

# Template:Bluetooth® settings



## Contents

- [1 Disclaimer](#)
- [2 General functionality](#)
- [3 Auto Connect to External Device](#)
  - [3.1 Bluetooth® solutions](#)

## Disclaimer



If you are not using Bluetooth®, **please consider turning it off or change Bluetooth® PIN** to remove potential risks.

If you are using Bluetooth® we strongly recommend **using AES encryption** for enhanced security.

## General functionality

**General**

BT Radio

Disable	Enable (hidden)
Enable (visible)	

Local Name

Local PIN

Security Mode

PIN only	PIN + MAC list
MAC list only	None

General functionality configures Bluetooth® to work in slave mode. This mode allows any external device to connect to X.

- **BT Radio** - allows enabling or disabling Bluetooth®. There are three different settings:
  - Disabled - Bluetooth® functionality will be disabled.
  - Enable (hidden) - Bluetooth® functionality will be enabled, external devices will be able to connect to X, but no devices will be able to detect it.
  - Enable (visible) - Bluetooth® functionality will be enabled and any external device will be able to detect and connect to X.

It is possible to configure the Local name of the device, as well as the Local PIN, which will be used when trying to pair with the X device. There are two different parameters:

- **Local Name** - parameter lets user declare a visible name of X to external devices.
- **Local PIN** - parameter lets user configure Bluetooth® PIN of X device.

The X supports composed Bluetooth® Local names, which allows the user to have a predefined number of IMEI digits at the end of the device name. The format of the composed Bluetooth® name looks like this: Device name + %imeiX

X - how many digits will be taken from IMEI to show in Local name, digits will be taken from the end of IMEI. Minimum value of X is 1 and the Maximum value is 15.

#### Example:

If the configured Local Name parameter is "X\_%imei7" and the IMEI of the device is 352093089520901, name will be displayed as **X\_9520901** (whether "\_LE" is added at the end depends on whether device supports BLE or not. The full name of the device, which supports BLE would be **X\_9520901\_LE**).

If the Local Name is written incorrectly, the Bluetooth® name of the device will be broadcasted as it is. An example can be seen below.

#### Example:

If the configured Local Name parameter is "X\_%imei7" devices name will be broadcasted as **X\_%imei7** or if wrong X will be configured, for example "X\_%imei20" devices name will broadcasted as **X\_%imei20**.

- **Security Modes** - Connection mode:
  - PIN only - only Local PIN will be reacquired to complete connection to X.
  - PIN + MAC list - PIN and Authorized Devices MAC List will be checked against to allow connection to X. If the external device MAC ID is in the list and correct *Local PIN* is entered then connection will be established, otherwise X will reject connection.
  - MAC list only - only *Authorized Devices MAC List* will be checked when trying to connect to X. If external device MAC ID is in the list then connection will be established, otherwise X will reject connection.
  - None - neither *Local PIN* nor *Authorized Device MAC List* will be checked.

# Auto Connect to External Device



Auto connection functionality configures X as master device, which allows connecting X to an external device. X currently supports these modes:

- **None** – disables auto connection functionality.
- **Hands Free** – X starts searching for an external hands free headset. If X finds a device which matches user defined *External MAC* or *External Name* then X will try to pair with that external device. If the external device asks for PIN then X will send user defined *External PIN*. After successfully pairing X will connect to paired device.
- **Data Link** – BT Data link mode is enabled by Configurator *Data Link* parameter: when **Data Link** is configured and FMB1YX has a link with the server, paired device can send messages via Bluetooth® SPP profile directly to the server. Messages will be encoded by [Codec12](#).

X supports ONE connection at a time.



X can see up to 10 available devices. If there are more than 10 devices, the list may change with each new scan.

*External Name* parameter works as a substring, which allows user to enter a part of the full external device name. For example, if external device name is "HandsFreeHeadset" and user enters "HandsFree" in *External Name* parameter window, then X will be allowed to connect to an external device named "HandsFreeHeadset".

## Bluetooth® solutions

- [Logging the X device using your mobile phone](#)