# ORDERMAN® get more.

## **Installation Instructions**



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## **GENERAL INFORMATION**

- The Orderman system has been specially designed for the taking of orders in the food & beverage industry.
- This manual only contains guidelines for the installation of system hardware. This information is basically applicable to all Orderman handhelds. Differing methods of operating the individual devices are shown separately.
- Additional information, help programs and documents are available from our homepage <u>www.orderman.com</u>. These include:
  - Orderman service package (OMAN.EXE)
  - Don Menu Card Designer
  - Item lists (overview of system components and accessories)
  - User guide for the individual devices

### **BASIC SYSTEM**

The basic system is composed of a RF-base station and up to eight Orderman devices.



The RF-base station is connected to the PC (cash point) by a RS232 cable. The power supply for the RF-base station is provided via the supplied power supply unit. The RF-base station and Orderman must be adjusted to the same radio channel.



### EXPANDED SYSTEM

If the range of a RF-base station does not cover the area to be served, additional RFbase stations must be utilised. In this case, an additional router: which assumes the multiplex function, is also necessary.



The router (or router light or also Orderman terminal <sup>1</sup>) is connected to the PC (cash point) via a RS232 cable. The router and the RF-base stations are cabled by means of an RS485 interface. The cable carries the power supply, thus avoiding the need for a power supply unit for every RF-base station. Each RF-base station must be assigned its own radio channel and the radio channels from all the installed RF-base stations must be set on every Orderman: The Orderman automatically switches radio channels as required.

<sup>1)</sup> Please note: The Orderman terminal is a stationary input terminal and can be used on the cabled Orderman network together with the RF-base station. In this case, a router is not required.



## SAFETY INSTRUCTIONS

**Ensure** that when installed, the Orderman system is galvanically isolated to the other electrical systems.

The Orderman system complies with CE directives and possesses certification from the Austrian Federal Bureau of Telecommunication Licences.

**Please note:** When cabling the devices, it is vital to ensure the correct polarity of the power supply, as otherwise irreparable damage could result.

## **TECHNICAL DATA**

Operating frequency range Radio output	. 433,150 MHz - 434,65 MHz
	) mW in a cellular telephone)
Transmission speed (radio)	9.600 baud
Range in buildings	up to 50 m
Area coverage	up to 7.800 m2
Distance between RF-base stations	min. 6 m
Power supply of the power supply units	
Voltage supply per router/RF-base station	max. 150 mA
Min. input voltage with a router/RF-base station	7,5 V
mini input voltago mini a routon tri bado blation initia	

Notification in accordance with the R&TTE regulations, article 6.4, directive 1999/5/EC

### SYSTEM LIMITS

max. number of Orderman per RF-Basis station	8, 5 are recommended
max. number of RF-base station per router	
max. number of RF-base station per router light	3
max. number of Orderman devices per installation	



## PLANING THE ORDERMAN INSTALLATION

### Place of installation

In order to avoid radio- and reception interference, select an open area for the installation of the RF-base stations. Please note:

- No metal parts or objects should be in the immediate vicinity, as these can influence the radio range.
- The equipment should be located as high as possible, in order to avoid the effects caused by large groups of people on the direct line between the RF-base station(s) and the Orderman.
- The locations should be protected from the weather and preferably be indoors.

The RF-base stations can be installed in an upright position or overhead.

### Establishing the radio range

Unknown influences (i.e., wall structure) mean that the actual radio range in buildings can never be predicted precisely. Therefore, the radio range must be determined by testing.

**Please note:** Plan for sufficient reserve capacity, in order to avoid problems during practical operations! You have to consider that there are no more than only a few persons in the room at the moment of installation because it is possible that visitors can interfere with the radio signal.

The following will explain how to determine the correct radio range using the OMAN.EXE programme. The complete Orderman installation, including connection to the PC and cabling will be described. You can use the radio test function in the extended menu setup on the Orderman itself to determine the strength of the radio signal and the longest distance in which a server can effectively take orders. You do not need a PC to do this. All you need is one Orderman, a power source, a radio base station, and its AC adaptor. Please see "Determining optimum base station position" on page 38.

Procedure for establishing the radio range:

- Install a RF-base station at the selected location in the required operating position.
  For achieving an optimal result it will be best to mount the RF base station to the blanket or to another high position in the room.
- Connect the RF-base station to a PC (MS DOS operating system or DOS Box on Windows) on COM1, COM2, COM3 or COM4, by means of a RS232 interface. Use the supplied cable.



- Feed the RF-base station with power (power supply unit).
- Start the "OMAN.EXE" program from the "Orderman Service Package": OMAN 1 (for COM1) OMAN 2 (for COM2)

For further information concerning the use of COM 3 and COM 4, start OMAN.EXE without parameters.

