

Installation and Operation Guide

Rev 1.0

MING
WIRELESS
STEWARD
CALL
—

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Introduction

These operating instructions give an overview of the components, settings and functions of the Ming wireless steward call system. Please read this document carefully before operating the system.

1. System parts

The Ming wireless steward call system consists of the following components:

- a) Wireless button
- b) Docking station
- c) "Type 1" antenna for communication between docking station and wireless button
- d) "Type 2" antenna (optional) for communication with your wireless network
- e) Mains adapter (optional)
- f) RJ45 network cable (optional)
- g) Client software (optional)

2. Safety advice

For installation and operation of the Ming system, carefully observe the following safety advice:

-  **Important:** Never place any metallic objects (e.g. coins, keys or paper clips) on the charging cradle of the docking station!
-  **Important:** Never attempt to charge other devices than the wireless button (e.g. mobile phones) on the charging cradle of the docking station!
-  **Important:** The wireless button and docking station are not rain proof, weatherproof or waterproof and may only be permanently operated in interior areas!
-  **Important:** The MING Wireless Steward Call system is designed to be used only on leisure yachts at sea. It operates on 902 to 928 MHz ZigBee™ radio frequency with a selectable radio power ranging from 100mW to 250mW. This may not comply with radiocommunication regulations in all countries. It is the customer's responsibility to check full compliance with local radiocommunication regulations before entering a country's territory. If you are unsure about this you can disable the 902 to 928 MHz ZigBee™ radio operation before entering a country's territory.
-  **Note:** The wireless button will warm up noticeably while charging on the docking station. This is normal as the integrated battery of the wireless button is charged using wireless power – i.e. without direct electrical contacts. During this process, a small percentage of thermal loss is generated that is given off as heat. The wireless button cannot overheat during charging because the charging process is constantly monitored by temperature sensors that will interrupt it as necessary.

3. Installation and configuration of the docking station

Prior to operating the Ming system, the docking station(s) must be configured before installation it in its subsequent location. For this, it is important that you observe the following sequence.

3.1. Docking station connections

Familiarise yourself with the docking station connections, they are located at the rear of the device. The individual connections are labelled on the bottom of the docking station. The individual connections are as follows:

- ANT 1 (Antenna connection for the "type 1" antenna for the wireless button)
- LAN (Connection for wired network, PoE compatible)
- USB (USB port for firmware updates)
- DC (Connection for mains adapter)
- ANT 2 (Antenna connection for the "type 2" antenna for the wireless network)

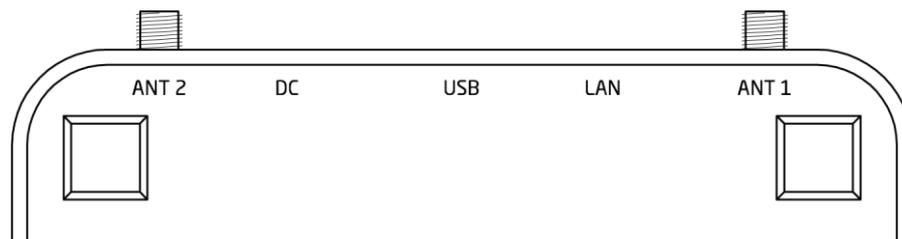


Figure 1: Underside of the docking station

3.1.1. Antenna ANT 1

First connect the "type 1" antenna to the ANT 1 connection. This antenna is used for communication with the wireless button. Insert the antenna into the connection pointing upwards. Please hold the antenna in an upright position with one hand while using the other hand to tighten the union nut of the antenna.

3.1.2. Network connection

You can choose between a wired or wireless network connection. For initial setup, a wired network connection to your computer is required.

- a) **Wired network:** Connect the RJ45 network cable to the LAN connection. Connect the other end of the cable to your network socket (or to your computer for initial setup).
- b) **Wireless network:** Connect the "type 2" antenna to the ANT 2 connection. This antenna is used for communication with your wireless network. Insert the antenna into the connection pointing upwards. Please hold the antenna in an upright position with one hand while using the other hand to tighten the union nut of the antenna.

⚠ **Note:** We recommend to connect the MASTERDOCK to your network via a wired connection.

3.2. Assigning an individual DOCK ID before initial connection

Before you connect the docking station to its power supply for the first time, you first have to assign an individual three-digit identification number (called DOCK ID) to each docking station. The DOCK ID is easily set using the rotary selector switch located on the underside of the docking station. Use a suitable small screwdriver for this purpose.

Use the first (left) rotary switch to set the first digit of the 3-digit DOCK ID, the second (middle) rotary switch to set the second digit and the third (right) rotary switch to set the third digit of the DOCK ID. Reading from left to right, the position of the three rotary switches then shows the selected DOCK ID.

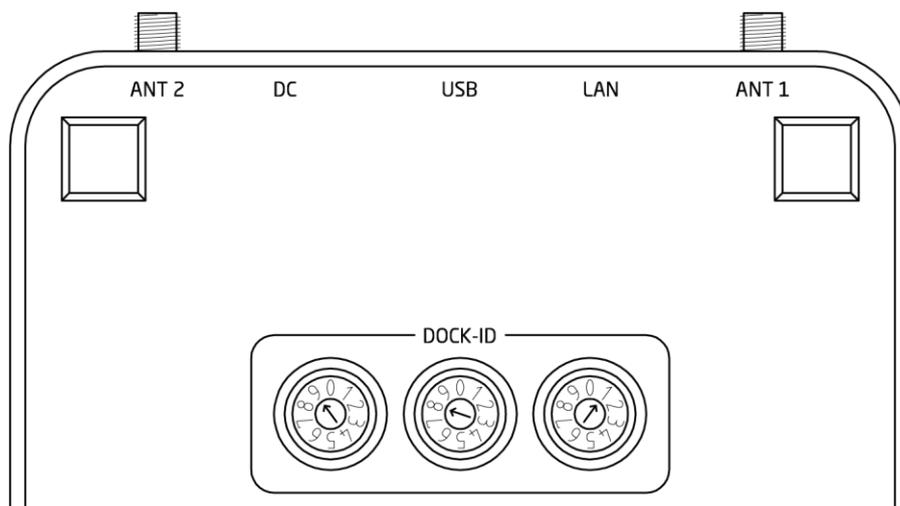


Figure 2: Underside of the docking station with rotary selector switches

Please set the DOCK ID of the first docking station to "999". The DOCK ID "999" defines the MASTERDOCK. Every Ming system has a MASTERDOCK – this dock centrally handles the entire communication of the Ming system.

If your Ming system consists of several docking stations, please set the second docking station to "998" next. This defines the "CO-MASTERDOCK". In the unlikely event that the MASTERDOCK

should fail, the CO-MASTERDOCK will continue to handle all communication and automatically ensures uninterrupted operation of the Ming system (redundancy).

All additional DOCK IDs can be assigned arbitrarily, but for convenience we recommend a consecutive allocation of DOCK IDs, i.e. "997" and in descending order, or "001" and in ascending order. In your documentation, please note the respective DOCK IDs next to the installation locations of the individual docking stations.

 **Important:** Make sure not to assign the same DOCK ID twice!

 **Important:** Set the first docking station to DOCK ID "999"

 **Important:** Set the second docking station to DOCK ID "998"

 **Note:** Note the location and DOCK ID of each docking station

3.3. Power supply

Power is supplied to the docking station either via the mains adapter or via your network switch, i.e. Power over Ethernet (PoE). For initial installation, power must be supplied via the mains adapter:

- a) Mains adapter: The mains adapter automatically adjusts to the connected mains voltage between 100 and 240 volts. Use the included adapters to connect the mains adapter to the required socket outlet type (EU, UK, US, AUS).

 **Important:** Make sure that the selected adapter securely locks into place!

Connect the mains adapter cable to the DC connection of the docking station. Then plug the mains adapter into the outlet socket.

- b) Power over Ethernet (PoE): This supplies power to the docking station via the RJ45 network cable of the wired network.

 **Important:** Your network switch must be capable to supply power at the respective port according to PoE specifications!

3.4. Configuring the docking stations

Generally, you need to first connect each docking station individually to your computer in order to make the required **-AND ONLY THESE-** network settings. As soon as all docking stations are part of the network, perform any system configurations exclusively via the MASTERDOCK (including those of the individual docking stations).

The power LED of the MASTERDOCK always shows a green light while the power LEDs of all additional docking stations show a white light instead. This enables you to always identify the MASTERDOCK.

⚠ Important: First connect each docking station individually with your computer!

⚠ Important: Perform only the network settings of each docking station first!

