



Manual

WERMA AndonWireless

Version: 1.0 - 05/2021

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1 Overview

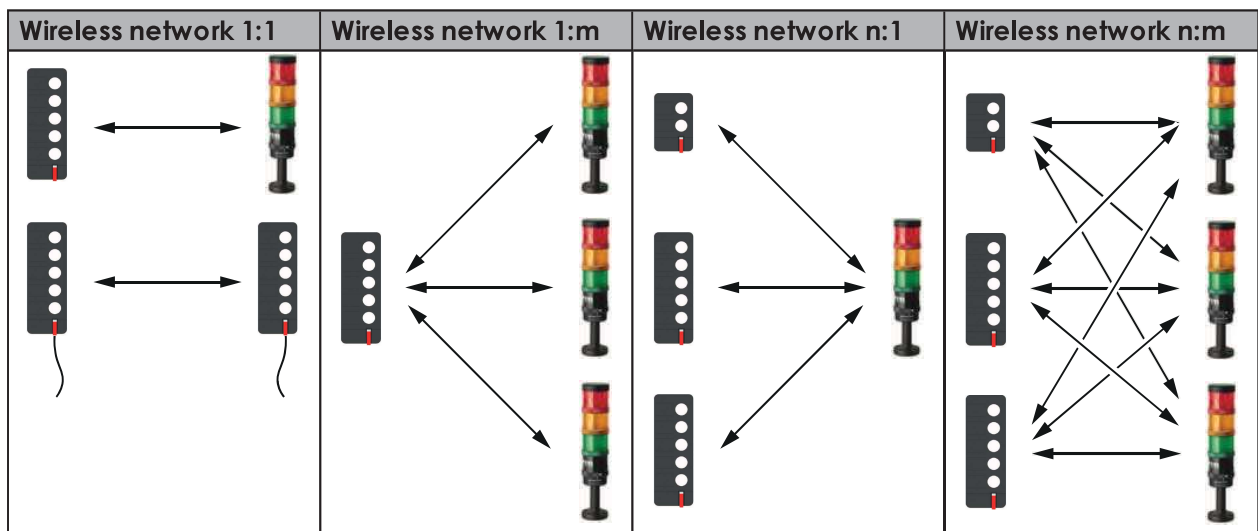
1.1 Function

The WERMA AndonWireless configuration software can be used to set up AndonWirelessBOXes and Transceivers individually.

The combination of an AndonWirelessBOX with 2 or 5 buttons and a Transceiver allows controlling the tiers of a WERMA signal light via a wireless connection.

The system can be designed flexibly. For example, an AndonWirelessBOX can control one or more signal lights (wireless network 1:1, wireless network 1:n) or several AndonWirelessBOXes can control one or more signal lights (wireless network n:m).

In exceptional cases, a system can also consist of only two AndonWirelessBOXes. The AndonWirelessBOXes must be powered via the USB port so that the buttons light up and display the status.



AndonWirelessBOXes with 2 or 5 buttons can be used together in a wireless network. The AndonWirelessBOXes can also have different button configurations.

For the AndonWirelessBOX and Transceiver to communicate correctly, the AndonWirelessBOX and Transceiver must use the same radio channel and the same radio network ID.

The Transceivers can act as repeaters and forward the wireless signal to improve the wireless connection or increase the range.



WERMA recommends that the AndonWirelessBOX is always used in conjunction with one or more Transceivers.

Radio frequencies used:

Operating range	Frequency range
Europe	868.0 - 868.6 MHz
USA and parts of Asia	921.0 - 922.0 MHz

1.2 LED display

Possible errors and the current status of the WERMA AndonWireless devices are displayed by the respective LEDs.

1.2.1 AndonWirelessBOX


LED	Meaning
Status display for the supply of power via the USB port	
LED lights up green continuously	AndonWirelessBOX is supplied with power.
LED briefly flashes green once	Radio transmission has been successful.
LED briefly flashes red once	Radio transmission has failed.
LED blinks blue	Firmware update is being imported.
LED lights up blue	An error has occurred during the firmware update.
Status display in battery mode	
LED is off	LED is off by default in battery mode to extend battery life.
LED briefly flashes green once	Radio transmission has been successful.
LED briefly flashes red once	Radio transmission has failed.
LED briefly flashes red three times	Battery charge is low.

1.2.2 Transceiver

LED	Meaning
LED lights up green continuously	Wireless network connection exists.
LED briefly flashes red once	Searching for the wireless network.
LED blinks red	Firmware error
LED blinks blue	Firmware update is being imported.
LED lights up blue	An error has occurred during the firmware update.

1.3 System requirements

Operating system	Windows 10 x86/x64 Minimum version: 1607 Current Windows updates are required.
Free hard disk space (recommended)	250 MB
USB port	Required for the hardware configuration.
Internet connection	Necessary for updating the AndonWireless configuration software.

 Supported operating systems are only supported for as long as Microsoft also supports them through the Microsoft Support Lifecycle.

2 Installing the AndonWireless configuration software

The AndonWireless configuration software does not need to be installed and runs as a portable version.

1. Unzip the AndonWireless-x.x.x.xx.zip file at the desired location.

3 Starting the AndonWireless configuration software

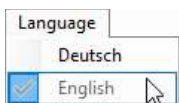
1. Double-click on AndonWireless.exe.
 - The AndonWireless configuration software starts.
 - The AndonWireless configuration software waits until an AndonWirelessBOX or Transceiver is connected.



WERMA recommends that you configure the AndonWirelessBOX first and then the Transceiver. The configuration of the AndonWirelessBOX can be exported and imported for the configuration of the Transceiver.

3.1 Setting the language

1. Select the desired language in the menu **Language**.



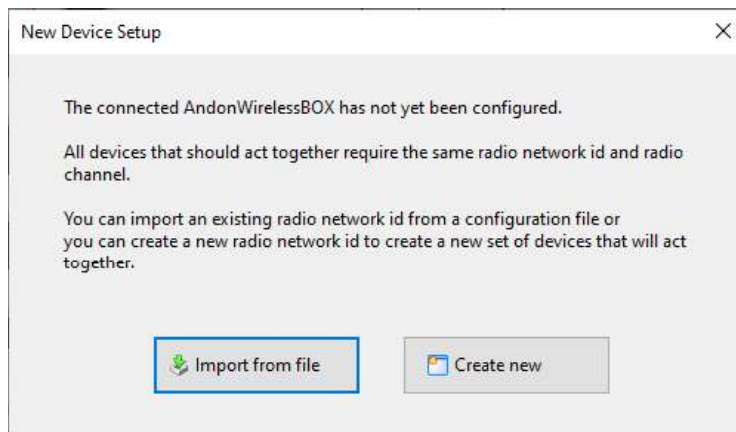
The AndonWireless configuration software must be closed and restarted to accept the changed language.

4 Configuring the AndonWirelessBOX

The configuration determines the status that will be displayed by the individual tiers of the signal tower after a button has been pressed on the AndonWirelessBOX. In addition, it is possible to determine the colour of each individual button and whether the buttons continue to light up after a button has been pressed.