Wait until the RF-base station has logged on to the PC (cash point). During this time, the message, "RF-Network LOGIN", will flash up on the upper right-hand side of the monitor. If this message has not disappeared after a minute, check to see if the right interface has been indicated and if the cabling is in order.

• Verify the setting of the radio channel on the Orderman and RF-base station.

The radio channel of the RF-base station is displayed on the PC monitor in the upper left-hand corner (BaSnr = serial number, Ver = firmware version, CH = set radio channel).

The Orderman radio channel can be displayed by activating the setup menu (See Orderman user guide).

Both devices must be set on the same radio channel (e.g. channel 10).

Only one radio channel may be used with the Orderman. If necessary, change the setting:

- Of the RF-base station using the "OMAN.EXE" program with the F2 button (F2 = set channels),
- Of the Orderman in the setup menu (See Orderman User guide).
- Switch on the Orderman. After a brief pause, a selection menu will appear on the display. Select "range check".

If this menu does not appear, there is no radio connection. In this case, check the radio channel set on the Orderman and the RF-base station as described above.

As a reference for good radio quality, use the counting speed in short range of the RF-base station.

• In order to avoid interference, make sure that no other RF-base station is using the same or an adjacent radio channel.

The Orderman won't work if you notice a channel-flashing (on the top of the right side on the LCD). If you have normal channel-flashing, then there is no connection to the RF-base station (out of range). Inverted channel-flashing signalises that data cannot be transfered to the PC (cash box) although Orderman and RF-base station are interconnected.



- Now walk around the entire area to be serviced and check the radio quality. The counting speed corresponds to the reaction time of the radio system. With good radio quality this should be under one second. If the range test fails to yield satisfactory results, change the position of the RF-base station (e.g. installation height, another room, another corner, antenna downwards, etc.) and repeat the procedure.
- If, after extensive tests, no position was found, which completely covers the desired area, one or possibly more additional RF-base station(s) and a router must be utilised. However, for testing purposes, one RF-base station is sufficient to define the various areas.



The radio areas of the individual RF-base stations should overlap fully without any gaps.





## CABLING

- **Caution:** The cabling of the entire electrical system may only to be performed by a licensed, specialist company in accordance with the given valid guidelines, regulations and standards.
- Please note: When cabling the unit, attention must be paid to the correct polarity of the supply voltage, as otherwise irreparable damage can be caused! After installation, check the cabling! Make certain that the Orderman system is installed galvanically isolated to other electrical equipment!

### **PIN** assignment

Modular 6-channel:

Terminal resistance:



Note:

RS 485 terminal resistor on PIN 1 and PIN 2 (120 Ohm)



## Connection to the RF-base station and router



Grouping of RS 232 socket	Grouping of RS485 socket	Grouping of RS232 socket
(RF-base station)	(Router/RF-base station)	(Router)
1 GND	1 485FUNKE	1 NC (not connected)
2 GND	2 485FUNKB	2 GND
3 GND	3 GND	3 NC (not connected)
4 RS232IN (RXD)	4 GND	4 RS232IN (RXD)
5 RS232OUT (TXD)	5 GND	5 RS232OUT (TXD)
6 V+	6 V+	6 NC (not connected)

## Connection to the OMB2



assignment RS232 Modular 6	assignment RS485 Modular 6	
(OMB2)	(OMB2)	
1 HS_XI	1 485_A	
2 GND	2 485_B	
3 HS_XO	3 GND	
4 RS232IN (RXD)	4 GND	
5 RS232OUT (TXD)	5 GND	
6 V+	6 V+	



## PIN assignment DSUB9 modular 6 adapter



modular Pin	modular	DSUB Pin	DSUB assignment
5		2	חצק
4	RS232001	3	TXD
2	GND	5	GND



## **PIN assignment OMT**





## Cable types

1:1 patch cable, flat cable 6 x 0.14 mm<sup>2</sup>

(d = 0.42 mm):

used for the following connections:

- RS232 PC <-> RF-base station<sup>1</sup>)
- RS232 PC <-> router<sup>1</sup>)
- RS232 PC <-> RS232/RS422-converter<sup>1</sup>)
- RS232 PC <-> RS232/RS422-converter <-> RF-base station
- RS485 connections between router/RF-base stations and network outlets

1) In the case of the additional use of the Orderman DSUB9/modular6-adapter



## Cabling PC(cash point) <-> RF-base station

RS232 cable, 1:1 patch cable and DSUB9/modular6-adapter, max. length = 10 m





### Cabling PC (cash point) <-> RF-base station via RS232/RS422converter

If the distance to be covered is greater than 10 m, we recommend the use of the RS232/RS422 converter.