⚠ Important: Then connect all docking stations to your network!

⚠ Important : Only then configure all other settings exclusively via the MASTERDOCK!

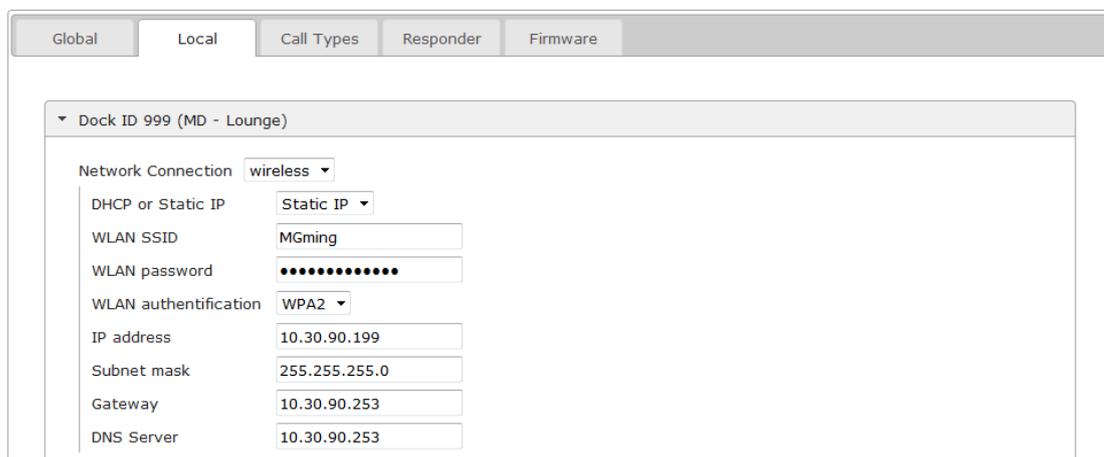
3.5. Initial network configuration

Now connect the docking station with your computer. Use a RJ45 network cable for this purpose.

Start up the internet browser on your computer and connect to the docking station by entering the IP address 192.168.168.168 in the browser's address field. Please ensure that your PC is configured to the same IP address range as the docking station.

Your browser now displays the configuration screen of the docking station.

The desired network configurations can now be carried out and saved via the menu item "Local".



The screenshot shows a web interface with a navigation bar at the top containing tabs: Global, Local, Call Types, Responder, and Firmware. The 'Local' tab is selected. Below the navigation bar, there is a dropdown menu showing 'Dock ID 999 (MD - Lounge)'. The main content area displays network configuration settings for a wireless connection. The settings are as follows:

Setting	Value
Network Connection	wireless
DHCP or Static IP	Static IP
WLAN SSID	MGming
WLAN password	••••••••••
WLAN authentication	WPA2
IP address	10.30.90.199
Subnet mask	255.255.255.0
Gateway	10.30.90.253
DNS Server	10.30.90.253

Figure 3: Web-Interface - Network settings

⚠ Important: You must assign a new and unique IP address that is valid for your network to each docking station.

⚠ Important: Perform only the network settings of each docking station first!

⚠ **Important:** Assign a new IP address to each docking station!

⚠ **Important:** Click on SAVE CHANGES to save your network settings!

3.6. System configuration via the MASTERDOCK

Once you have carried out the network settings for all docking stations and have connected all docking stations with your network, proceed to connect with the MASTERDOCK to carry out all system settings.

The configuration screen is divided into 5 logical areas that you can access by clicking on the respective menu items in the upper part of the screen. These are:

- Global
- Local
- Call Types
- Responder
- Firmware



Figure 4: Web-Interface - Menu items

⚠ **Important:** Please note that any configuration changes will only be transmitted to the docking station if you confirm the changes by clicking on the SAVE CHANGES button at the bottom of the screen! Otherwise your changes will be lost when you exit the configuration menu!

When you have saved your settings by clicking on SAVE CHANGES, the configuration screen will be updated automatically.

3.6.1. Global

Any settings made under the GLOBAL menu item are automatically valid for all Ming components in the system.

System PIN

This is where you define an arbitrary 6-digit system PIN. A client uses this System PIN to authenticate itself on the Ming system.

Yacht Name

This is where you may enter the name of the yacht on which the Ming system has been installed.

Date/Time Reception

This determines if the system time is to be received from a client or from an NTP server.

If you choose CLIENT, the time will be provided to the Ming system by a MING client software that has "Time Master" activated in its settings.

If you choose NTP SERVER, an input field for the IP address of your NTP server will open that you have selected to provide the time.

Responder ID Request

Determine if a crew member must authenticate himself with a 4-digit responder ID when answering a call at the client.

If you select YES, a pop-up window requesting the responder ID will open up when a call is taken. Only if the correct responder ID has been entered, a call can be accepted. The responder ID may be individually defined for each crew member under the main menu item RESPONDER.

If you select NO, tapping on a call on the client screen will answer the call without authentication. This enables you to only trace *where* the call was answered or which client was used to answer it, but not *who* answered it.

Harbour Mode

Harbour mode deactivates all wireless connections between the wireless buttons and the docking stations. Active harbour mode is signalled by red bars at the upper and lower edge of the app. Please note that the system cannot send or receive any calls in active harbour mode!

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In this menu item harbour mode can be ENABLED or DISABLED.

Dock location prefix and dock location prefix colour

The dock location prefix is a graphic component of an incoming call on a client.

To aid orientation, abbreviations for larger logical areas of the yacht in which one or more docking stations are installed can be defined here.

Normally, the common deck abbreviations (e.g. SD for sun deck or MD for main deck) are used, but any two-digit abbreviation can be chosen.

One of 9 pre-defined colours can be assigned to each dock location prefix. This aids orientation when taking calls as the dock location prefix is displayed in large letters before the location name of the docking station.

With the buttons ADD NEW PREFIX and DELETE new prefixes can be created or existing ones can be deleted.

The screenshot displays the 'Global Settings' section of a web interface. At the top, there are tabs for 'Global', 'Local', 'Call Types', 'Responder', and 'Firmware', with 'Global' selected. Below the tabs, the 'Global Settings' section includes fields for 'System PIN' (123456), 'Yacht Name' (M/Y Testdrive), 'Date/Time Reception' (Client), 'Responder ID Request' (No), and 'Harbour Mode' (disabled). The 'Dock Location Prefix Settings' section lists four entries: 'SD' (Sun Deck) with a yellow color, 'BD' (Bridge Deck) with a blue color, 'MD' (Main Deck) with a red color, and 'LD' (Lower Deck) with a teal color. Each entry has a 'Delete' button. At the bottom of this section is a '+ Add new prefix' button.

Figure 5: Web-Interface - Global

3.6.2. Local

This is where you can make any local settings, i.e. the individual settings for each docking station. At first you will only see the docking station that you are directly connected with during initial installation.

Once all docking stations are part of your network, all the installed docking stations will be listed here with their respective dock ID and location name. Click on the dock for which you would like to change the settings.

Network Connection

This is where you determine the network settings that allow the docking station to connect to your network, depending on the available network type.

We recommend to connect the MASTERDOCK to your network via a wired connection.

Dock location prefix

In GLOBAL settings you have already defined one or more location prefixes. This is where you select the suitable location prefix for the dock location.

Dock location name

This is where you define the name of the location which the crew is being called to when they receive an incoming call. This name is an important part of the call and should be defined clearly and with great care.

RF power

This is where you can set the transmitting power between wireless buttons to 100mW or 250mW. Depending on the desired range, select one of the two settings.

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Range test mode

Range test mode serves to check during the installation of the system whether the transmission range between wireless button and docking station is sufficient for the intended installation site.

First select ENABLE range test mode and save this setting. Then place the button on the dock. When a wireless button is placed on a dock for the first time after unpacking, it takes approx. 20-25 seconds until it becomes active.

After a few seconds, the button LED lights up green continuously. You can now pick up the button and move around freely. As soon as the button loses radio contact with the docking station, the LED changes from green to red. This way you maintain a reliable overview of the local range you can achieve and can thus determine the optimal installation site for the docking station.

To quit range test mode, select DISABLE followed by re-saving the settings.

Feedback type

The LED ring on the wireless button allows the user of the wireless button to display the status of a call. This lets the system to signal the user about whether a call has been successfully transmitted to the crew or if a crew member has accepted a call. There are 4 different feedback types available:

a) No feedback:

No feedback whatsoever is signalled by the LED ring.

b) System feedback:

When a call is sent (short press), the LED ring starts to light up green. As soon as the call has been successfully transmitted to the system, the LED goes out. If a call cannot be immediately transmitted to the system, the LED changes colour from green to red. The button continues to carry out the call. As soon as it succeeds, the LED goes out.

