

Template:FMM Bluetooth settings

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Disclaimer

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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

The screenshot shows a settings window titled "General". It contains several sections:

- BT Radio:** A 2x2 grid of buttons. The top-left button is "Disable" (blue), the top-right is "Enable (hidden)" (grey), the bottom-left is "Enable (visible)" (grey), and the bottom-right is empty.
- Local Name:** A text input field.
- Local PIN:** A text input field containing the value "5555".
- Security Mode:** A 2x2 grid of buttons. The top-left is "PIN only" (grey), the top-right is "PIN + MAC list" (grey), the bottom-left is "MAC list only" (grey), and the bottom-right is "None" (blue).

General functionality configures Bluetooth to work in slave mode. This mode allows any external device to connect to FMM1YX.

Parameter *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 FMM1YX, 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 FMM1YX.

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 FMM1YX device. There are two different parameters:

- **Local Name** parameter lets user declare a visible name of FMM1YX to external devices.
- **Local PIN** parameter lets user configure Bluetooth PIN of FMM1YX device.

The FMM1YX 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 "FMB_120_%imei7" and the IMEI of the device is 352093089520901, the name will be displayed as **FMB_120_9520901** (whether "_LE" is added at the end depends on whether the device supports BLE or not. The full name of the device, which supports BLE would be **FMB_120_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 "FMB_120_%ime7" devices name will be broadcasted as **FMB_120_%ime7** or if wrong X will be configured, for example "FMB_120_%imei20" devices name will broadcasted as **FMB_120_%imei20**.

 The Composed Bluetooth name is supported from 03.25.05 firmware version.

FMM1YX Bluetooth has several different *Security Modes*:

- **PIN only** - only Local PIN will be reacquired to complete connection to FMM1YX.
- **PIN + MAC list** - PIN and Authorized Devices MAC List will be checked against to allow connection to FMM1YX. If the external device MAC ID is in the list and correct *Local PIN* is entered then connection will be established, otherwise FMM1YX will reject connection.
- **MAC list only** - only *Authorized Devices MAC List* will be checked when trying to connect to FMM1YX. If external device MAC ID is in the list then connection will be established, otherwise FMM1YX will reject connection.
- **None** - neither *Local PIN* nor *Authorized Device MAC List* will be checked.

Auto Connect to External Device

Auto Connect To External Device

Connection Mode

None	OBDDII
Data Link	Inateck Scanner
User ID	

External MAC

External Name

External PIN

Authorized Devices MAC List

1	
2	
3	
4	
5	
Import CSV	
Export CSV	

Auto connection functionality configures FMM1YX as master device, which allows connecting FMM1YX to an external device. FMM1YX currently supports these modes:

- **None** - disables auto connection functionality.
- **OBDDII** - FMM1YX starts searching for an external OBDD II Dongle. If FMM1YX finds a device which matches user defined *External MAC* or *External Name* then FMM1YX will try to pair with that external device. If the external device asks for PIN then FMM1YX will send user defined *External PIN*. After successfully pairing FMM1YX will connect to paired device.
- **Data Link** - BT Data link mode is enabled by Configurator *Data Link* parameter: when **Data Link** is configured and FMB 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](#).
- **Inateck Scanner** - FMM1YX automatically connects to Inateck BT Barcode Scanner BCST-70 and will be ready to receive data (coded in barcode). *Scanner must be configured for using "ENTER" as suffix*. FMM1YX supports online and inventory mode. A new record will be generated on every data portion received from scanner via SPP. Data will be stored with AVL ID 264, variable data length, max length is 32 bytes. *Note: Added from FW version 03.16.00.Rev.00+*
- **User ID** - This mode makes FMM1YX connect automatically to a device and stores its BT MAC address in I/O element *User ID* (I/O ID: 50520). This is used for driver authentication. If there's no connection, the I/O element value is set to 0.

FMM1YX supports ONE connection at a time.

- ✘ FMM1YX 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 users to enter a part of the full external device name. For example, if the external device name is "OBDDongle" and the user enters "OBD" in *External Name* parameter window, then FMM1YX will be allowed to connect to an external

device named "OBDDongle".

Bluetooth solutions

- [How to connect OBD II Bluetooth Dongle to FMM1YX device](#)
- [Logging the FMM1YX device using your mobile phone](#)