

In spite of careful processing and programming a defect and/or complete failure of the WIB2B can not be completely excluded. Due to atmospheric disturbances or to disturbances of other electrical and electronic devices, contents of messages can be falsified. The operators of the transmitting plants can change or stop the broadcasting service (temporarily or permanent).

Therefore no liability for availability and correctness of the indicated messages are taken over. In particular no liability for possible damages resulting from use of the WIB2B and information of this manual will be taken over.

In this manual trademark, trade names, customer names, etc. are used. Even if these are not particularly characterized, the appropriate protection regulations are effective.

Note

Software updates for this product are available in the Internet:
http://www.weatherinfobox.com/english/Downloads.htm

Contents

Scope of delivery

The following parts belong to the scope of delivery of the WIB2B:

- 1 x WIB2B,
- 1 x USB cable,
- 1 x CD with WIB2B software
- 3 x NiMH rechargeable batteries AAA, 800mAh (are placed inside the device).

Introduction

The WIB2B is a dual frequency NAVTEX-receiver for the board PC. The device receives simultaneously NAVTEX-messages on medium wave frequencies 518 kHz (international, English) and on 490 kHz (national, national language).

The WIB2B equiped with an inserted precision air pressure sensor, is able to record the air pressure during a period of up to seven days.

The device will be connected to the PC via an USB interface. It is similar to an USB-memory-stick and appears as a new storage medium on the PC. This storage medium contains all received messages as well as all data of the air pressure sensor.

An antenna installation is not necessary, since the WIB2B is equipped with an internal ferrit rod antenna. The device is equipped with rechargeable batteries (3 x NiMH, Typ AAA), which are recharged via the USB bus. The battery capacity lasts for approx. three days of operation without PC.

Software

The operation of the WIB2B will be done by a comfortable Windows software. The software is working with the operating systems Windows 2000, XP and Vista, available in German, English and French version.

Software updates for the WIB2B will be spread via internet. Nevertheless, please look form time to time under http://www.weatherinfobox.com, to make sure, you have the latest version.

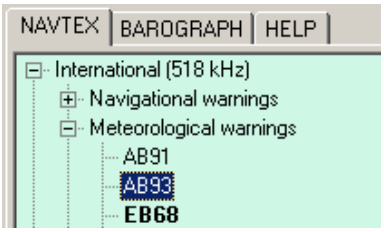
Software installation

The software of the WIB2B is stored on the enclosed CD, which is part of the scope of delivery. In the folder *Deutsch* on the CD you will find the installation program for the German version. The folder *English* contains the installation program for the English version and the folder *Francais contains the* appropriate installation program for the French version.

In order to install the software please start the required installation program (Setup.exe) with a double click. Afterwards you have to follow the instructions shown on the screen.

After installation the WIB2B is ready for operation. Please attach the WIB2B via USB cable to the PC and start the WIB2B program.

NAVTEX-Messages



In order to view NAVTEX-messages, please activate the tab NAVTEX. Here the NAVTEX menu structure is shown, in which the NAVTEX messages are sorted according to their message type.
For both used NAVTEX frequencies (490 kHz and 518 kHz) an own menu structure is availiable.

New messages are displayed in the menu tree in bold font. Messages which were already displayed once are shown in normal font. The entire menu structure can completely be opened with the button ⬍ and closed with the button ⧗.

All NAVTEX-messages will automatically be stored for two days and afterwards deleted. The transmission method for NAVTEX-messages (Sitor) permits a reduced recognition and correction of transfer errors. Characters, which were not received correctly, will be represented as underscore (_). Nevertheless it is possible that also normally represented characters are incorrect.

Structure of a NAVTEX message

The make up of a NAVTEX message is to be explained on the basis of following example:

```
ZCZC PA09
NETHERLANDS COASTGUARD
NAVIGATIONAL WARNING NR. 9 172128 UTC AUG
PLATFORM L10-G  53-29.4N 004-11.7E
UNLIT
NNNN
```

Each NAVTEX-message begins with the letters ZCZC, followed by the message identification (PA09). The first letter of the message identification serves the master station for identification. In this example it is NETHERLANDS COASTGUARD (P).