When the alternative call type is sent (long press), this is indicated with a light blue colour instead of green.

c) Crew feedback:

When a call is sent (short press), the LED ring starts to light up green. As soon as a crew member accepts the call at a client, the LED goes out. If a call cannot be immediately transmitted to the system, the LED changes colour from green to red. The button continues to carry out the call. As soon as this is successful, the LED changes from red to green and goes out when the call is accepted.

When the alternative call type is sent (long press), this is indicated with a light blue colour instead of green.

d) Multiple button feedback:

If there are several buttons in one space using the same docking station, this setting helps the crew to determine which of the local buttons has sent the call.

When a call is sent (short press), the LED ring starts to light up green. If a crew member accepts the call at a client, the LED continues to be lit up in green and in this way signals to the crew member which local button has been pressed. The crew member entering the site can now switch off the LED by pressing the button again.

If a call cannot be immediately transmitted to the system, the LED changes colour from green to red. The button continues to carry out the call. As soon as it succeeds, the LED changes from red to green.

When the alternative call type is sent (long press), this is indicated with a light blue colour instead of green.

Short Press call type

This is where you can define which call type is sent when the wireless button is briefly pressed. The Short Press call type is signalled by a green LED on the wireless button.

Long Press call type

Here you can define which alternative call type is sent when the wireless button is pressed and held for a longer duration (2.5+ seconds). The Long Press call type is signalled by a light blue LED on the wireless button.

LED level dock

Brightness setting for both of the LEDs on the docking station.

LED level linked buttons

Brightness setting of the buttons that are connected with this docking station.

Tone level dock

Volume setting of the speaker integrated in the docking station when generating signal tones.

Buttons linked to dock

This is a list of all buttons currently connected to this docking station.



Figure 6: Web-Interface - Local

3.6.3. Call types

Here is a list of predefined and custom call types which you can freely assign to a short press or long press of the wireless button in the local settings.



Figure 7: Web-Interface - Call types

3.6.4. Responder

Here you can define the name and IDs of the persons to be authorised for accepting a call at a client (only necessary when the Responder ID request is activated in the global settings).

Clicking on Add new responder opens a pop-up window for specifying a personalised, freely selectable 4-digit ID and the name associated with it.

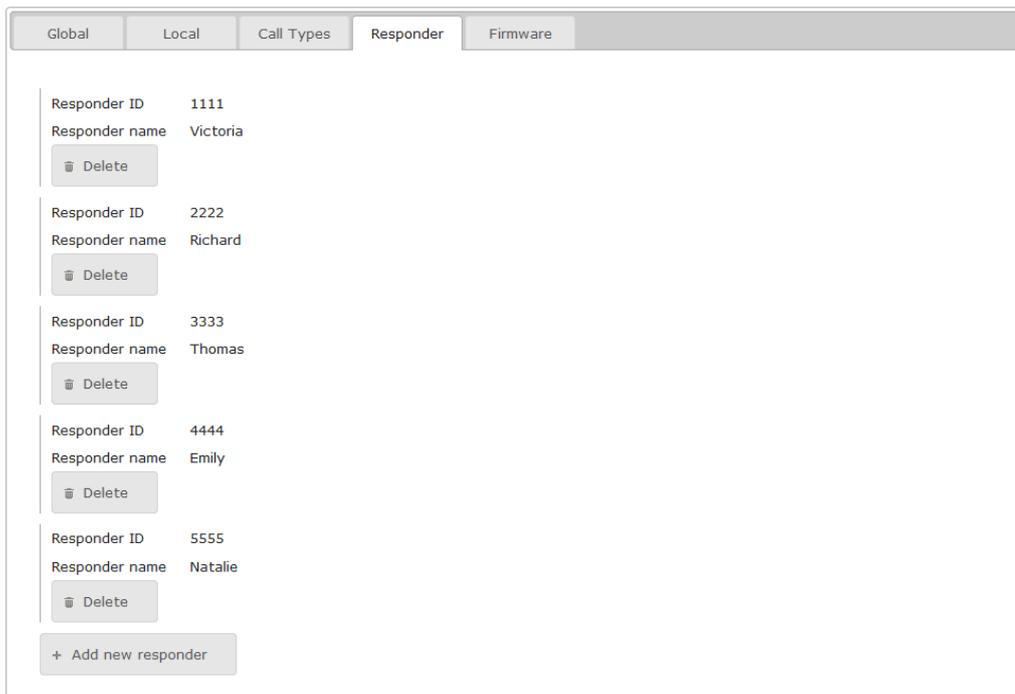


Figure 8: Web-Interface - Responder

3.6.5. Firmware

The topic of firmware is dealt with in a separate document.

3.7. Installations site

After you have fully configured the docking station(s), it is/they are then physically installed at the final installation site you have selected.

First determine a suitable location for installation of the docking station. When doing this, adhere fully to the following guidelines:

- The docking station must be installed in the same space where you would also like to use the wireless button. Even though the radio contact between the docking station and wireless button covers quite a large range, it cannot penetrate steel walls or steel ceilings.
- The docking station requires a connection to your IT network. This can be made either with a cable or wireless. Therefore, make sure that there is a network outlet in close proximity to your desired installation site and (depending on the configuration) also a power outlet. For a wireless connection, the installation site of the docking station must be located within the transmission range of your wireless network. Additionally, you need access to an available power socket.
- The docking station also serves as a charging station for regularly re-charging the internal battery of the wireless button. Therefore, we recommend installing the docking station at a location with easy access.
- The docking station is not rainproof, weatherproof or water-resistant. It may only be installed in interior spaces!

4. Installation and configuration of the MING client software: Apple iOS app

A variety of software applications are available for the crew to receive a call sent from a wireless button. The most commonly used software is the iOS app MING Client. It is available for download from the Apple App Store and can be installed on the following Apple devices (iOS 7.x or later):

- Apple iPad
- Apple iPad Retina
- Apple iPad Mini
- Apple iPad Mini Retina
- iPod Touch
- iPod Touch Retina
- iPhone
- iPhone 5 Retina

4.1. Download and installation

M Download the MING Client app from the Apple App Store to your Apple device. The installation is automatic.

4.2. Network settings

Ensure that your Apple device is in the same network as the installed docking station(s). Adjust the network settings in the system settings of your Apple device.

4.3. Starting the app and initial set-up

When the app is started for the first time, a settings page appears for you to perform the initial set-up of the app (see Figure 9: iPad - Initial settings). The basic settings are:

CLIENT SETTINGS

System PIN

Please enter the 6-digit PIN which you assigned when configuring the docking station. The client app or client software uses this System PIN to authenticate itself on the MING system.

Device Type

If this Apple device is the first and/or only device on which you are installing the MING Client app, then please leave this setting in the default, 'Public Device'. Other setting options for this feature will be introduced in a later chapter of this operating manual.

Location Prefix

Here you may enter the two-digit location prefix of the area where the Apple device will be permanently installed to receive calls. This may e.g. be 'MD' for main deck, or 'BD' for bridge deck. When responding to a call, the system attaches the location prefix at the beginning of the location name (see below, e.g. 'MD Pantry' or 'LD Crew Mess') and helps to identify where the call was received.

Location

Here you may assign the name of the location where the Apple device is permanently installed, e.g. 'Pantry' or 'Crew Mess'. During a response to a call, Location and Location Prefix describe from where the call was taken, e.g. "MD Pantry" or „LD Crew Mess“.

Responder PIN

Entering the Responder PIN is not required initially. This function will be described in a later section of this operating manual.

Archive Entries

Here you may define the number of archived calls that will be displayed in the Call History.

Time Master

Activate this function on an Apple device to assign the device as the Time Master for the entire MING system. The system time of this Apple device will be transmitted automatically to the MASTERDOCK at each start of the MING app and set as the system time for all MING system components.

SELECT CALLS TO BE RECEIVED

Here you may select whether this Apple device should (or may) receive any call type sent from the wireless buttons (select "All") or just a specific set of call types (select the desired types).

JOIN NETWORK

Once you have completed the initial set-up, click "Join Network" to connect your Apple device to the MING system.