-
- i** If both AndonWirelessBOXes are used with 2 and 5 buttons, WERMA recommends configuring the AndonWirelessBOX with 5 buttons and exporting the configuration first, see *"Exporting the configuration to a configuration file"*, p. 23. This ensures that the exported configuration file also contains the desired settings for tiers 3 to 5.
-

1. Use the USB cable supplied to connect the AndonWirelessBOX to the computer.
 - The AndonWireless configuration software detects the AndonWirelessBOX.
 - If necessary, the required drivers are installed by the Windows update. If the driver installation fails, the drivers can be installed manually, see *"Manual driver installation"*, p. 28.
 - If the AndonWirelessBOX has not yet been configured or has been reset to the factory settings, the **New Device Setup** window appears.

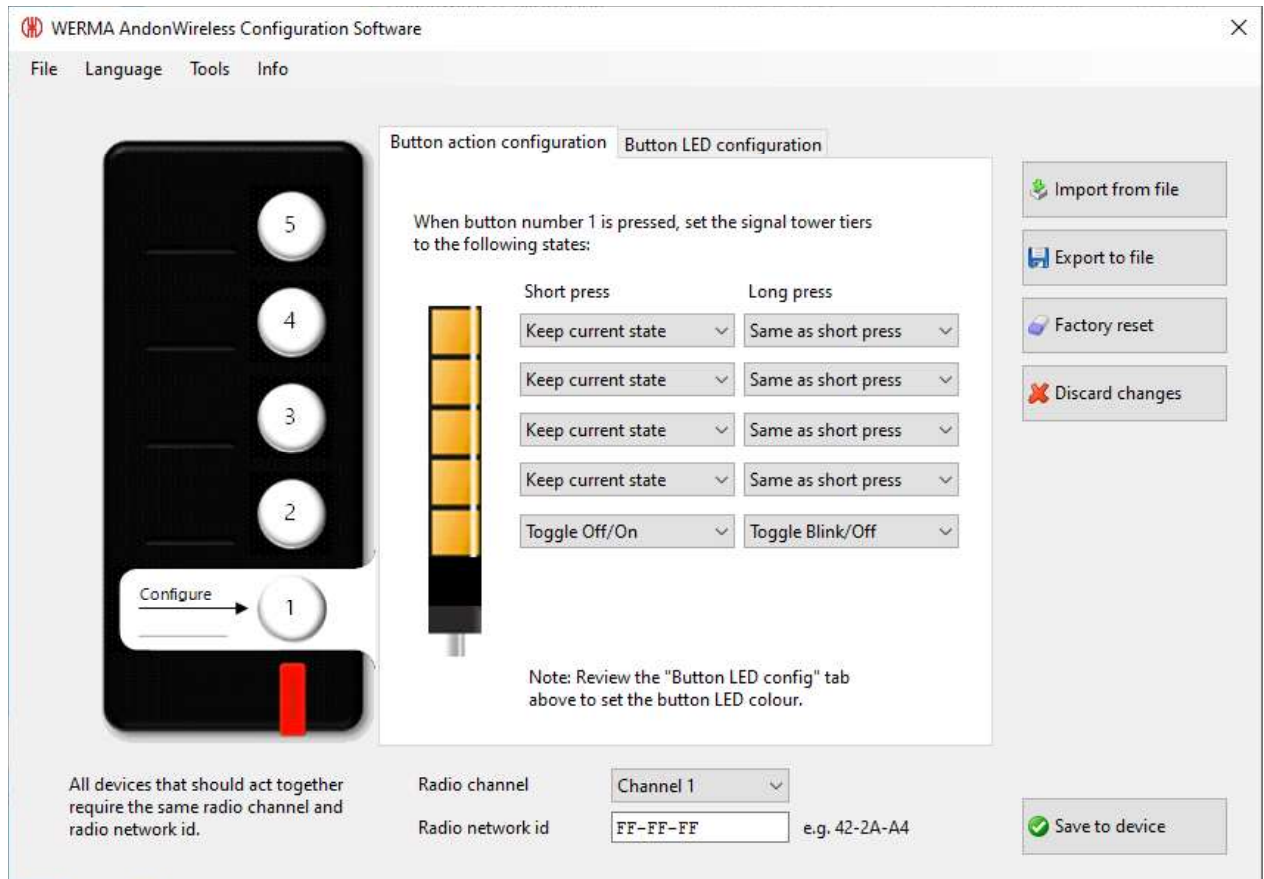


- If a configuration has already been created and saved, this configuration can be imported or a new configuration can be created.

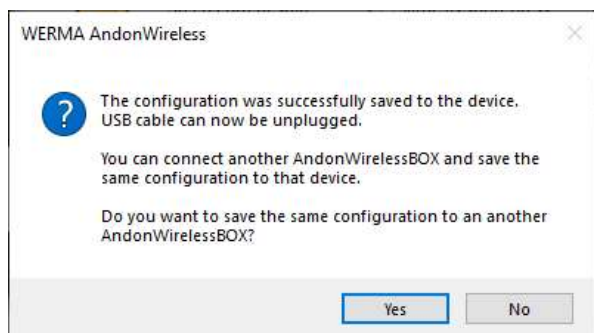
-
- i** If no configuration has been saved yet, the settings can be read and exported from an AndonWireless device that has already been configured.
-

4.1 Importing the configuration

1. Click on **Import from file** in the **New Device Setup** window.
2. Navigate to the saved configuration file (*.json) and click on **Open**.
→ The configuration is loaded and displayed.



3. Click on **Save to device** to transfer the configuration to the AndonWirelessBOX.
→ The configuration is transferred to the AndonWirelessBOX.
→ When the transfer is complete, the current configuration can be transferred to other AndonWirelessBOXes.