RS232 cable, 1:1 patch cable and DSUB/9 modular6 adapter, max. length = 10 m. Category 5 data cable,  $4 \times 2 \times 0.6$  mm ( $8 \times 0.28$  mm<sup>2</sup>), max. length = 170 m (up to 1000 m. when using an additional power supply unit for the 2nd converter, or for the RF-base station)



**Please note.** Connect the screen of the category 5 data cable one way with GND. The A and B converters will be set using the DIP switch - A on the PC (cash point).

### Cabling PC (cash point) <-> router <-> RF-base station

The connection between the router and the RF-base stations runs via a network cable through which the data link (RS485) is created. In addition, the cable also carries the power supply. Therefore, a power supply unit is not required for each unit.

A power supply unit can supply a maximum of 4 devices (router and RF-base stations). When using more than 4 devices, the power supply in the network cable must be interrupted after at least every fourth device, in order to not overload the power supply units. In this case, the installation method using network outlets is recommended (see following section). At least one power supply unit must be used within a group with connected power supply (1 ... 4 units).

If, in a group, a power supply unit is placed at every unit, the length of a section is unlimited. However, the entire network cable length may not exceed 1000 m.

If, in a group, only one power supply unit is used, the following section lengths are produced when using 1:1 patch cable (flat cable 6 x 0.14 mm<sup>2</sup> (d = 0.42 mm):



Caution: Do not overload the power supply units!

The network connection consists of one train. No branching or loops may be formed! A terminal resistor must be attached to both end units of the network connection.

**Please note:** The entire length of the network connection (the sum of all 1:1 patch cables) may not exceed 1000 m!



#### Installation examples:

Example 1: 1 router, 2 RF-base stations, 1 power supply unit on one end unit RS232 cable, 1:1 patch cable and DSUB9/modular6-adapter, max. length = 10m



Example 2:.....1 router, 2 RF-base stations, 2 power supply units RS232 cable, 1:1 patch cable and DSUB9/modular6-adapter, max. length = 10 m



Example 3: ....1 router, 4 RF-base stations, 2 power supply units RS232 cable, 1:1 patch cable and DSUB9/modular6 adapter, max. length = 10 m





Example 4: 6 units are used (1 router, 5 RF-base stations). A minimum of 2 power supply units must be employed and the power supply must be interrupted at least once, in order to avoid operating more than 4 units on one power supply train. Interrupt the power supply after the third unit. Equip all 3 units in the first group of three with a power supply unit, i.e., the cable lengths between the 3 units of the first group are only limited to the extent that the entire network length may not exceed 1000 m. In the second group of 3, place 1 power supply unit at the middle RF-base station. This limits the cable length between the units of the second group of 3 to 500 m.

### Cabling PC (cash point) <-> router <-> RF-base stations via Network outlets (recommended)

The connection between the router and the RF-base stations runs via a network cable through which the data link (RS485) is created. In addition, the cable also carries the power supply. Therefore, a power supply unit is not required for each unit.

A power supply unit can supply a maximum of 4 devices (router and RF-base stations). When using more than 4 devices, the power supply in the network cable must be interrupted after at least every fourth device, in order to not overload the power supply units. At least one power supply unit must be used within a group with connected power supply (1 ... 4 units).

If, in a group, a power supply unit is placed at every unit, the length of a section is unlimited. However, the entire network cable length may not be exceed1000 m.

If a power supply unit is used in a group, the following section lengths are produced when using the category 5,  $2 \times 2 \times 0.6$  mm (4 x 0.28 mm2) data cable:



Caution: Not do overload the power supply units!

The network connection consists of one train. No branching or loops may be formed! A terminal resistor must be attached to both end units of the network connection.

**Please note:** The entire length of the network connection (the sum of all category 5 data cables) may not exceed 1000 m! Connect the screen of the category 5 data cable one way with GND.