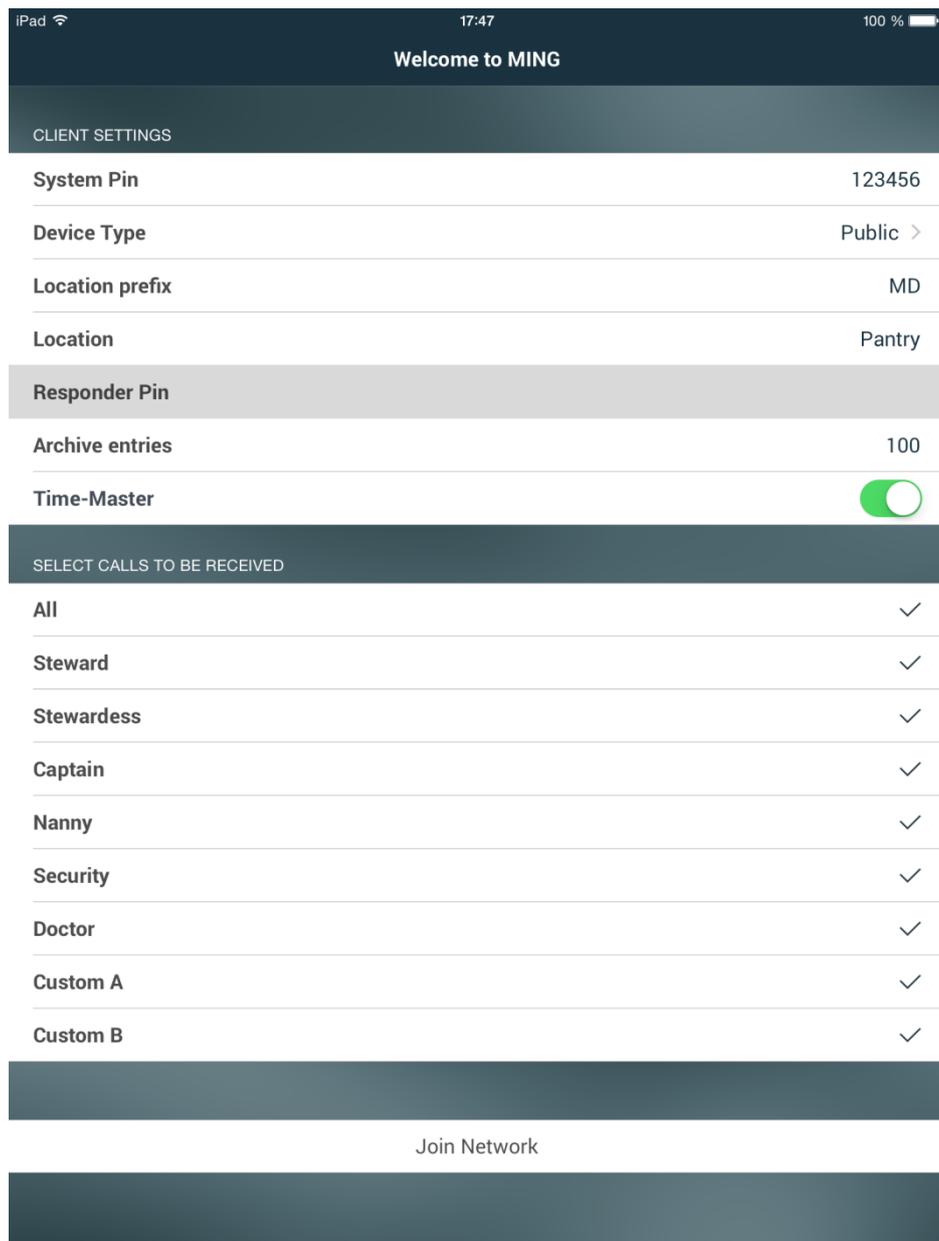


Figure 9: iPad - Initial settings

4.4. Other system settings

You may change the settings made during the initial set-up or make additional settings at any time. To do so, click on the "Settings" icon to open the system settings. The following options are available:

CLIENT SETTINGS

IP

Displays the IP address of your Apple device. This value is for information only and cannot be changed. If you want to change the IP address of your Apple device, then please do so in the Apple system settings of your device.

ID

Displays parts of the device ID of your Apple device. This value is for information only and cannot be changed.

System PIN

Please enter the 6-digit PIN which you assigned when configuring the docking station. The app uses this System PIN to authenticate itself on the MING system.

Device Type

The MING system is able to distinguish between public and personal devices. Typically, a public device is an Apple device with an installed MING app that is set to never go into the sleep or standby mode. It is recommended to connect such Apple devices to a permanent power supply. This is the only way to ensure that the device will be able to receive calls without interruption.

A public device communicates directly with the MASTERDOCK and is usually installed in a Crew Pantry or Crew Mess. This device is accessible by multiple crew members, hence the name, "public device". There must be at least one public device for each MING system.

A personal device on the other hand does not communicate directly with the MASTERDOCK but goes through a public device. A personal device basically acts as a remote controller for a public device. A personal device typically is an Apple iPhone or iPod Touch assigned to an individual crew member.

For the initial start-up, the first Apple device should be configured as a public client.

Location Prefix

Here you may enter the two-digit location prefix of the area where the Apple device will be permanently installed to receive calls. This may e.g. be 'MD' for main deck, or 'BD' for bridge deck. When responding to a call, the system attaches the location prefix at the beginning of the location name (see below, e.g. 'MD Pantry' or 'LD Crew Mess') and helps to identify where the call was received.

Location

Here you may assign the name of the location where the Apple device is permanently installed, e.g. 'Pantry' or 'Crew Mess'. During a response to a call, Location and Location Prefix describe from where the call was taken, e.g. „MD Pantry“ or „LD Crew Mess“.

Responder PIN

If the MASTERDOCK was set so that entering a personal Responder PIN is required to take a call, then the Responder PIN of the crew member who carries this personal client may be entered here.

Call type reception

Here you may select whether this Apple device should (or may) receive any call type sent from the wireless buttons (select "All") or just a specific set of call types (select the desired types).

Archive Entries

Here you may define the number of archived calls that will be displayed in the Call History.

Time Master

Activate this function on an Apple device to assign the device as the Time Master for the entire MING system. The system time of this Apple device will be transmitted automatically to the MASTERDOCK at each start of the MING app and set as the system time for all MING system components.

CALL NOTIFICATION

Tone type

Here you may select the tone signal that indicates an incoming call.

Tone repeat

Here you may set the number of times the tone signal that indicates an incoming call will be replayed. The following options are available:

- 1x repeat
- 3x repeat
- Until accepted

Vibration

Here you may set whether your Apple device should vibrate to indicate an incoming call. Please note that not all iOS devices may support this function.

GLOBAL SETTINGS

Harbour mode

Harbour mode deactivates all wireless connections between the wireless buttons and the docking stations. Active harbour mode is signalled by red bars at the upper and lower edge of the app. Please note that the system cannot send or receive any calls in active harbour mode! To activate the Harbour mode, please read the following information carefully:

 **Important:** The MING Wireless Steward Call system is designed to be used only on leisure yachts at sea. It operates on 902 to 928 MHz ZigBee™ radio frequency with a selectable radio power ranging from 100mW to 250mW. This may not comply with radiocommunication regulations in all countries. It is the customer's responsibility to check full compliance with local radiocommunication regulations before entering a country's territory. If you are unsure about this you can disable the 902 to 928 MHz ZigBee™ radio operation with this function before entering a country's territory.

ABOUT

Clicking the About button gives you further information about the app (e.g. the app's revision number) as well as the contact information for support requests.