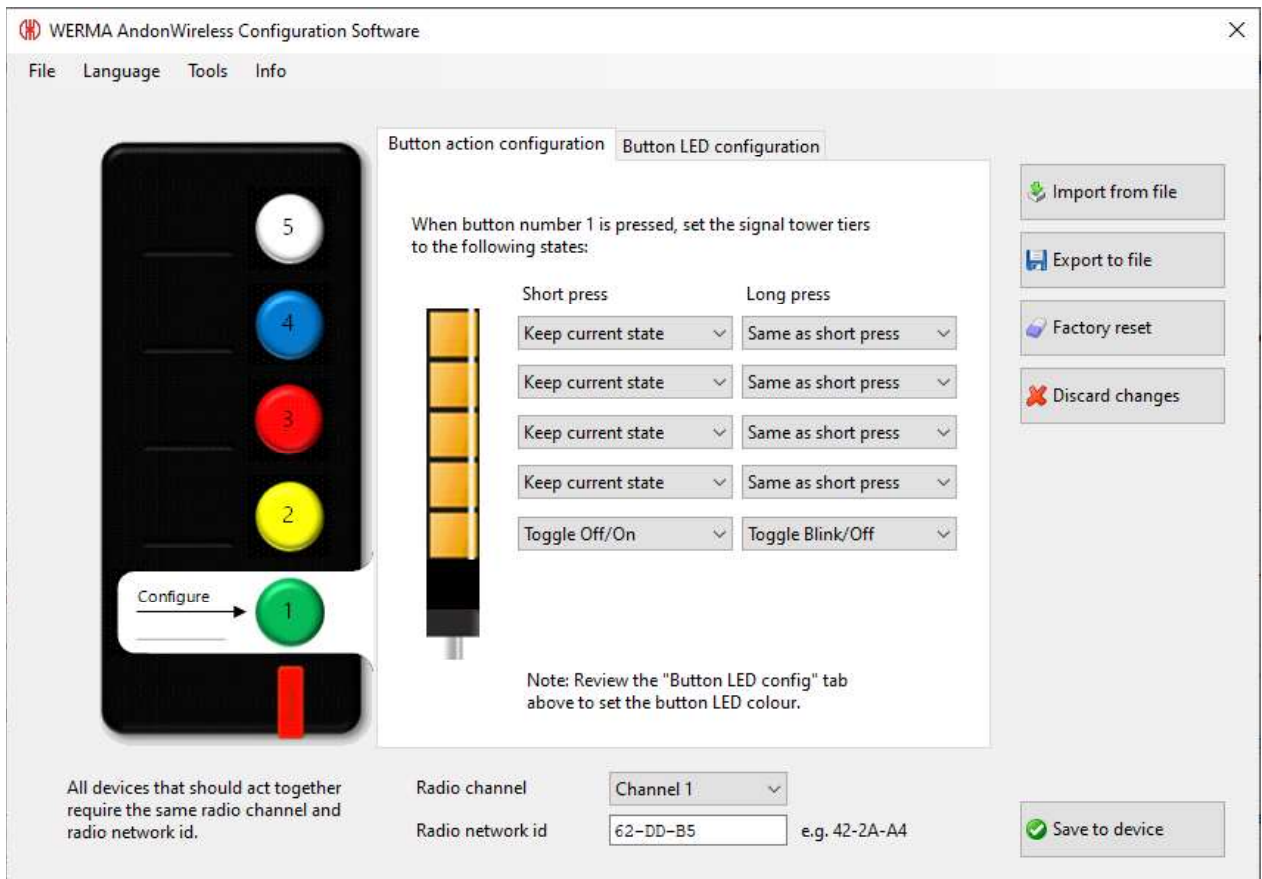
4. Click on **Yes** to transfer the current configuration to other AndonWirelessBOXes, see "Transferring the configuration to other AndonWirelessBOXes", p. 16.
5. Click on **No** to configure another AndonWireless device.
6. Remove the USB cable from the AndonWirelessBOX.

4.2 Creating a new configuration or modifying an existing configuration



Modified settings can be reset at any time by clicking on **Discard changes** in the last configuration saved on the AndonWirelessBOX.

1. Click on **Create New** in the **New Device Setup** window.
→ The configuration screen appears.



WERMA AndonWireless Configuration Software

File Language Tools Info

Button action configuration Button LED configuration

When button number 1 is pressed, set the signal tower tiers to the following states:

Short press	Long press
Keep current state	Same as short press
Keep current state	Same as short press
Keep current state	Same as short press
Keep current state	Same as short press
Toggle Off/On	Toggle Blink/Off

Note: Review the "Button LED config" tab above to set the button LED colour.

All devices that should act together require the same radio channel and radio network id.

Radio channel: Channel 1

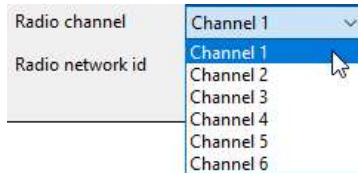
Radio network id: 62-DD-B5 e.g. 42-2A-A4

Buttons: Import from file, Export to file, Factory reset, Discard changes, Save to device

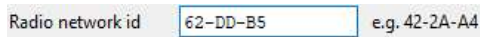
4.2.1 Setting the radio channel and radio network ID

- i** All AndonWireless devices that are to communicate with each other must use the same radio channel and the same radio network ID.

1. Select the common radio channel for the AndonWirelessBOX and Transceiver in the **Radio channel** selection menu.



2. Enter the common radio network ID for the AndonWirelessBOX and Transceiver in the **Radio network id** field.



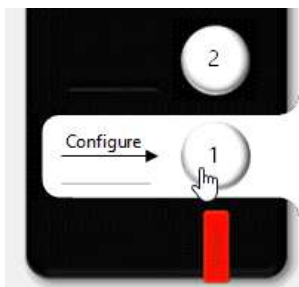
- i** Possible characters for the **Radio network id**:
- Numbers from 0 to 9
 - Letters from A to F

4.2.2 Configuring the button functions

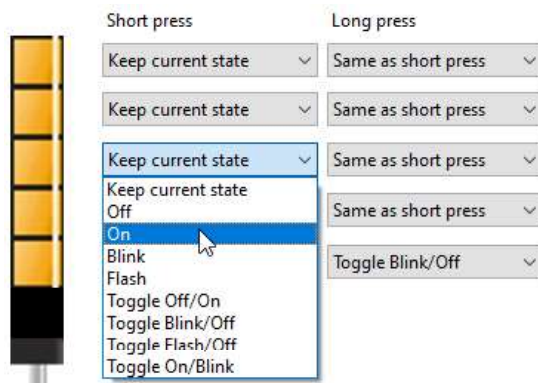
The status of each tier of the signal tower can be defined for each button. A distinction can be made as to whether the button is pressed briefly (**short pressed**) or for longer than 1 second (**long pressed**).

- i** AndonWirelessBOXes that jointly control a signal tower do not need to have the same configuration and can have different button configurations.

1. Click on the button you want to configure in the symbolic view.



2. For each tier of the signal tower, select the status after pressing the button briefly (**short pressed**) and after pressing the button for longer (**long pressed**).



Status	Description
Keep current state	– Retain the current status of the tier.
Off	– Switch off the tier.
On	– Switch on the tier.
Blink	– Let the tier blink.
Flash	– Let the tier flash.
Toggle Off/On	– Toggle between: Off <-> On – Switch off the tier if the tier is switched on, blinks or flashes. – Switch on the tier if the tier is switched off.
Toggle Blink/Off	– Toggle between: Blink <-> Off – Let the tier blink if the tier is switched on, switched off or flashes. – Switch off the tier, if the tier blinks.
Toggle Flash/Off	– Toggle between: Flash <-> Off – Let the tier flash if the tier is switched on, switched off or blinks. – Switch off the tier if the tier flashes.
Toggle On/Blink	– Toggle between: On <-> Blink – Switch on the tier if the tier is switched off, blinks or flashes. – Let the tier blink if the tier is switched on.
Same as short pressed	– Accept the status of the short pressed setting.

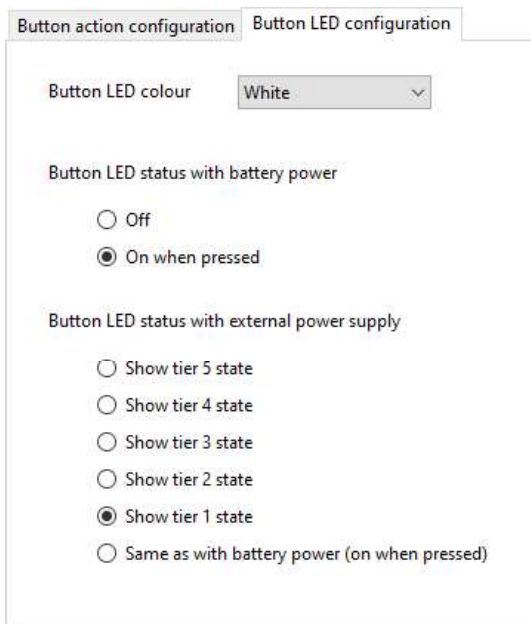


The Configuration examples (see "Configuration examples", p. 29) shows a few examples of possible practical configurations.