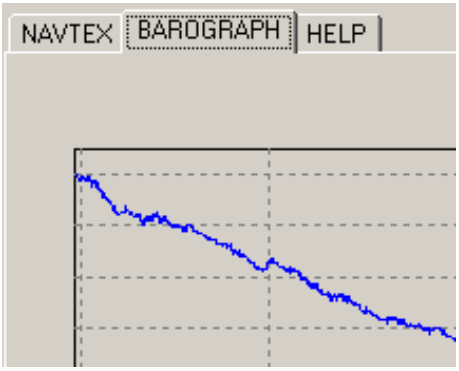
In the second letter the kind of message is coded, here navigational warning (navigation warnings). The last two numbers of the message identification (09) are a serial numbers. The number 00 has a privileged position. It is reserved for distress messages.

NAVTEX messages have a time stamp. It is shown at the end of the third line (172128 UTC August) and means: 17. August, 21:28 UTC. The time stamp refers to the date, the message was produced and not to the time of the radiant transmission. Afterwards the message content follows. The message ends with NNNN.

The following table contains an overview of the message types:

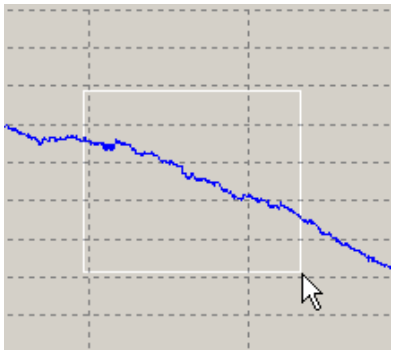
Code	Message type	Menu option
A	Navigational warnings	Navigational warnings
B	Meteorological warnings	Meteorological warnings
C	Ice reports	Ice reports
D	Search and rescue information	Search and rescue information
E	Meteorological forecasts	Meteorological forecasts
F	Pilot service messages	Pilot service messages
G	Information about DECCA navigational system	Electronic navaid messages
H	Information about LORAN navigational system	Electronic navaid messages
J	Information about GPS navigational system	Electronic navaid messages
K	Information about other navigational systems	Other messages
L	Additional navigational warnings (i.e. Ring moves)	Additional warnings
V	Other navigational warnings (i.e. ring list)	Remaining messages
W	Reserved for special service	Remaining messages
X	Reserved for special service	Remaining messages
Y	Reserved for special service	Remaining messages
Z	QRU (there are no messages)	Remaining messages

Barograph



The second tab contains the BAROGRAPH. The measuring data are represented in the diagram from left to right. I.e. the current measured value is on the right side of the curve. The barograph has a measuring interval of one minute and a resolution of 0,1hPa.

The representation period can be decreased with the Zoom-In-Button and increased with the Zoom-Out-Button . The temporal gradation is 12h, 24h, 48h and 7 days.



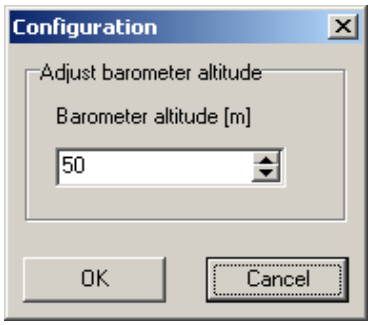
You can increase a cut out of the air pressure curve. Draw in addition a rectangular window with the mouse from above left to downward right. Use the left mouse button. If the mouse button is released, the appropriate range of the diagram will be shown increased.

The enlargement can be cancelled again by drawing any rectangular window with the mouse in reverse direction (from downside right to upward left).

The diagram is movable in any direction. Click in addition with the right mouse button into the air pressure curve and move the mouse. As long as you keep the mouse button pressed, the air pressure curve will follow the mouse movements.