Installation examples:

Example 1: ....... 1 router, 2 RF-base stations, 1 power supply unit on an end unit RS232 cable, 1:1 patch cable and DSUB9/modular6-adapter max. length = 10 m category 5 data cable, 2 x 2 x 0.6 mm (4 x 0.28 mm<sup>2</sup>), max. length = 170m



Example 2:.....1 router, 2 RF-base stations, 2 power supply units RS232 cable, 1:1 patch cable and DSUB9/modular6-adapter, max. length = 10 m category 5 data cable, 2 x 2 x 0.6 m (4 x 0.28 mm<sup>2</sup>), max. length =170m



Example 3: 1 router, 4 RF-base stations, 2 power supply units RS232 cable, 1:1 patch cable and DSUB9/modular6-adapter, max. length = 10 m category 5 data cable, 2 x 2 x 0.6 mm (4 x 0.28 mm<sup>2</sup>), max. length = 170 m



Example 4: 6 units are used (1 router, 5 RF-base stations). A minimum of 2 power supply units must be employed and the power supply must be interrupted at least once, in order to avoid operating more than 4 units on one power supply train. Interrupt the power supply after the third unit. Equip all 3 units in the first group of three with a power supply unit, i.e., the cable lengths between the 3 units of the first group are only limited to the extent that the entire network length may not exceed 1000 m. In the second group of 3, place 1 power supply unit at the middle RF-base station. This limits the cable length between the units of the second group of 3 to 680 m.



## INSTALLATION

The installation of the RF-base stations takes place using the two screws supplied at the points determined during planning.

## **CONFIGURATION AND PUTTING INTO OPERATION**

- Complete cabling (see also, "Cabling" section).
- In the case of networks, place terminal resistors on the end units.
- Check the cabling.
- Install power supply.
- Switch on PC.
- Set radio channels.

The Orderman system recognises 61 different radio channels (from radio channel 5 to 65). When using a router (terminal) with several RF-base stations, every RF-base station must be assigned its own radio channel. When choosing the radio channel, care should be taken that no neighbouring RF-base stations operate on adjacent radio channels. The selected distance between the individual radio channels must be as large as possible. The radio channels of nearby RF-base stations must be at least 20 radio channels apart.

Example 1: 1 router, 2 RF-base stations RF-base station 1 = radio channel 5 RF-base station 2 = radio channel 65 Example 2: 1 router, 5 RF-base stations RF-base station 1 = radio channel 50 RF-base station 2 = radio channel 10 RF-base station 3 = radio channel 30 RF-base station 4 = radio channel 60

RF-base station 5 = radio channel 20 **No identical radio channels may be used.** 







 No identical radio channels may be used with the RF-base station. The setting of the radio channel for each RF-base station takes place via the "OMAN.EXE" program using the F2 button (F2 = set channels). Start the "OMAN.EXE" program as described in the section, "Planning the Orderman Installation".

In the case of an installation with only one RF-base station, the radio channel setting is unimportant, unless another Orderman System is in operation in the immediate vicinity. The largest possible channel distance should also be used here. Each RF-base station contains one radio channel between 5 and 65.

## **ORDERMAN LEO RADIO CHANNEL SETTING**

In order to access the menu set-up, press the button (\*) while turning on the device with (\*)

Press the button again in order to access the channel list.:

The following buttons are available:



Use <exit> and the button 1 to save all the settings.



### RADIO CHANNEL SETTING ORDERMAN DON ORDERMAN MAX

The following steps are required to access the channel setting menu:

- press and hold down on any position in the touch area
- Simultaneously, press down the On/Off button until "CALIBRATE..." is displayed.
- Release On/Off button and touch area.
- Briefly press the On/Off button.

### The Orderman is now in the setup menu for the end user.

- Touch the Don/ Max button on the toolbar.
- Then press the On/Off button again briefly.

### The Orderman is now in the setup menu for dealers.

- Touch the RF-channel symbol.
- All the preset radio channels can be deleted using CLR.
- Now select all the RF-base station channels in the system by touching the respective channel number.
- Confirm the channel setting by touching "OK".
- Save all the changes of the settings by pressing the SAVE button

Never select more channels in the setup menu than actually exist in the Orderman system. This would lead to unnecessary delays in the radio communications.

Example 1: 1 RF-base station = radio channel 35 Orderman = radio channel 35

Example 2:..... 1 router with 5 RF-base stations

RF-base station 1 = radio channel 50 RF-base station 2 = radio channel 10 RF-base station 3 = radio channel 30 RF-base station 4 = radio channel 60 RF-base station 5 = radio channel 20



Orderman = radio channel 10, 20, 30, 50, 60

• Once the radio channels have been set, a function test must be carried out. Walk around the entire area and verify the radio quality as described in the section, "Determining the Radio Range".



### SETTING THE RADIO CHANNEL FOR ORDERMAN LEO2 ORDERMAN LEO2PLUS

Perform the following steps to access the channel setting menu:

- With the unit switched off, hold down the Send key
- Briefly press the On/Off key and
- Briefly press the 0 key
- Release the Send key

## The Orderman unit is now in Extended Setup mode where individual settings can be made.

- Select menu option 'System Setup' and confirm by pressing OK
- Select menu option 'Channel' and press OK
- Using the keypad, enter/remove channels as required under the menu options 'Add' and 'Remove' and confirm by pressing OK
- Active channels are displayed in the 'Ch-List' at the top
- Save settings by pressing the F key, or select menu option 'Save(F)' and press OK

The number of channels entered in the setup menu must never exceed the number of channels actually available in the Orderman system; this leads to unnecessary radio delays and interruptions.