4.2.3 Configuring button colours

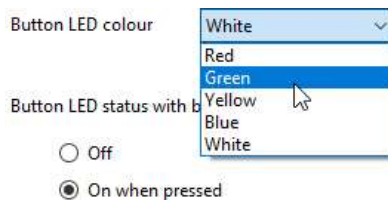
It is possible to define the colour in which the button lights up when it is pressed for each button. In addition, it is possible to specify whether the button remains lit after it has been pressed and displays the status of the tier if the AndonWirelessBOX is powered via the USB-C port. This allows the current status of the signal tower to be displayed on the AndonWirelessBOX.

1. Move to the **Button LED configuration** tab.



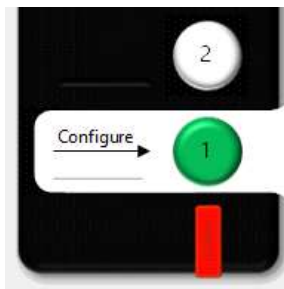
The screenshot shows the 'Button LED configuration' tab. It contains three sections: 'Button LED colour' with a dropdown menu set to 'White'; 'Button LED status with battery power' with radio buttons for 'Off' and 'On when pressed' (selected); and 'Button LED status with external power supply' with radio buttons for 'Show tier 5 state', 'Show tier 4 state', 'Show tier 3 state', 'Show tier 2 state', 'Show tier 1 state' (selected), and 'Same as with battery power (on when pressed)'.

2. Select the desired colour for the button in the **Button LED colour** selection list.



The screenshot shows the 'Button LED colour' dropdown menu open, displaying a list of colors: White, Red, Green, Yellow, Blue, and White. A mouse cursor is pointing at the 'Green' option. Below the dropdown, the 'Button LED status with battery power' section shows 'On when pressed' selected.

→ The button in the symbolic view takes over the selected colour.



3. Select the behaviour of the button with the **Button LED status with battery power** option if the AndonWirelessBOX is operated with battery voltage.

Button LED status with battery power

- ☐ Off
☒ On when pressed

Option	Description
Off	<ul style="list-style-type: none"> – The button does not light up when the button is pressed. – The battery life is extended.
On when pressed	<ul style="list-style-type: none"> – The button lights up while the button is pressed. – The button does not light up when it is not pressed.

4. Select the behaviour of the button with the **Button LED status with external power supply** option when the AndonWirelessBOX is powered via the USB-C port.

Button LED status with external power supply

- ☐ Show tier 5 state
☐ Show tier 4 state
☐ Show tier 3 state
☐ Show tier 2 state
☒ Show tier 1 state
☐ Same as with battery power (on when pressed)

Option	Description
Show tier 5 state	<ul style="list-style-type: none"> – The button lights up according to the status of the tier: – Tier in the signal tower lights up: Button lights up in the set colour. – Tier in the signal tower does not light up: Button does not light up. – Tier in the signal tower blinks: Button blinks in the set colour. – Tier in the signal tower flashes: Button flashes in the set colour.
Show tier 4 state	
Show tier 3 state	
Show tier 2 state	
Show tier 1 state	
Same as with battery power (on when pressed)	<ul style="list-style-type: none"> – The button lights up when it is pressed. – The button does not light up when it is not pressed.

4.2.4 Transferring the configuration to the AndonWirelessBOX

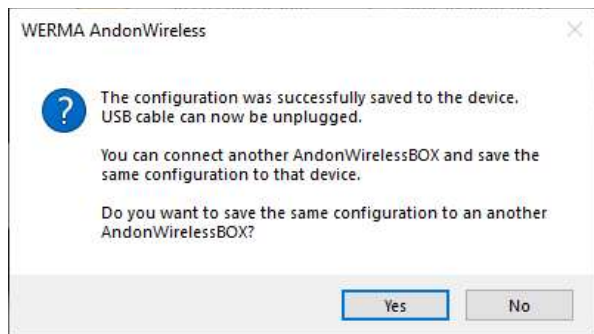
When the configuration is complete, the settings can be transferred to the AndonWirelessBOX.

-
- i** If the configuration is to be transferred to other AndonWirelessBOXes at a later time, the current configuration can be exported to a configuration file, see *"Exporting the configuration to a configuration file"*, p. 23.

WERMA recommends that you export the configuration to a configuration file to be able to import the setting of the radio channel and the radio network ID for the configuration of the Transceiver.

1. Click on **Save to device.**

- The configuration is transferred to the AndonWirelessBOX.
- When the transfer is complete, the current configuration can be transferred to other AndonWirelessBOXes.



-
- i** The current configuration can only be transferred to an AndonWirelessBOX with the same number of buttons as in the configuration.
-

- 2. Click on **Yes** to transfer the current configuration to other AndonWirelessBOXes, see *"Transferring the configuration to other AndonWirelessBOXes"*, p. 16.**
- 3. Click on **No** to configure another AndonWireless device.**
- 4. Remove the USB cable from the AndonWirelessBOX.**

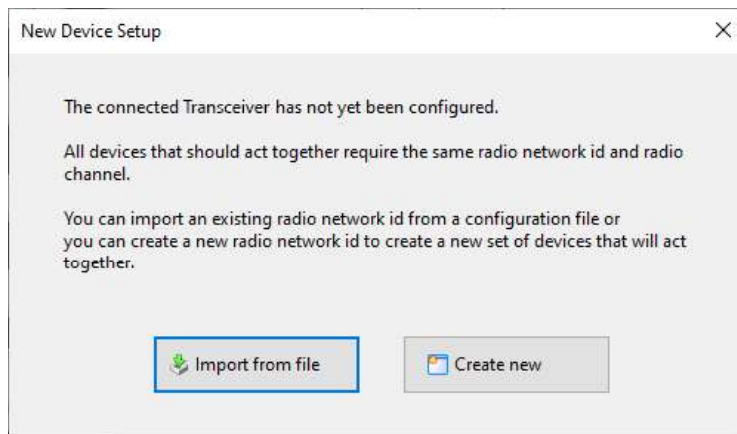
Transferring the configuration to other AndonWirelessBOXes

- 1. Remove the USB cable from the AndonWirelessBOX.**
- 2. Connect other AndonWirelessBOXes with the same number of buttons as in the configuration to the computer.**
- 3. Click on **Save to device**.**

5 Configuring the Transceiver

The radio channel and radio network ID can be configured for the Transceiver. If necessary, the assignment of the signal tower tiers can also be modified.

1. Use the USB cable to connect the Transceiver to the computer.
 - The AndonWireless configuration software detects the Transceiver.
 - If necessary, the required drivers are installed by the Windows update. If the driver installation fails, the drivers can be installed manually, see "Manual driver installation", p. 28.
 - If the Transceiver has not yet been configured or has been reset to the factory settings, the **New Device Setup** window appears.



- If a configuration has already been created and saved, this configuration can be imported or a new configuration can be created.