The data of the barograph are only up to date, if a WIB2B is attached to the computer. Then the curve is represented in blue colour. If the air pressure data are not up to date (no WIB2B attached), the curve will be represented in black.

While the WIB2B is attached to the PC, the current temperature, the air pressure and the three hours of air pressure tendency are indicated on top of the screen. Please note: The device heats up with charging batteries. The displayed temperature is thereby corrupted.



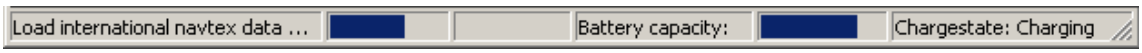
The air pressure sensor in the WIB2B measures the absolute air pressure. Because air pressure is normaly referred to sea level, a too small measurement value is displayed without correction, if the device is above sea level.

To display the correct air pressure you have to set the barometre height in the configuration dialog. You reach the dialog about the menu *Settings->Configuration...*

Please note, that the data of the barograph are lost, if the batteries of the WIB2B are exhausted. Therefore you should charge the batteries in time.

Status line

The status line is located at the lower edge of the WIB2B program window.
At this line information of the condition of the WIB2B are indicated.



The following information are contained in the status line (from the left to the right):

- information of the data communication with progress bar,
- Information of new NAVTEX messages,
- status of battery,
- status of the WIB2B.

Function overview

The following table gives an overview about the functions of the WIB2B:

Menu option	Icon	Function
File->Open...		Opens an already stored message.
File->Save...		Stores a message.
File->Print...		Prints a message or a barograph curve.
File->Exit		Terminates the program.
Settings->Configuation		Opens the dialogue for adjustment of the barometre height.
Settings->Expand tree		Opens / unfolds the NAVTEX menu tree.
Settings->Collapse tree		Closes / folds the NAVTEX menu tree.
Settings->Zoom In		Increases the barograph view (only the time scale).
Settings->Zoom Out		Decreases the barograph view (only the time scale).
Help->Manual...		Opens the User Manual.
Help->System information...		Shows system information of the software and of the WIB2B.

Operating instructions

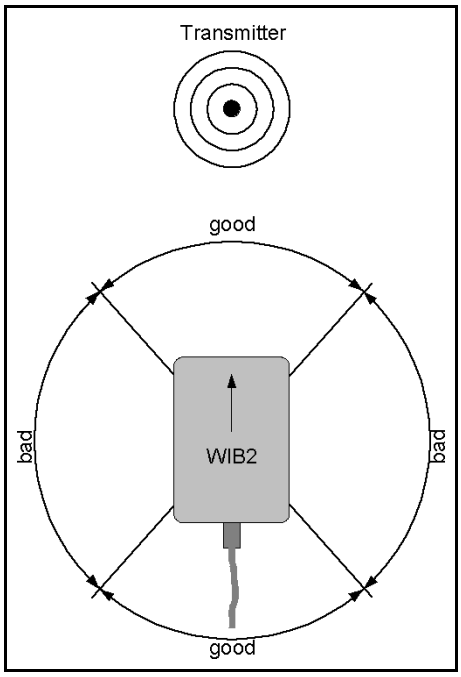
Environment

Please use the equipment only in the interior in dry environment. Do not expose the equipment in use to temperatures higher than 50°C and lower than 0°C.

Switching WIB2B on & off

The WIB2B has no operating controls. The device is switched on when it is attached to a PC. It switches off automatically, if the internal battery is empty. Thus it is guaranteed that the battery does not become deep discharged.

Hints to radio reception



The internal ferrite rod antenna of the WIB2B has a directionality. For good reception the equipment must be operating flat lying.
With small distance to the transmitter the directionality of the antenna will become hardly noticeable. The range of the bad receipt (see illustration) is hardly to be determined.
With increasing distance from the transmitter the directionality of the antenna will become more visible. In this case the WIB2B must be aligned to the transmitter for a good receipt.
Electromagnetic interferences can impair the receipt. This can occur due to e.g. computer, electronic navigation equipment, fluorescent lamps, inverters, battery chargers, generators, electric motors, high voltage transmission lines etc.
Therefore the equipment should be positioned as far away as possible from this equipment.