## SETTING THE TILT SENSOR FOR ORDERMAN LEO2

The tilt sensor can be set to activate the key lock function when the Orderman is held in a vertical position (i.e. when holstering it). The default setting is "Keylock".

Perform the following steps to access the channel setting menu:

- With the unit switched off, hold down the Send key
- Briefly press the On/Off key and
- Briefly press the 0 key
- Release the Send key

- Select menu option "Function Flags" and confirm by pressing OK
- Select menu option "Sensor" and chose between the options "OFF" and "Keylock" and press OK
- Save settings by pressing the F key, or select menu option "Save(F)" and press OK



### SETTING THE FLIP VIEW FOR ORDERMAN LEO2 LEO2PLUS

The flip view function allows a server to easily display a tab or order to a guest by tilting the Orderman upside-down. The display is then turning by 180°. The default setting is "ON"; the flip view function is activated.

Perform the following steps to access the channel setting menu:

- With the unit switched off, hold down the Send key
- Briefly press the On/Off key and
- Briefly press the 0 key
- Release the Send key

- Select menu option "Function Flags" and confirm by pressing OK
- Select menu option "Flip View" and chose between the options "OFF" and "ON" and press OK
- Save settings by pressing the F key, or select menu option "Save(F)" and press OK

### SETTING THE TILT SENSOR FOR ORDERMAN MAX2 MAX2PLUS

The tilt sensor settings allow you to determine what happens, when the Orderman is held in a vertical position (i.e. when holstering it).

- "Stand by ON": Battery-saving function. The Orderman switches into the standby mode. The display turns off, the key lock is on. Press the on/off button to return to the latest application.
- "Tilt Lock ON": The Orderman turns on the key lock. The key lock symbol is displayed. Press the on/off button to return to the latest application.
- "**Tilt Power-off OFF**": The tilt sensor is deactivated. All functions of the Orderman are running and nothing will change when the unit is tilted.
- **"Tilt Power-off ON":** The Orderman turns off. Press the on/off button to restart the Orderman.

The default setting is "Stand by ON".

Perform the following steps to access the tilt sensor setting menu:

- Press and hold a finger anywhere on the touch screen while simultaneously holding down the on/off button. The screen will begin to rhythmically blink on and off and the word "calibrate" will appear in the upper left corner
- Release the touch screen and the on/off button simultaneously
- Then press the on/off button again and you will access the Orderman setup menu

### The Orderman unit is now in Setup mode for customers.

Touch the Max2/Max2plus symbol on the tool bar and the on/off button again.

- Touch the symbol "Flags" on the touch screen
- Chose one of the four options described above in the third menu item from the top
- Confirm your selection with OK and leave the setup menu by touching "Save"

### SETTING THE FLIP VIEW FOR ORDERMAN MAX2 MAX2PLUS

The flip view function allows a server to easily display a tab or order to a guest by tilting the Orderman upside-down. The display is then turning by 180°. The default setting is "Tilt Flip ON"; the flip view function is activated.

Perform the following steps to access the tilt sensor setting menu:

- Press and hold a finger anywhere on the touch screen while simultaneously holding down the on/off button. The screen will begin to rhythmically blink on and off and the word "calibrate" will appear in the upper left corner
- Release the touch screen and the on/off button simultaneously
- Then press the on/off button again and you will access the Orderman setup menu

### The Orderman unit is now in Setup mode for customers.

Touch the Max2/Max2plus symbol on the tool bar and the on/off button again.

- Touch the symbol "Flags" on the touch screen
- Chose "Tilt Flip ON" or "Tilt Flip OFF" in the fourth menu item from the top
- Confirm your selection with OK and leave the setup menu by touching "Save"



## Display Symbols (Leo /Don / Max / Leo2 / Leo2plus)





### UPDATE

The router, RF-base stations and Orderman are designed to allow the update of operating software (firmware) via the RS232 interface or radio.

This is only necessary if units with different firmware versions are to be found in the system, or if updated firmware versions are available and the intention is to use the new features.

The latest firmware versions for the RF-base stations and Orderman can be downloaded from our homepage www.orderman.com.

The "OMAN.EXE" program from the latest Orderman service package must be employed for the update of a new firmware version.