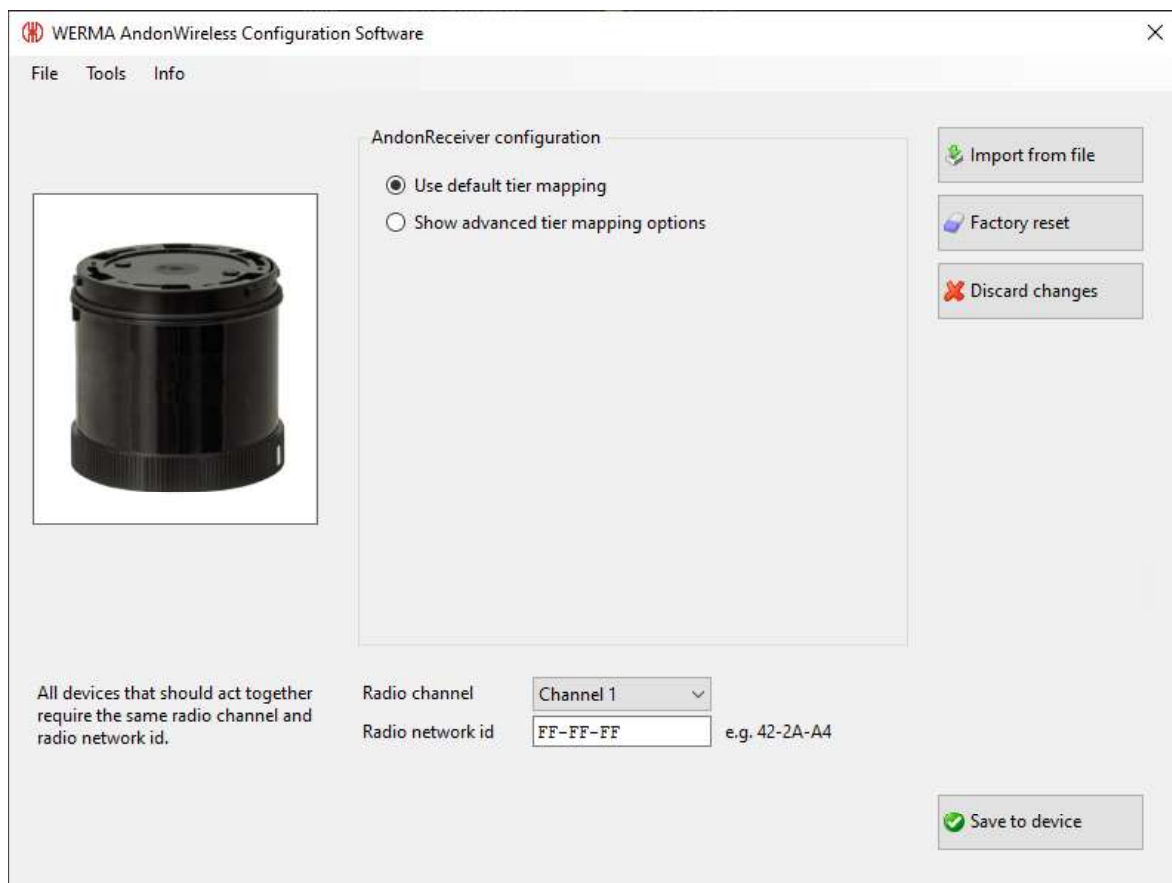
If no configuration has been saved yet, the settings can be read and exported from an AndonWireless device that has already been configured.

5.1 Importing the configuration

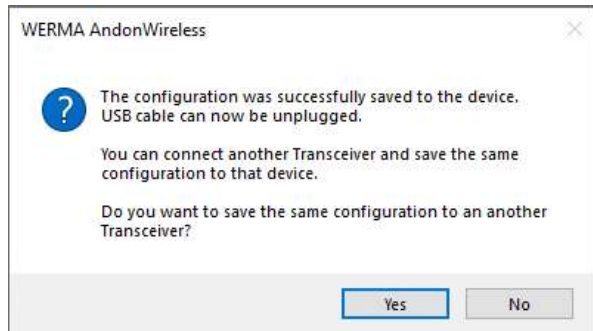


When importing the configuration file, only the radio channel and the radio network ID are imported. The tier assignment is not loaded.

1. Click on **Import from file** in the **New Device Setup** window.
2. Navigate to the saved configuration file (*.json) and click on **Open**.
→ The configuration is loaded and displayed.



3. Click on **Save to device** to transfer the configuration to the Transceiver.
 - The configuration is transferred to the Transceiver.
 - When the transfer is complete, the current configuration can be transferred to other Transceivers.



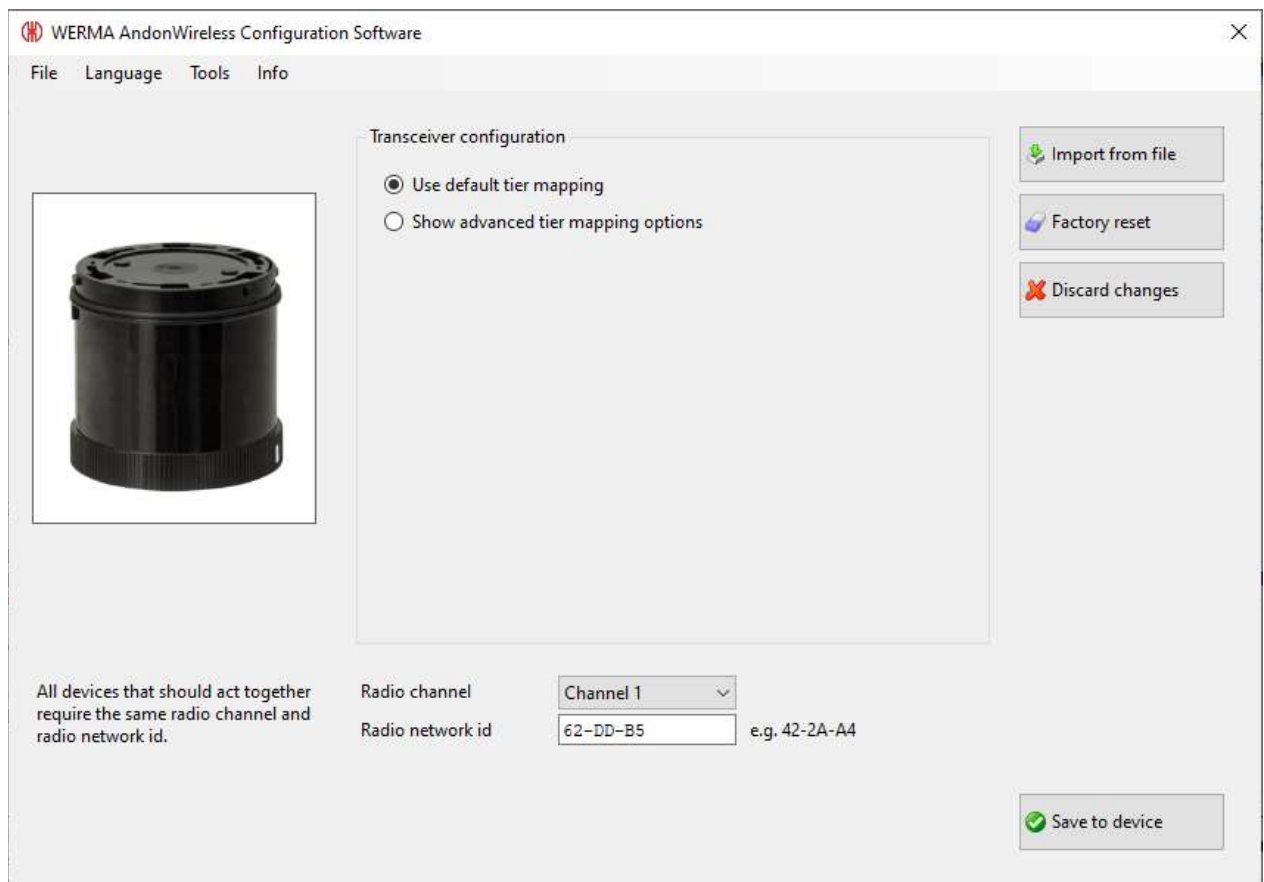
4. Click on **Yes** to transfer the current configuration to other Transceivers, see "*Transferring the configuration to other Transceivers*", p. 22.
5. Click on **No** to configure another AndonWireless device.
6. Remove the USB cable from the Transceiver.