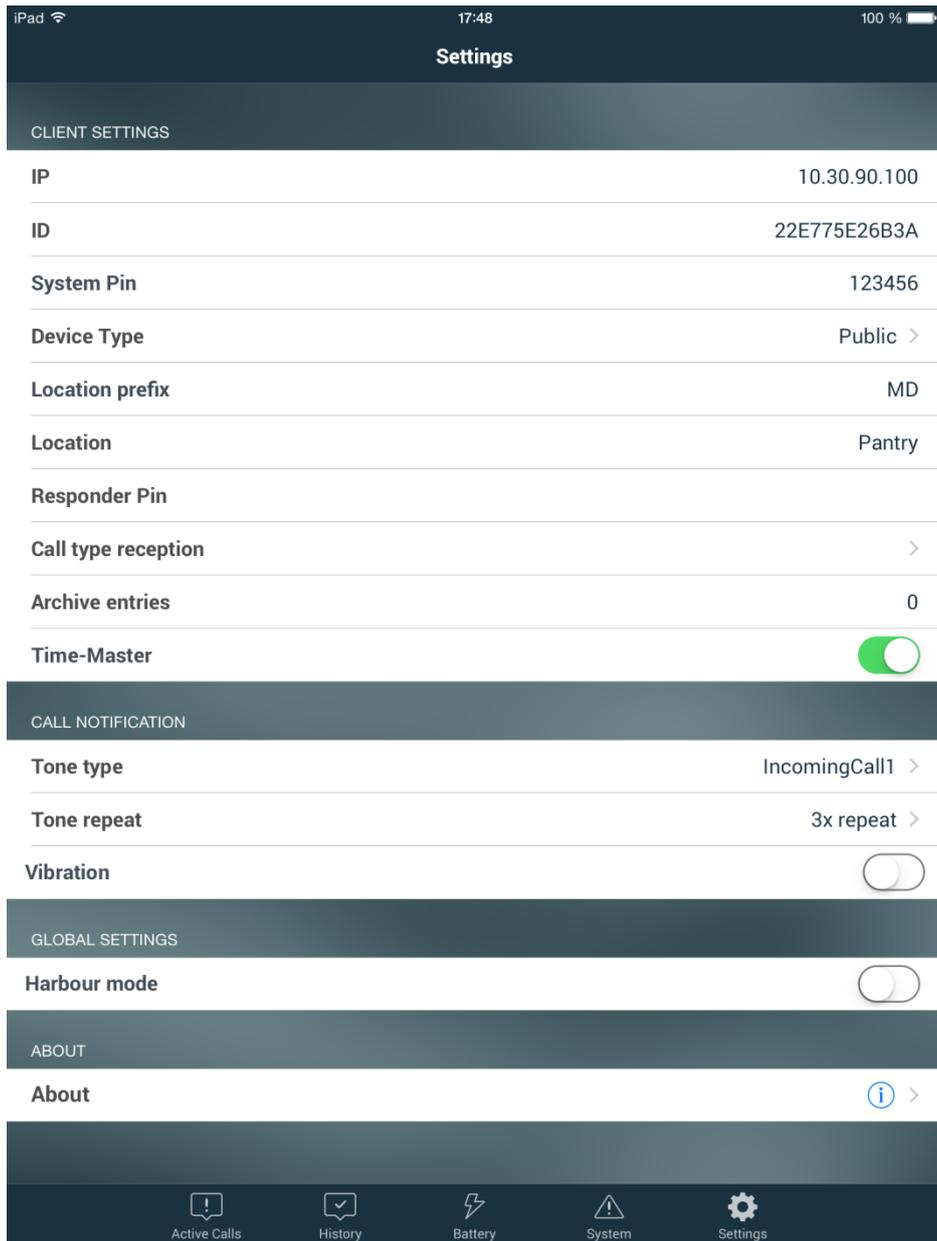


Figure 10: iPad – Settings page

5. Initial charging of the wireless button

Place the wireless button in an upright position on the charger of the docking station. When a wireless button is placed on a dock for the first time after unpacking, it takes approx. 20-25 seconds until it becomes active.

The "Charge" LED on the docking station indicates that it has detected a wireless button by flashing yellow briefly. The wireless button will now be charged wireless and without contact. The LED remains lit yellow during the charging process. Please leave the wireless button in the docking station throughout the charging process.

Depending on the initial battery charge, a complete charging process may take up to five hours. When the wireless button is fully charged, the "Charge" LED goes out. You may now remove the wireless button from the docking station and place it anywhere in the area.

 **Note:** The wireless button will warm up noticeably while charging on the docking station. This is normal as the integrated battery of the wireless button is charged using wireless power – i.e. without direct electrical contact. During this process, a small percentage of thermal loss is generated that is given off as heat. The wireless button cannot overheat during charging because the charging process is constantly monitored by temperature sensors that will interrupt it as necessary.

6. Start-up and use of the system

When the configuration of the docking station(s) and the client software is complete and all wireless buttons are fully charged, the system is ready for operation.

6.1. Sending a call (short press)

To send a call, briefly press the upper part of the wireless button. The call type assigned to a short press will be sent to the crew via the clients.

Depending on the set feedback option, the outer LED ring indicates the current status of the call.

a) No feedback:

No feedback whatsoever is signalled by the LED ring.

b) System feedback:

When a call is sent, the LED ring starts to light up green. As soon as the call has been successfully transmitted to the system, the LED goes out. If a call cannot be immediately transmitted to the system, the LED changes colour from green to red. The button continues to carry out the call. As soon as it succeeds, the LED goes out.

c) Crew feedback:

When a call is sent, the LED ring starts to light up green. As soon as a crew member accepts the call at a client, the LED goes out. If a call cannot be immediately transmitted to the system, the LED changes colour from green to red. The button continues to carry out the call. As soon as this is successful, the LED changes from red to green and goes out when the call is accepted.

d) Multiple button feedback:

When a call is sent, the LED ring starts to light up green. When a crew member accepts the call at a client, the LED continues to be lit up in green and in this way signals to the crew member which local button has been pressed. The crew member entering the site can now switch off the LED by pressing the button again.

If a call cannot be immediately transmitted to the system, the LED changes colour from green to red. The button continues to carry out the call. As soon as it succeeds, the LED changes from red to green.

6.2. Sending and alternative call (long press)

To send an alternative call, press and hold the upper part of the wireless button until the LED display changes from green to light blue (2.5+ seconds). The call type assigned to a long press will be sent to the crew via the clients.

Depending on the set feedback option, the outer LED ring indicates the current status of the call.

a) No feedback:

No feedback whatsoever is signalled by the LED ring.

b) System feedback:

When a call is sent, the LED ring starts to light up green briefly and then changes to light blue. As soon as the call has been successfully transmitted to the system, the LED goes out. If a call cannot be immediately transmitted to the system, the LED changes colour from light blue to red. The button continues to carry out the call. As soon as it succeeds, the LED goes out.

c) Crew feedback:

When a call is sent, the LED ring starts to light up green briefly and then changes to light blue. As soon as a crew member accepts the call at a client, the LED goes out. If a call cannot be immediately transmitted to the system, the LED changes colour from light blue to red. The button continues to carry out the call. As soon as this is successful, the LED changes from red to light blue and goes out when the call is accepted.

d) Multiple button feedback:

When a call is sent, the LED ring starts to light up green briefly and then changes to light blue. When a crew member accepts the call at a client, the LED continues to be lit up in light blue and in this way signals to the crew member which local button has been pressed. The crew member entering the site can now switch off the LED by pressing the button again.

If a call cannot be immediately transmitted to the system, the LED changes colour from light blue to red. The button continues to carry out the call. As soon as it succeeds, the LED changes from red to light blue.

6.3. Receiving and taking a call

Incoming calls are automatically displayed on the Active Calls screen. A call consists of the following information components:

- Location Prefix, e.g. MD for main deck
- Location Name, e.g. dining room
- Call Type, e.g. stewardess required
- Time Counter, counts the time from when the call comes in to when it is taken