**Important.** Within a radio network, care must be taken that all Orderman devices are fitted with identical firmware and that the router and all RF-base stations are equipped with the fitting firmware version to the Orderman devices.

Suitable firmware versions are always provided together in an "Orderman Service Package".

The version numbers of the Orderman firmware and the corresponding router/RF-base station firmware are not necessarily identical.

To establish which firmware versions are available in the "Orderman Service Package", please read the "readme.txt" file in the "Orderman Service Package".

Example: all the devices in one system are to be updated:

- The radio network (either a RF-base station or a router and numerous RF-base stations) must be connected to a MS-DOS PC via a RS232 interface (e.g. via COM 1) and supplied with power.
- Unzip the compacted file (.zip) from the "Orderman Service Package" and place it in a separate folder.
- Switch to the folder into which you have copied the "Orderman Service Package" and then start the "OMAN.EXE" program with the command "OMAN 1" (parameter 1 instructs the program to communicate via the COM 1 interface).



- Wait until the radio network has logged in at the PC. In the meantime, the message, "RF-Network LOGIN" will flash up on the upper right-hand edge of the monitor. If this message does not disappear after one minute, check that the correct interface is indicated and that the cabling is OK.
- Serial number, firmware version and radio channel from the router and RF-base stations are displayed as a list in the upper left-hand corner of the PC monitor (BaSnr = serial number, Ver = firmware version, Ch = set radio channel).
- Verify if all the employed network devices (router and RF-base stations) are loaded with the latest firmware version (see readme.txt in the "Orderman Service Package").

#### If yes, no update is necessary.

**If no,** start the automatic network update procedure with the F3 button (for details, see "Program help using the F1 button"). This function automatically updates all connected network devices (router and RF-base stations).

**Please note.** If the procedure is interrupted, the unit that was processed last may possibly not be loaded with valid firmware and will not log in. In this case, the unit must be directly connected to the PC via the RS232 interface (should this not already be the case) and supplied with the firmware module using the F4 button (F4 = single update).

 After the radio network has been updated, verify that all the handhelds used in the system are equipped with the latest version of the firmware. The firmware version is displayed after switching on the device.

In the case, that any handheld is not loaded with the latest firmware version, proceed as follows:



### Orderman Leo firmware update

• Switch off the Orderman



- Press the ON button and keep it pressed.
- Press both outer buttons in the first row ("-" and " $\uparrow$ ") and keep them pressed.
- Release the ON key. The backlight will blink on (the display is blank). Release the other two keys.
- On the Orderman, switch to the radio channel of a RF-base station to which you have contact (the channel numbers of the RF-base stations are indicated in the upper left-hand area of the PC monitor). Use the top row of the button arrangement on the Orderman as illustrated below.
  E.g. Set channel 25: press the "-" button (clear, channel = 0) Press the "F" key twice (increases channel by 20 => 20) Press the "SPLIT" key five times (increases channel by 5 => 25)
- Now press the "<sup>↑</sup>" key to start the update procedure. You can follow the procedure on the PC monitor. In the Orderman list beside the Orderman serial number, a number is displayed in red and counted down to "0". The update procedure for this unit is subsequently ended.



• Check if the correct version is installed in the Orderman.

**Please note:** If the Orderman update procedure is interrupted, it is possible that the Orderman involved may not be fitted with valid firmware. In this case, instead of the usual start, the backlight will blink regularly. Simply repeat the aforementioned procedures again !

### Orderman Don, Orderman Max firmware update

- press and hold down on any position in the touch area
- Simultaneously, press down the On/Off button until "CALIBRATE..." is displayed.
- Release On/Off button and touch area.
- Briefly press the On/Off button.

### The Orderman is now in the setup menu for the end user.

- Touch the Don button on the toolbar.
- Then press the On/Off button again briefly.

### The Orderman is now in the setup menu for dealers.

- In order to initiate the update procedure, touch the update symbol on the display.
- The same radio channel must be set on both, the Orderman Don/ Max and the RF-base station.
- The updating procedure is completed when "Finished" appears on the display.



### Firmware update for Orderman Leo2 Orderman Leo2 plus

Perform the following steps to access the channel setting menu:

- With the unit switched off, hold down the Send key
- Briefly press the On/Off key and
- Briefly press the 0 key
- Release the Send key

## The Orderman unit is now in Extended Setup mode where individual settings can be made.

- Select menu option 'Update' and confirm by pressing OK
- The update procedure will begin
- The Orderman must be set to the same radio channel as the RF base station
- The update procedure is complete when 'Finished' appears on the display; confirm this by pressing OK

You can track the procedure on the PC screen: next to the serial number of the Orderman unit, a red number will count down in the Orderman list. When the number reaches 0, the update procedure for this unit is complete.