5.2 Creating a new configuration or modifying an existing configuration



Modified settings can be changed at any time by clicking on **Discard changes** in the last configuration saved on the Transceiver.

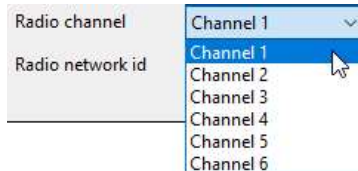
1. Click on **Create New** in the **New Device Setup** window.
→ The configuration screen appears.



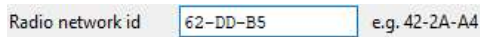
5.2.1 Setting the radio channel and radio network ID

- i** All AndonWireless devices that are to communicate with each other must use the same radio channel and the same radio network ID.

1. Select the common radio channel for the AndonWirelessBOX and Transceiver in the **Radio channel** selection menu.



2. Enter the common radio network ID for the AndonWirelessBOX and Transceiver in the **Radio network id** field.



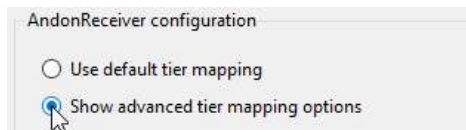
- i** Possible characters for the **Radio network id**:
- Numbers from 0 to 9
 - Letters from A to F

5.2.2 Modifying the tier assignment

If necessary, the tier assignment can be modified. For example, the sequence of the tiers can be reversed for a suspended signal tower or modified for a signal tower with fewer tiers.

- i** The number of tiers in the symbolic view does not need to correspond to the actual number of tiers of the signal tower.

1. Select the **Show advanced tier mapping options** option.



2. Select the status of the individual tiers of the signal tower.

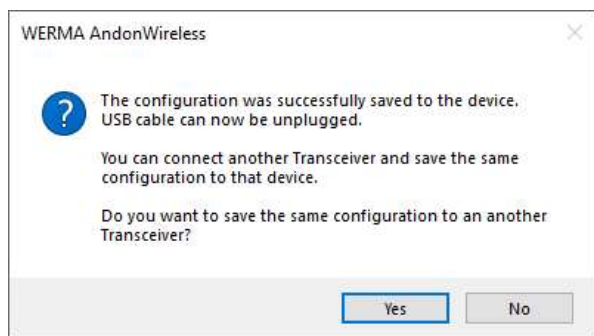
Status	Description
Show tier 1 state	– Display the status of the 1st tier.
Show tier 2 state	– Display the status of the 2nd tier.
Show tier 3 state	– Display the status of the 3rd tier.
Show tier 4 state	– Display the status of the 4th tier.
Show tier 5 state	– Display the status of the 5th tier.
Permanent Off	– Switch off the tier permanently.
Permanent On	– Switch on the tier permanently.
Pass signal input	– Loop through the input signal.

-
-  The Configuration examples (see "Configuration examples", p. 29) shows a few examples of possible practical configurations.
-

5.2.3 Transferring the configuration to the Transceiver

When the configuration is complete, the settings can be transferred to the Transceiver.

1. Click on **Save to device**.
 - The configuration is transferred to the Transceiver.
 - When the transfer is complete, the current configuration can be transferred to other Transceivers.



2. Click on **Yes** to transfer the current configuration to other Transceivers, see "Transferring the configuration to other Transceivers", p. 22.
3. Click on **No** to configure another AndonWireless device.
4. Remove the USB cable from the Transceiver.

Transferring the configuration to other Transceivers

1. Remove the USB cable from the Transceiver.
2. Connect the other Transceivers to the computer.
3. Click on **Save to device**.

6 Exporting and importing the configuration

The configuration of an AndonWirelessBOX can be saved in a configuration file and imported again at a later time. The configuration file can also be loaded for a Transceiver. In this case, only the radio channel and the radio network ID are imported. The tier assignment is not loaded.

6.1 Exporting the configuration to a configuration file



Settings can only be exported with an AndonWirelessBOX. Settings of a Transceiver cannot be exported.

1. Perform the configuration as desired.
2. Click on **Export to file**.
3. Navigate to the desired location.
4. Enter the desired file name.
5. Click on **Save**.

6.2 Importing the configuration from the configuration file

1. Click on **Import from file**.
2. Navigate to the saved configuration file (*.json) and click on **Open**.
 - The configuration is loaded and displayed.
 - The configuration can be modified and transferred to the AndonWireless device, see "Creating a new configuration or modifying an existing configuration", p. 11 or see "Creating a new configuration or modifying an existing configuration", p. 20.

7 Resetting to factory settings

If necessary, the AndonWireless devices can be reset to the factory settings.

1. Use the USB cable to connect the AndonWireless device to the computer.
 - The AndonWireless configuration software detects the AndonWireless device.
 - The configuration screen appears.
2. Click on **Factory reset**.
 - A security prompt appears.

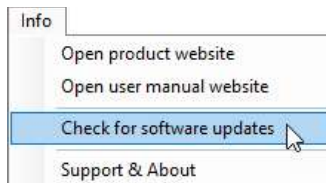


3. Click on **No** if you don't want to reset the AndonWireless device to the factory settings.
4. Click on **Yes** to reset the AndonWireless device to the factory settings.
 - AndonWireless device is reset to the factory settings.

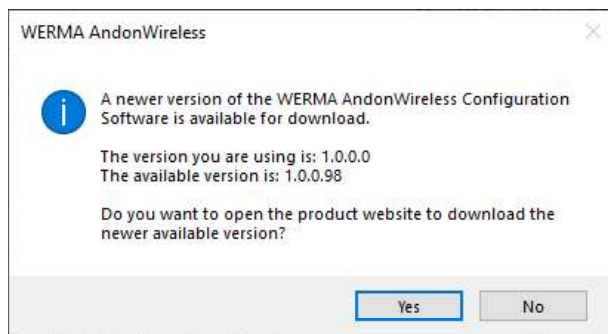
8 Updating the software

-  The computer must be connected to the Internet to perform a software update.
-

1. Click on **Check for software updates** in the **Info** menu.



- The AndonWireless configuration software checks for software updates.
- A corresponding message appears if an update is found.



2. Click on **Yes** to download the new version of the AndonWireless configuration software from the product website.
- The product website is loaded.
3. Download the latest version of the AndonWireless configuration software from the product website.
4. Stop the AndonWireless configuration software.
5. Delete AndonWireless.exe.
6. Unzip the downloaded zip file.

9 Updating the firmware

When a AndonWireless device with outdated firmware is connected, the AndonWireless configuration software detects the outdated firmware. A corresponding message appears that allows a firmware update to be performed.