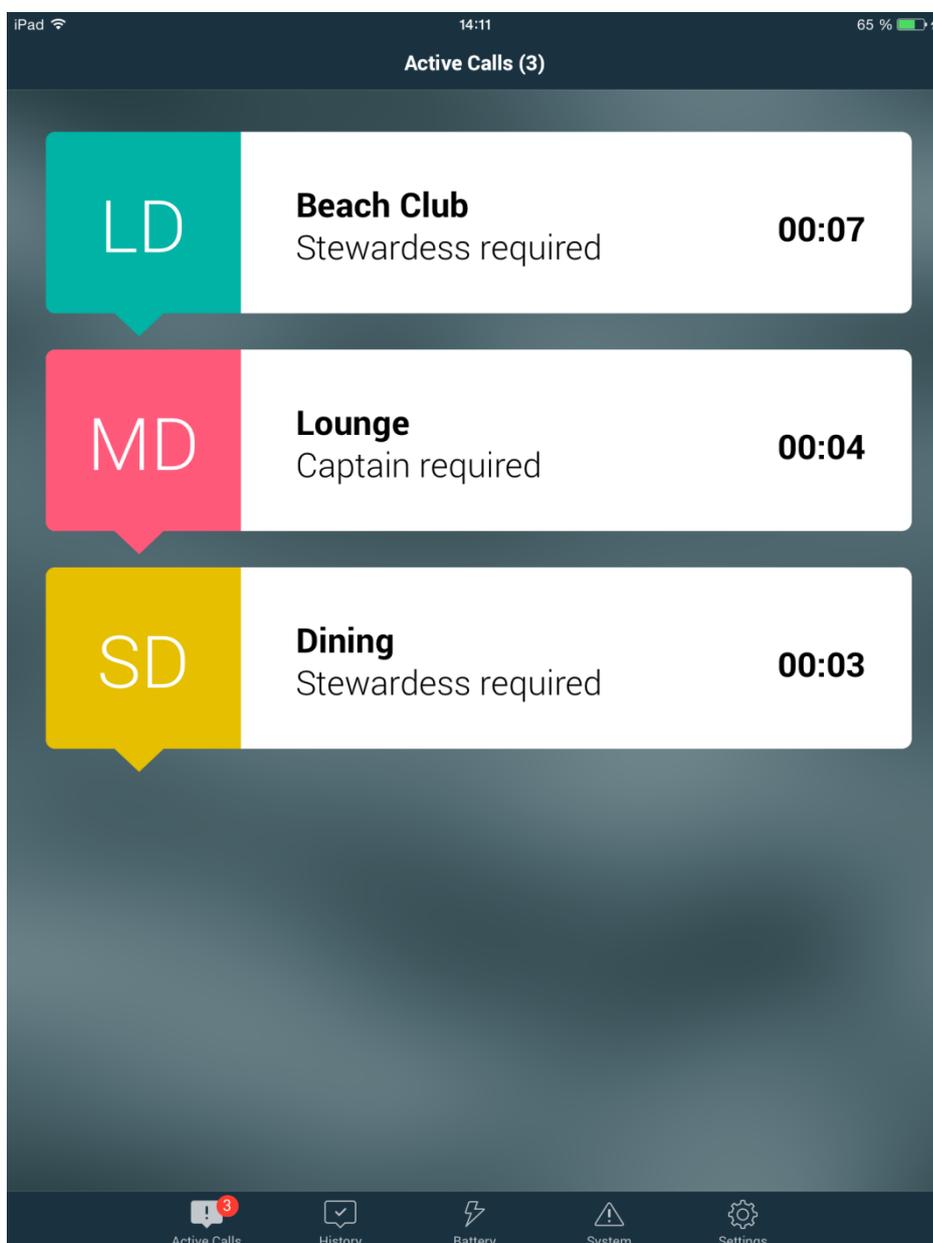


Figure 11: iPad - New incoming calls

Take a call by touching it. The call now changes its colour to grey and will be moved to the call history after 20 seconds. This action is carried out simultaneously on all clients in the system.

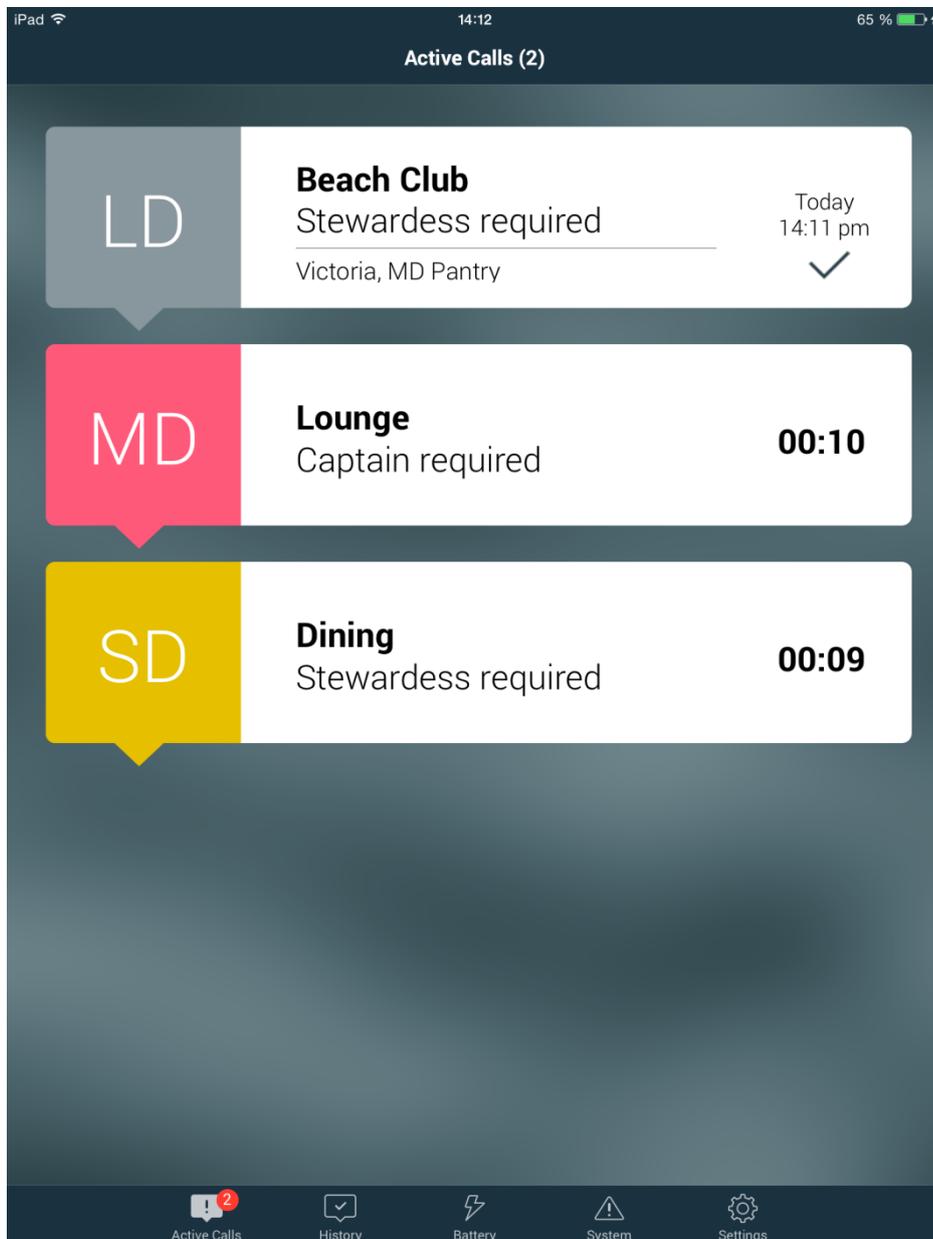


Figure 12: iPad - First call has been accepted

If the system settings require authorisation by a Responder ID to take a call, then a keypad is displayed to enter the personal Responder ID when the call is selected. Only an authorised Responder ID may take a call.

If several calls that have not yet been taken are in the list, then the oldest calls are displayed at the top.

If a call has been waiting for more than 5 minutes, then the colour of the Time Counter changes from black to red.