• Check that the correct version is now loaded on the Orderman unit.



### OMB2 licence update (licence extension)

- Install the latest Orderman Service Package (includes oman.exe) Go to the homepage www.orderman.com -> Partner Area -> Downloads -> Software Tools -> Orderman Service Package
- Connect the OMB2 to a free RS232 COM port (e.g. COM1) using the supplied batch cable. Interface parameters are set within oman.exe so that it is not necessary to change any Windows settings.

Package V4.8)

Launch the program oman.exe

Select the COM port and press START

- To extend licence levels, inform Orderman of ٠ the ID code and serial number of the OMB2
- Press the F8 key to obtain the ID code

🖾 OMAN 4.8 für Test COM1 📃 🗌 🗙				
10:58:06 OMA	N U3.3(kg) by thi	nk dig	COM1:57600, cr	C
INETW.DEVICE	S: OMR, OMB & OMT 1	LINPUT DEVI	CES: ORDERMAN & ORDE	RMAN TERMINALI
Snr Ver C	<u>h Snr Ver Ch</u>	Snr Statu	ıs Snr Status	Snr Status
53620 5.06	5			
Input new Li	cense Code for sn	r 53620: 1547	9 B8E1 775C 9BD5 FA90	(Esc=skip)
<<< Network	initialized >>>			
repeat telnr	9 for snr 53620			
repeat telnr	16 for snr 53620			
repeat telnr	17 for snr 53620			
repeat telnr	18 for snr 53620			
$\sim$ (hange License Statue of PP hase station(s) one memory place				
(aptor binding litering of the start start of the start o				
53620 ID=5F9C 2504 4122 F0F8 8BDB 2B20 Max $0M=4$ Demo=0FF tDemo=119b				
programment				

After obtaining the new licence code, press the F8 key Enter the licence code and confirm by pressing ENTER

<<< Network initialized >>>		
Input new License Code for snr 53620:	(1547 B8E1 775C 9BD5 FA90	(Esc=skip)

- After initialisation of the OMB2, press F8 again You will see the new ID code and the maximum number of units now supported
- **MaxOM** = Maximum number of units supported by OMB2 (Don, Max, Leo, OMPR)
- F10 Exit



OMAN He CANCEL



### **ORDERMAN LEO SELFTEST MENU**

In order to access the Selftest menu, keep the  $\bigcirc$  button depressed, while switching on the device with the ON button.

### Radio Test (radio range test, call-up with button 1)

During this test, the serial numbers of the base station, the channel number, the software version and serial number of the router, as well as the number of all logged on Orderman devices appear on the display.

In order to judge the quality of the radio link, data protocols are sent to the RF-base station and then received back. The number of positive data transfers is shown on the bottom edge of the display as an <increasing number>.

#### Additional key data:

- <max.pause>: maximum pauses occurring between two transmitted data protocols. The lower the value the better. Anything above 0.7 is less than optimal.
- <steps/sec.>: The number successfully completed data transfers (receive send receive) between the Orderman and the radio base station per second. The greater the value the better. 1.6 – 2.9 is good and 3.0 and above is great.

#### This test can be completed without the OMAN.EXE program.

## Battery Test (call-up with button 2)

This menu item is used to measure existing battery capacity.

Procedure:

- Fully charge up the battery to be tested with the charging station or a power supply unit.
- Remove the Orderman Leo from the charging station or switch off the plugged in power supply unit.
- Access the battery test menu and start the battery test. Battery capacity is measured during this discharging process. The voltage curve is shown in terms of time as a graphic (the Orderman switches off automatically when the battery is empty).
- Once the Orderman has turned itself off, charge the battery to a level that permits the Orderman to be switched on (another battery can also be used). Following renewed access to the testing menu, the test result of the discharged battery will be displayed:

< last test result: "Capacity in percent">.



## Channel scan (channel search, call-up with button 3)

All the channels that can be set on the Orderman can be scanned to see if they are already occupied by active base stations.

Display:

<scanning channel: base station channel number>. All the channels occupied by the Orderman system are shown reversed on the display.

### Orderman Don, Orderman Max

### Radio Test – radio range test

- press and hold down on any position in the touch area
- Simultaneously, press down the On/Off button until "CALIBRATE..." is displayed.
- Release On/Off button and touch area.
- Briefly press the On/Off button.

#### The Orderman is now in the setup menu for the end user.

- Touch the Don/Max button on the toolbar.
- Then press the On/Off button again briefly.

#### The Orderman is now in the setup menu for dealers.

• Touch the radio test symbol.