Damage caused by an interruption to the firmware update!

If the firmware update is interrupted, the AndonWireless device may be damaged or the AndonWireless device may no longer be accessible.

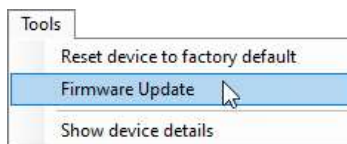
1. Never interrupt the firmware update.
2. Do not disconnect the USB cable from the AndonWireless device until the firmware update is complete.



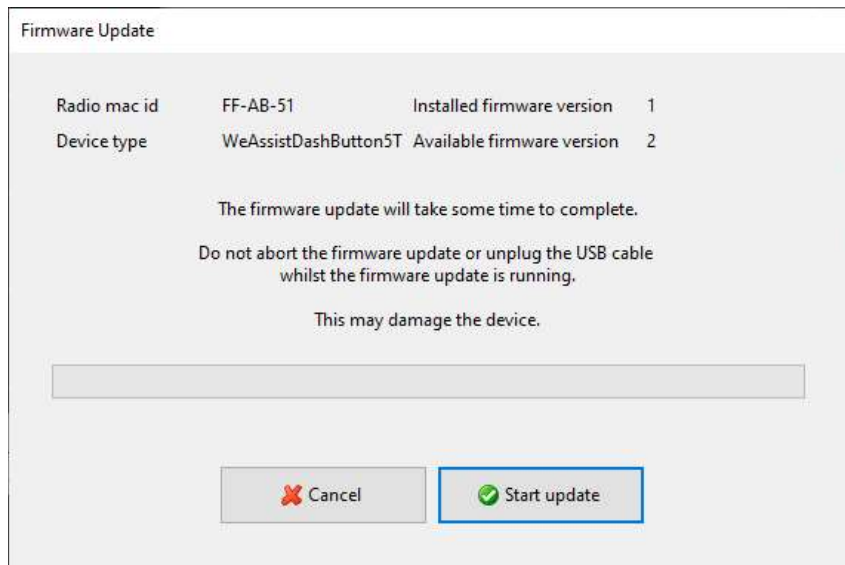
The firmware is stored in the AndonWireless configuration software. To obtain the latest available firmware, WERMA recommends updating the AndonWireless configuration software before performing a manual firmware update, see *"Transferring the configuration to other AndonWirelessBOXes"*, p. 16.

If necessary, the firmware update can be performed manually as follows:

1. Use the USB cable to connect the AndonWireless device to the computer.
2. Click on **Firmware Update** in the **Tools** menu.



- WERMA AndonWireless checks if a firmware update is available for the AndonWireless device.
- If a firmware update is available, the **Firmware Update** window appears.




1. Click on **Cancel** if you don't want to perform a firmware update.
2. Click on **Start update** to perform the firmware update.
→ The firmware update is downloaded and transferred to the AndonWireless device.

If an error occurs during the firmware update, the status LED on the AndonWireless device lights up blue.

1. Disconnect the USB cable from the AndonWireless device and reconnect it.
2. Perform a firmware update again.
3. If the firmware update fails again: contact the WERMA support team.

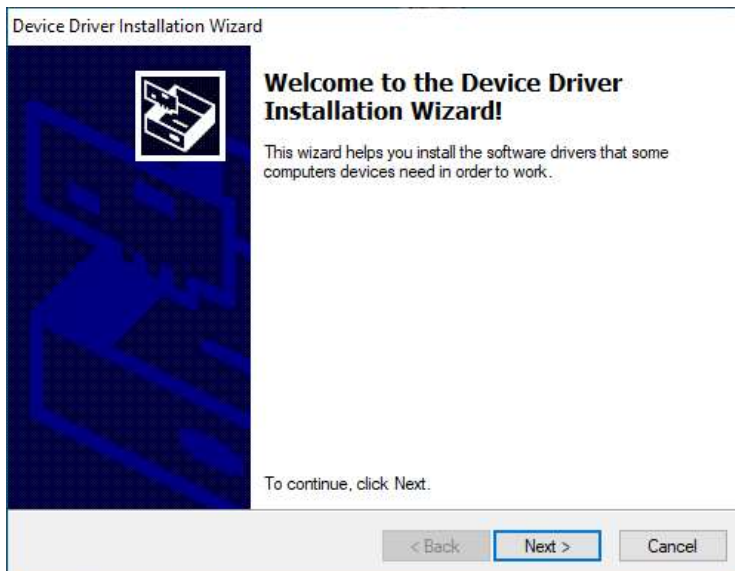
10 Manual driver installation

-  Manual driver installation is only required if the device driver software has not been automatically installed during the connection of an AndonWireless device.

1. Double-click on the CDM21228_Setup.exe in the driver folder.
→ The installation of the FTDI CDM driver starts.



2. Click on **Extract**.
→ The Device Driver Installation Wizard starts.



3. Click on **Next** and follow the instructions in the Device Driver Installation Wizard.

11 Configuration examples



In all of the following configuration examples, the AndonWirelessBOXes are powered via the USB port to reflect the status of the signal towers.

11.1 Example 1: Simple signalling

Scenario

- The operator has an AndonWirelessBOX with 2 buttons.

Process

The operator has a problem and presses button 2 of his AndonWirelessBOX.

- Button 2 of the operator's AndonWirelessBOX lights up red.
- The operator's signal tower lights up red.

After the problem has been resolved, the operator presses button 1 of his AndonWirelessBOX.

- Button 2 of the operator's AndonWirelessBOX lights up green.
- The operator's signal tower lights up green.

Configuration of the AndonWirelessBOX

Operator's AndonWirelessBOX

Button action configuration

Button LED configuration

When button number 1 is pressed, set the signal tower tiers to the following states:

Short press	Long press
Keep current state	Same as short press
Keep current state	Same as short press
Keep current state	Same as short press
Off	Same as short press
Toggle Off/On	Same as short press

Note: Review the "Button LED config" tab above to set the button LED colour.

Button action configuration

Button LED configuration

When button number 2 is pressed, set the signal tower tiers to the following states:

Short press	Long press
Keep current state	Same as short press
Keep current state	Same as short press
Keep current state	Same as short press
Toggle Off/On	Same as short press
Off	Same as short press

Note: Review the "Button LED config" tab above to set the button LED colour.

11.2 Example 2: Reporting a problem to the shift manager and signalling help

Scenario

- The operator and shift manager have an AndonWirelessBOX with 2 buttons.

Process

The operator needs help and presses button 2 of his AndonWirelessBOX.

- Button 2 of the operator's AndonWirelessBOX lights up red.
- The operator's signal tower lights up red.
- Button 2 of the shift manager's AndonWirelessBOX lights up red.

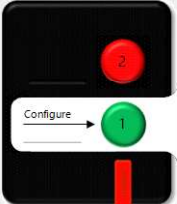
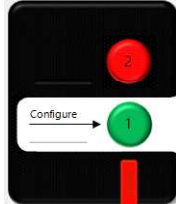
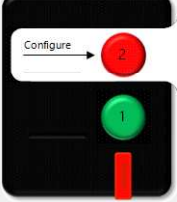
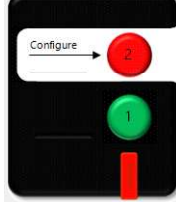
The shift manager presses button 2 of his AndonWirelessBOX, to confirm that he is coming to help.