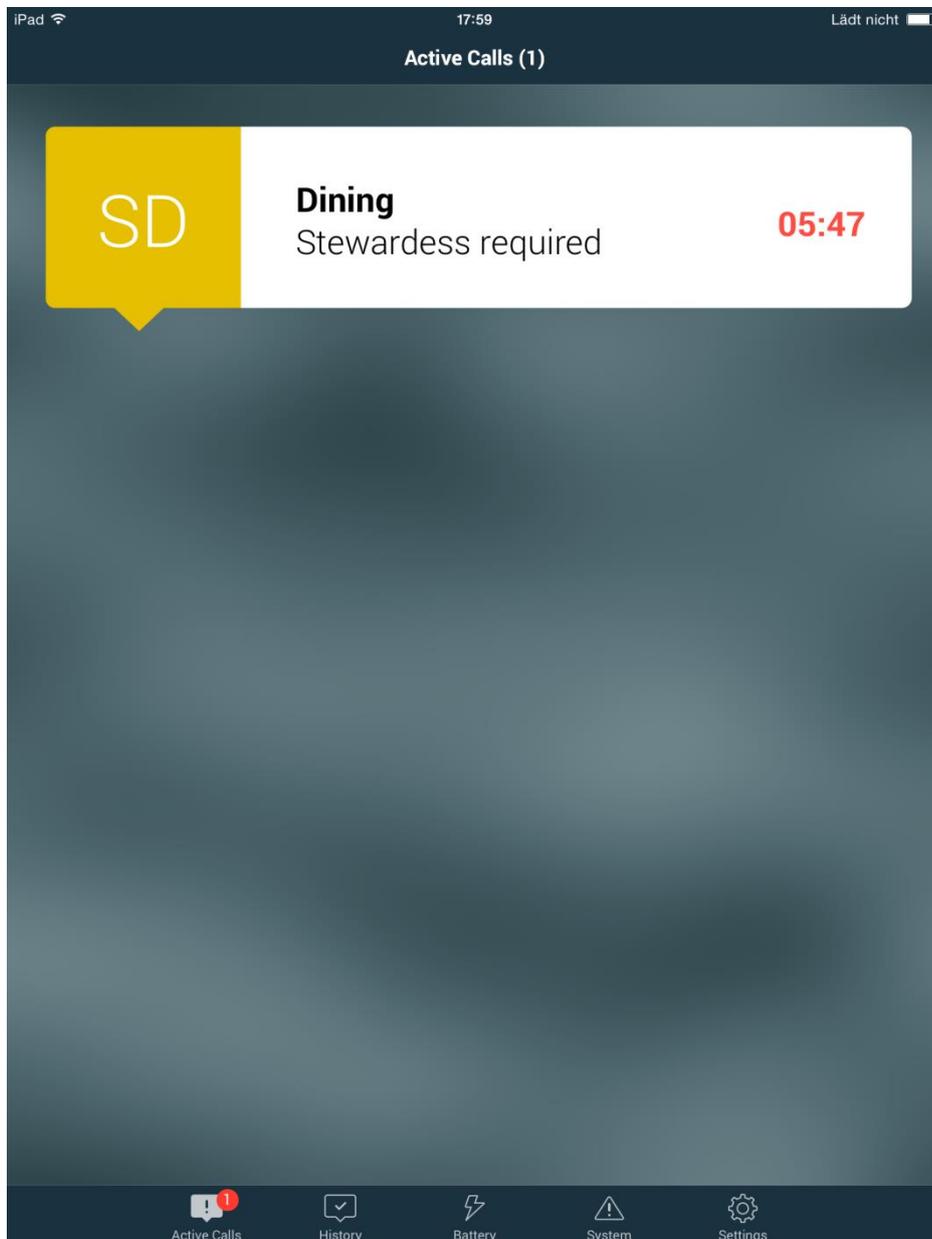


Figure 13: iPad – Call waiting for more than 5 minutes

If a call is not taken within 60 minutes, then it is transferred to the Call History as an expired call.

⚠ Important: To be able to receive calls, the MING app has to remain open on your Apple device!

6.4. Call history

Calls that have been taken are transferred to the Call History with the following added information:

- Who took the call (only if Responder ID Request is active)
- Where or from which client was the call taken
- When was the call taken

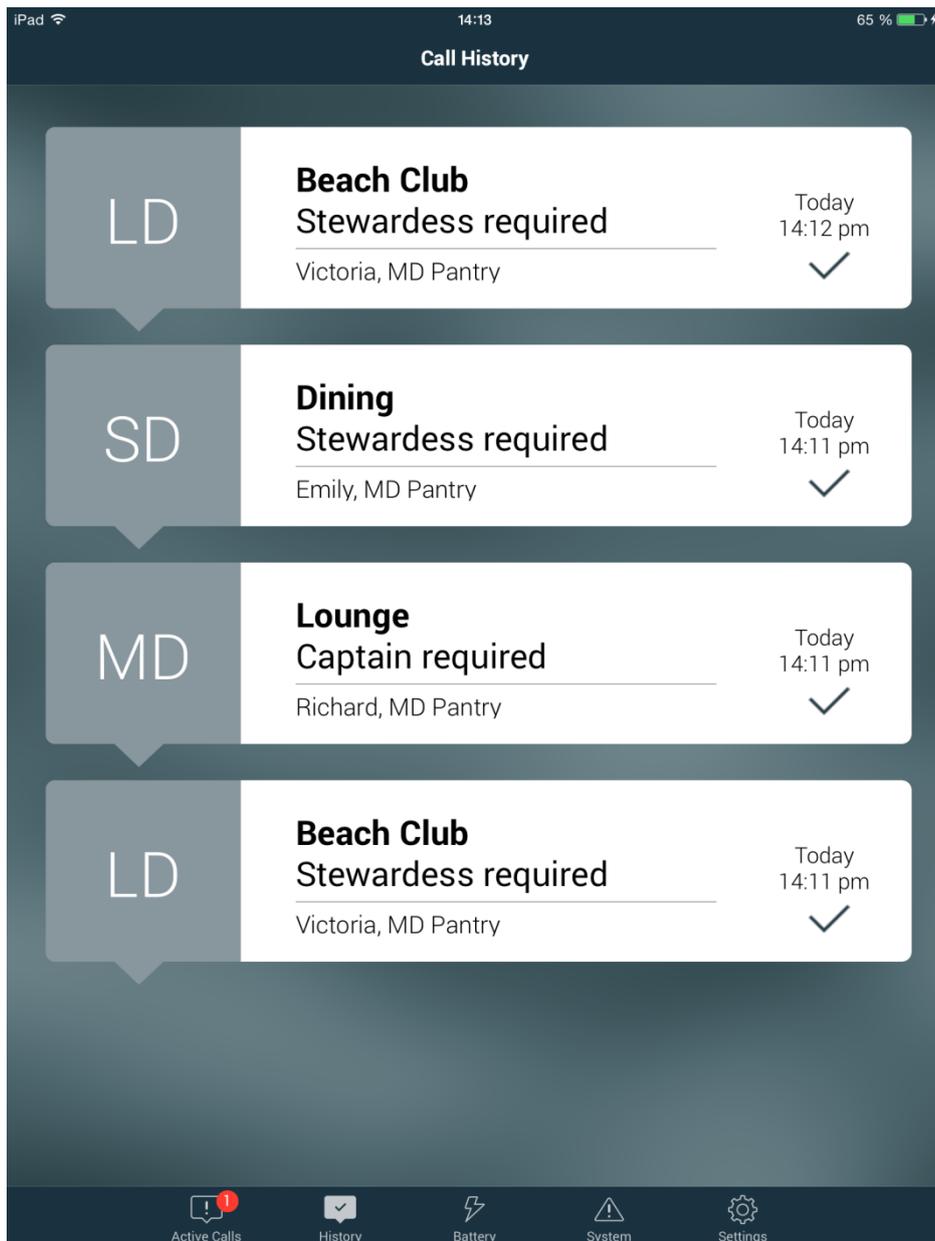


Figure 14: iPad - Call history

This action is carried out simultaneously on all clients in the system.

If several calls are in the history, then the calls that were taken most recently are displayed at the top.

6.5. Monitoring the battery level of the wireless button remotely

The Battery screen page displays the battery levels of all wireless buttons in the system. Battery levels are updated about every 5 minutes.