The receipt can be impaired also by atmospheric disturbances (e.g. Thunderstorms).

The transmission method for NAVTEX-messages (Sitor) permits a reduced recognition and correction of transfer errors. Characters, which were not received correctly, will be shown by the WIB2B as an underlined (_). Nevertheless it is possible that also normally represented characters are incorrect. Steal and/or aluminium yachts are like Faraday's cages. An insufficient receipt is probable.

Rechargeable batteries

The WIB2B contains three NiMH rechargeable batteries, type AAA with a capacity of 800 mAh. The batteries are recharged via the USB interface of the PC. Fully recharged batteries last in use for approx. three days.
The battery management of the WIB2B always provides for optimally recharged batteries, so you don't have to pay attention about the recharging of the batteries. If you do not want to use the WIB2B for a longer period (longer than one year), it is meaningful to take out the batteries in full recharged condition out of the device and to replace them when needed. Pay particular attention to the correct polarity.

If you want to exchange the batteries, use only fast rechargeble NiMH batteries, type AAA with a capacity of min. 800 mAh.

Suitable rechargeable batteries are i. e.:

Ansmann AAA NiMH 800mAh,
GP GP80AAAH,
Sanyo HR-4U.

Used up batteries must duly be disposed and do not belong into domestic waste.

Operational status indicators

The WIB2B has two light emitting diodes (LED's), which have the following meaning:

LED	Lights	Meaning
Red LED	Steady light	Operation via PC, the batteries are completely recharged
	Flashes evenly	Operation via PC, batteries are rechargeing
	Short flash	Battery operation
	Off	Device has been switched off
Green LED	Steady light	Just receiving a NAVTEX-message

Specifications

Receipt frequency	518 kHz and 490 kHz
PC interface	USB Full Speed, socket mini-B 5-pin
Rechargeable battery	3 x NiMH batteries, type AAA, 800mAh
Resolution temperature	0,1°C
Measurement error of the temperature sensor	±1°C
Resolution of the air pressure sensor	0,1hPa
Absolute measurement error of the air pressure sensor	±1,5hPa
Typical long term stability of the air pressure sensor	-1hPa/year
Air pressure measuring interval	60s
Maximum recording span air pressure	7 days
Power input in battery operation	10 mA
Battery operation period	Approx. 3 days
Power input USB	Max. 450 mA when rechargeing, otherwise 15mA
Battery recharge time	2-3 hours
Operating temmperature	0...50°C
Supported operating systems	Windows ME, 2000, XP, Linux, Mac OS
Memory	762 KB flash memory
Antenna	Inserted ferrite rod antenna
Dimensions (LxWxH)	Approx. 90mm x 57mm x 23mm
Weight	107g without cable

For inside use only.

Accessories

12 / 24 Volt recharge adapter for WIB2B Item-No.: 38153
Continuous operations on board are possible, independently of the PC. Cigarette lighter plug with USB socket for charging of the internal batteries via 12 V electrical systems. Usable with the USB cable contained in the scope of supply.
230 Volt recharge adapter for WIB2B Item-No.: 38154
Nylon bag for WIB2B Item-No.: 38160

Warranty

If the WIB2B exhibits a defect due to production or material defects within 24 months starting from the purchase date, it is either repaired by us or exchanged free of charge against appropriate equipment.
To wearing parts (e.g. housing, batteries, etc.) the warranty applies for six months starting from purchase date. The warranty does not apply, if the defect is caused on inappropriate treatment or neglection of the manuals.

A receipt of the warranty voucher with purchase date is required.

Devices with a crossed out dustbin label have to disposed in the European Union via a separate garbage collection at a suitable collective places for the recycling of electric and electronic devices.

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