During this test, the serial numbers of the base station, the channel number, the software version and the serial number of the router, as well as the number of all logged on Orderman devices appear on the display.

In order to judge the quality of the radio link, data protocols are sent to the RF-base station and then received back. The number of positive data transfers is shown on the bottom edge of the display as an <increasing number>.



### Additional key data:

- <max.pause>: maximum pauses occurring between two transmitted data protocols. The lower the value the better. Anything above 0.7 is less than optimal.
- <steps/sec.>: The number successfully completed data transfers (receive send receive) between the Orderman and the radio base station per second. The greater the value the better. 1.6 – 2.9 is good and 3.0 and above is great.

### This test can be completed without the OMAN.EXE program.

### Channel scan – channel search

The following steps are required, in order to access the channel scan menu:

- press and hold down on any position in the touch area
- Simultaneously, press down the On/Off button until "CALIBRATE..." is displayed.
- Release On/Off button and touch area.
- Briefly press the On/Off button.

### The Orderman is now in the setup menu for the end user.

- Touch the Don/Max button on the toolbar.
- Then press the On/Off button again briefly.

### The Orderman now in the setup menu for dealers.

- Touch the RF-Channel symbol.
- Touch the SCAN symbol.

All the channels that can be set on the Orderman are scanned to see if they are occupied by active base stations.

All the occupied channels are shown reversed on the display.



### SELF-TEST FOR Orderman Leo2 Orderman Leo2 plus

### Keyboard test

Perform the following steps to access the Tests menu:

- With the unit switched off, hold down the Send key
- Briefly press the On/Off key and
- Briefly press the 0 key
- Release the Send key

## The Orderman unit is now in Extended Setup mode where individual settings can be made.

- Using the cursor keys, select menu option 'Tests' and confirm by pressing OK
- Select menu option 'Keyboard' and press OK
- This takes you to the 'Keyboard Test' menu where you can check the functions of all keys; a counter increases at the relevant position each time you press a key
- When every key has been pressed at least once, 'COMPLETED' will appear on the left side of the display
- Hold down the On/Off key for 3 seconds to switch to the Tests menu

### Radio test

- Using the cursor keys, select menu option 'Tests' and confirm by pressing OK
- Select menu option 'Radio Test' and press OK
- The radio test will start

During the test, the display will show the serial number of the base station, the channel number and software version, the serial number of the router and the number of logged in Orderman units.

To assess the quality of the radio link, data logs are sent to the RF base station and bounced back. The number of successful data transfers is indicated by the counter at the lower edge of the display.

#### Other characteristic data

- <max.pause>: maximum pauses occurring between two transmitted data protocols. The lower the value the better. Anything above 0.7 is less than optimal.
- <steps/sec.>: The number successfully completed data transfers (receive send receive) between the Orderman and the radio base station per second. The greater the value the better. 1.6 – 2.9 is good and 3.0 and above is great.



### Tilt sensor test

- Using the cursor keys, select menu option 'Tests' and confirm by pressing OK.
- Select menu option 'Tilt Sensor' and press OK.
- This takes you to the tilt sensor test where you can check the function of the tilt sensor.

## **Options test: Hardware test for available options**

- Using the cursor keys, select menu option 'Tests' and confirm by pressing OK
- Select menu option 'Options' and press OK
- The hardware test indicates the available options
- Select the required option and perform the function check

## DETERMINING OPTIMUM BASE STATION POSITION

In a few short steps you can determine the perfect position for a base station to ensure optimum performance and continuous customer satisfaction.

- 1. The channel scan function helps you determine if there are other Orderman installations nearby. Please ensure that your own base station is turned off before scanning for other sending base stations.
- 2. Choose a central location in relation to the areas that need radio coverage. Plug the base station into a power source. Position the base station as high as you can (high on a wall or on the ceiling). You find more information on page 7.
- 3. Enter into the extended setup menu of the Orderman and conduct the radio test.
- 4. Now walk the area slowly and observe how the MaxPause and Steps/sec values change from place to place. Pay close attention to the values presented on handheld display. The speed in which the counter progresses is a good indicator of the radio signal in reference to its proximity to the base station. The "Steps/Sec" value should be 2 or more. If this value is less than 2, then the radio coverage is poor, or non-existent. In this case, move the base station to another location and repeat the procedure.

Hint: Organize the installation in such a way that you have ample coverage beyond the area where you plan to take orders. Many bodies can adversely affect the radio signal. Therefore we recommend building in "extra" radio coverage to make sure you have perfect radio coverage in an area crowded with people. This way you can be sure that everybody (guests, servers, restaurateurs) are completely satisfied with the Orderman performance.