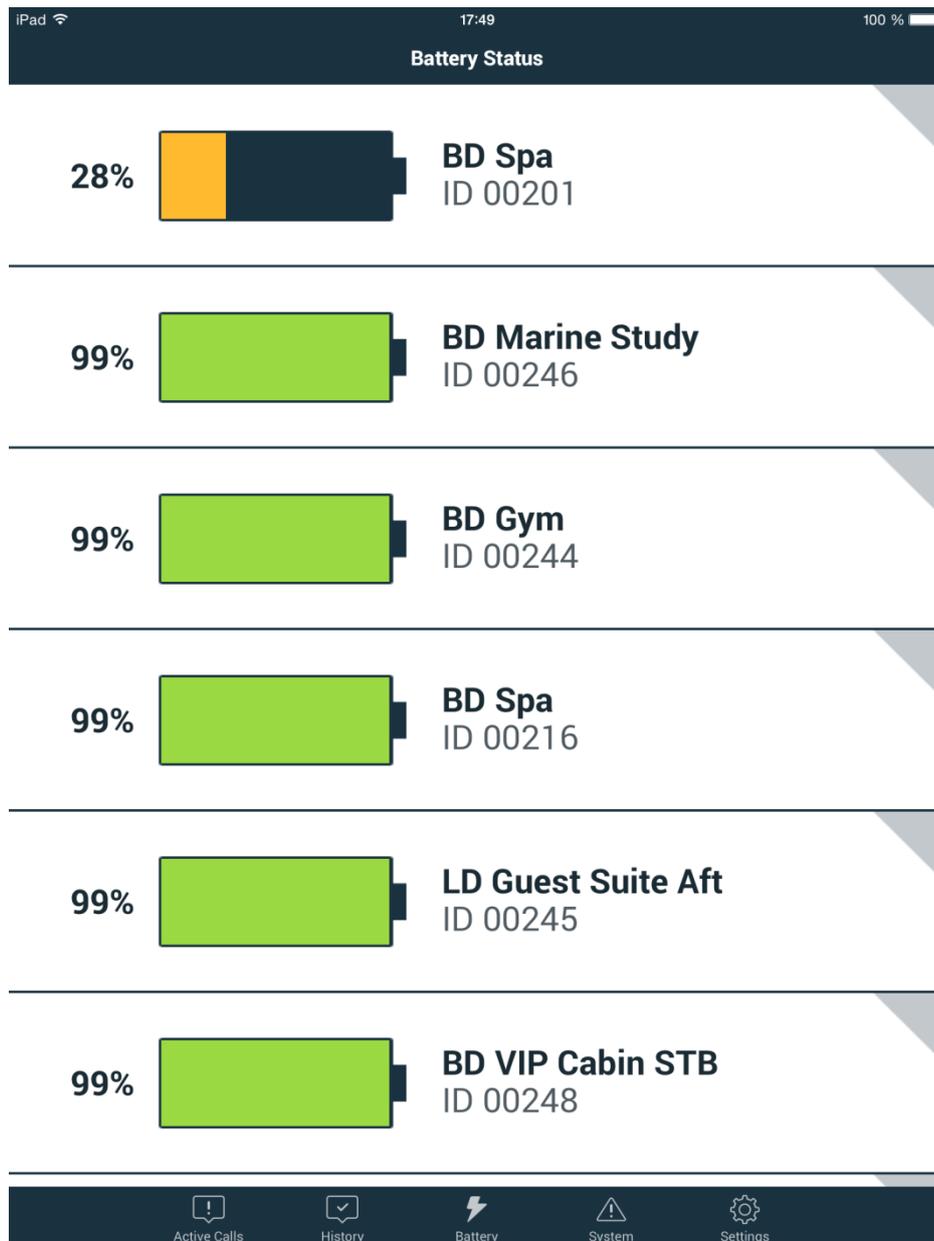


Figure 15: iPad - Battery status

If several wireless buttons are in a system, then the wireless buttons with the lowest battery level are displayed at the top.

If a wireless button is currently being charged, then this is indicated by a charging icon.

6.6. System messages

This screen page displays various system messages, usually warnings or error messages. You should pay careful attention to these messages, because they usually include warnings about limited system functionality.

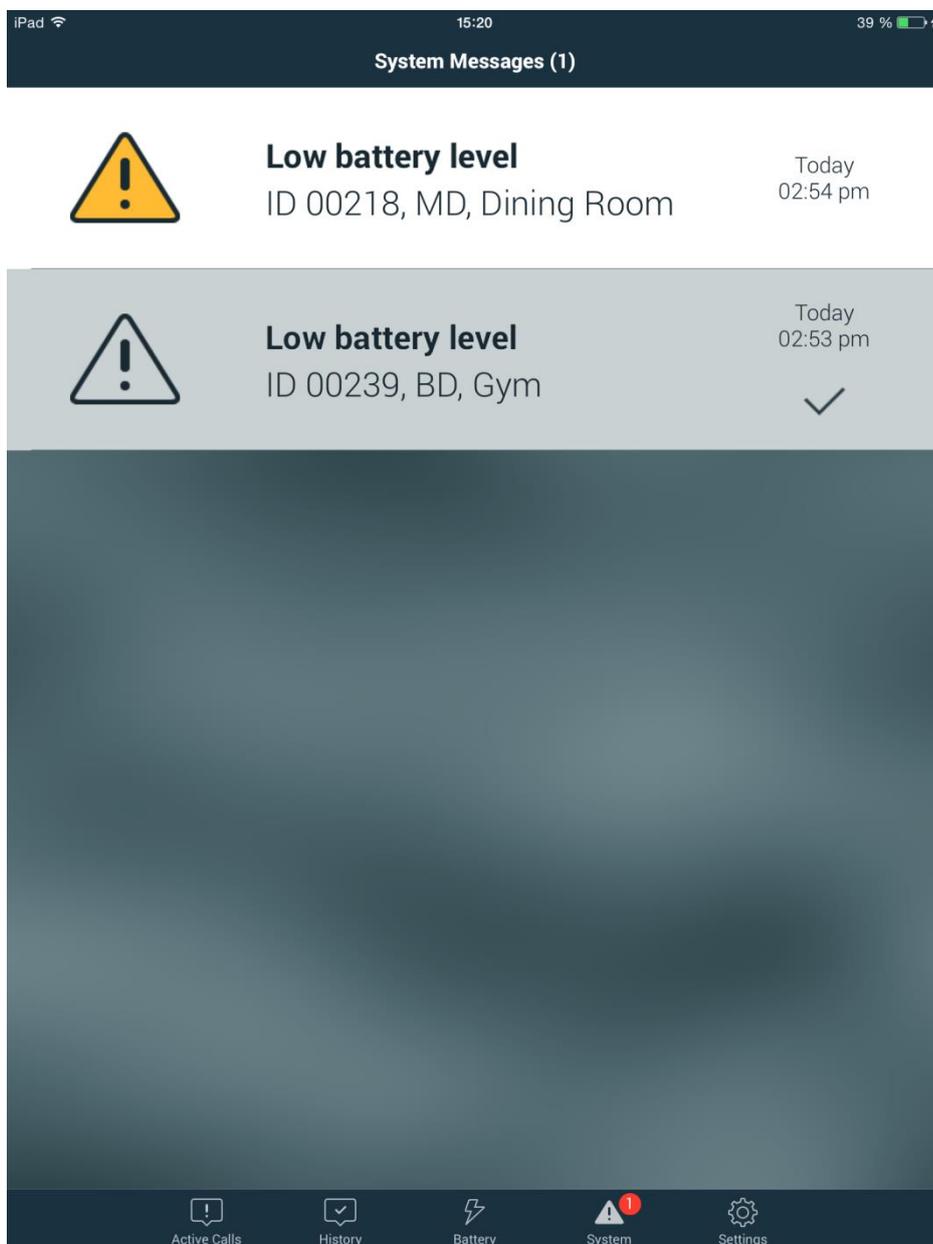


Figure 16: iPad - System messages

7. Special functions

The MING Wireless Steward Call System offers a range of extraordinary functions that significantly improve the operating convenience and reliability of the system.

7.1. Connecting a wireless button to a different docking station

One of the unique features that set the MING Wireless Steward Call System apart from the competition is the ability to quickly and easily connect wireless button to another docking station in a different area. E.g., if another wireless button is needed in the dining room, simply remove a wireless button from a different area.

Then place this wireless button on the docking station in the dining room for about 10 seconds. Wait for the power LED of the docking station to flash twice. The wireless button is now linked to the dining room.

Remove the wireless button from the docking station. Pressing the wireless button now sends a call from the dining room to the crew client.

You may return the wireless button to its original area at any time. Place the wireless button on its original docking station for 10 seconds. The power LED flashes twice to indicate that the wireless button is linked to its original docking station again.

7.2. Redundancy in the event of MASTERDOCK failure

If your MING Wireless Steward Call System consists of at least two docking stations, then your system will have a CO-MASTERDOCK in addition to the MASTERDOCK (see chapter 3.2.).

In the unlikely event that the MASTERDOCK fails, the failure will be detected within 5 minutes, and the CO-MASTERDOCK will automatically take over the entire communication. This will be indicated by the CO-MASTERDOCK's power LED changing its colour from white to green. The redundancy feature ensures uninterrupted operation of the MING system.

If the MASTERDOCK re-enters the system at a later time, then the MASTERDOCK will automatically take over the entire communication back from the CO-MASTERDOCK. This will be indicated by the power LED changing its colour from green to white on the CO-MASTERDOCK.

7.3. Flight mode

If you would like to send one or several wireless buttons with a courier service, then you need to disable the radio communication of these wireless buttons. When doing so, the wireless button must NOT be in a docking station.

Place the wireless button on a firm surface. Press and hold the upper part for about 20 seconds until the LED ring goes out. During this process, the LED of the wireless button will change briefly from green to light blue before going dark after 20 seconds.

Once the LED is off, the radio communication of the wireless button is disabled. Wireless buttons are always delivered in flight mode.

You may activate the radio communication by placing the wireless button in the docking station for about 20 to 25 seconds.

 **Important:** To activate the flight mode, the wireless button must **not** be in a docking station!

8. Cleaning and care

The information below helps you to keep the components of your MING system in mint condition for a long time:

- ⚠ **Important:** Never use chrome or metal polish. Doing so may damage or dull the metal surfaces!

- ⚠ Use only dry and clean micro-fibre or cotton cloths to clean the metal surfaces of the wireless button. Shake out the cloths thoroughly and clean the metal surfaces of fingerprints by wiping with gentle pressure.

- ⚠ Should there be any hard-to-remove stains on the metal surfaces, then try to clean the device with a very small amount of window cleaner (applied to a clean cloth).

- ⚠ The leather surfaces usually do not require any care. If there are any stains, please be careful to test your leather cleaner or leather care product on a small area. Be careful to prevent leather care products from making contact with the metal surfaces.