- Button 1 of the shift manager's AndonWirelessBOX blinks green.
- The operator's signal tower blinks green.
- Button 1 of the operator's AndonWirelessBOX blinks green.

After the problem has been resolved, the operator presses button 1 of his AndonWirelessBOX.

- Button 1 of the operator's AndonWirelessBOX is off.
- The operator's signal tower is off.
- Button 1 of the shift manager's AndonWirelessBOX is off.

Configuration of the AndonWirelessBOXes

Operator's AndonWirelessBOX	Shift manager's AndonWirelessBOX																								
<div> <div>  </div> <div> <div>Button action configuration</div> <div>Button LED configuration</div> </div> <div> <p>When button number 1 is pressed, set the signal tower tiers to the following states:</p> <table border="1"> <thead> <tr> <th>Short press</th> <th>Long press</th> </tr> </thead> <tbody> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> <tr> <td>Off</td> <td>Same as short press</td> </tr> <tr> <td>Off</td> <td>Same as short press</td> </tr> </tbody> </table> <p>Note: Review the "Button LED config" tab above to set the button LED colour.</p> </div> </div>	Short press	Long press	Keep current state	Same as short press	Keep current state	Same as short press	Keep current state	Same as short press	Off	Same as short press	Off	Same as short press	<div> <div>  </div> <div> <div>Button action configuration</div> <div>Button LED configuration</div> </div> <div> <p>When button number 1 is pressed, set the signal tower tiers to the following states:</p> <table border="1"> <thead> <tr> <th>Short press</th> <th>Long press</th> </tr> </thead> <tbody> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> </tbody> </table> <p>Note: Review the "Button LED config" tab above to set the button LED colour.</p> </div> </div>	Short press	Long press	Keep current state	Same as short press	Keep current state	Same as short press	Keep current state	Same as short press	Keep current state	Same as short press	Keep current state	Same as short press
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11.3 Example 3: Multiple workstations

Scenario

- Every operator has an AndonWirelessBOX with 2 buttons.
- The shift manager has an AndonWirelessBOX with 5 buttons.
- The signal towers reflect the requirement.
 - Tier 1 of the signal towers: Operator 1; colour white
 - Tier 2 of the signal towers: Operator 2; colour red
 - Tier 3 of the signal towers: Operator 3; colour green
 - Tier 4 of the signal towers: Operator 4; colour yellow
 - Tier 5 of the signal towers: Operator 5; colour blue

Process using operator 2 as an example

Operator 2 needs help and presses button 1 of his AndonWirelessBOX.

- Button 1 of the operator's AndonWirelessBOX blinks red.
- Tier 2 of the signal towers blinks red.
- Button 2 on the shift manager's AndonWirelessBOX blinks red.

The shift manager presses button 2 of his AndonWirelessBOX, to confirm that he is coming to help.

- Button 2 of the shift manager's AndonWirelessBOX lights up red.
- Tier 2 of the signal towers lights up red.
- Button 1 of operator 2's AndonWirelessBOX lights up red.

After the problem has been resolved, operator 2 presses button 2 of his AndonWirelessBOX.

- Button 2 of operator 2's AndonWirelessBOX is off.
- Tier 2 of the signal towers is off.
- Button 2 of the shift manager's AndonWirelessBOX is off.

Configuration of the AndonWirelessBOXes

Operator 2's AndonWirelessBOX

Button action configuration

Button LED configuration

When button number 1 is pressed, set the signal tower tiers to the following states:

Short press

Long press

Keep current state

Same as short press

Keep current state

Same as short press

Keep current state

Same as short press

Keep current state

Same as short press

Blink

Same as short press

Note: Review the "Button LED config" tab above to set the button LED colour.

Shift manager's AndonWirelessBOX, with the example of button 2 for operator 2

Button action configuration

Button LED configuration

When button number 2 is pressed, set the signal tower tiers to the following states:

Short press

Long press

Keep current state

Same as short press

Keep current state

Same as short press

Keep current state

Same as short press

On

Same as short press

Keep current state

Same as short press

Note: Review the "Button LED config" tab above to set the button LED colour.

Button action configuration

Button LED configuration

When button number 2 is pressed, set the signal tower tiers to the following states:

Short press

Long press

Keep current state

Same as short press

Keep current state

Same as short press

Keep current state

Same as short press

Keep current state

Same as short press

Off

Same as short press

Note: Review the "Button LED config" tab above to set the button LED colour.

i The configuration of the AndonWirelessBOXes of the other operators differs only in the setting of the tier for the respective operator and the colour of button 1.

11.4 Example 3: Signalling material requirements

Scenario

- Every operator has an AndonWirelessBOX with 5 buttons.
- The warehouse has an AndonWirelessBOX with 5 buttons.
- The signal towers reflect the requirement.
 - Tier 1 of the signal towers: Requirement for material 1; colour white
 - Tier 2 of the signal towers: Requirement for material 2; colour red
 - Tier 3 of the signal towers: Requirement for material 3; colour green
 - Tier 4 of the signal towers: Requirement for material 4; colour yellow
 - Tier 5 of the signal towers: Requirement for material 5; colour blue

Process using the requirement for material 3 as an example

An operator requires material 3, so he presses button 3 of his AndonWirelessBOX.

- Button 3 of the operator's AndonWirelessBOX blinks green.
- Tier 3 of the signal towers blinks green.
- Button 3 on the warehouse's AndonWirelessBOX blinks green.

The warehouse presses button 3 of its AndonWirelessBOX, to confirm that material has been delivered.

- Button 3 of the warehouse's AndonWirelessBOX lights up green.
- Tier 3 of the signal towers lights up green.
- Button 3 of the operator's AndonWirelessBOX lights up green.

Once the material has been filled up, the operator presses button 3 of his AndonWirelessBOX for longer than 1 second.

- Button 3 of the operator's AndonWirelessBOX is off.
- Tier 3 of the signal towers is off.
- Button 3 of the warehouse's AndonWirelessBOX is off.

Configuration of the AndonWirelessBOXes

Operators' AndonWirelessBOXes, with the example of material 3	Warehouse's AndonWirelessBOX, with the example of material 3																								
<p>When button number 3 is pressed, set the signal tower tiers to the following states:</p> <table border="1"> <thead> <tr> <th>Short press</th> <th>Long press</th> </tr> </thead> <tbody> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> <tr> <td>Toggle Blink/Off</td> <td>Same as short press</td> </tr> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> </tbody> </table> <p>Note: Review the "Button LED config" tab above to set the button LED colour.</p>	Short press	Long press	Keep current state	Same as short press	Keep current state	Same as short press	Toggle Blink/Off	Same as short press	Keep current state	Same as short press	Keep current state	Same as short press	<p>When button number 3 is pressed, set the signal tower tiers to the following states:</p> <table border="1"> <thead> <tr> <th>Short press</th> <th>Long press</th> </tr> </thead> <tbody> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> <tr> <td>On</td> <td>Same as short press</td> </tr> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> <tr> <td>Keep current state</td> <td>Same as short press</td> </tr> </tbody> </table> <p>Note: Review the "Button LED config" tab above to set the button LED colour.</p>	Short press	Long press	Keep current state	Same as short press	Keep current state	Same as short press	On	Same as short press	Keep current state	Same as short press	Keep current state	Same as short press
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