Test Report
Inateck Bluetooth Barcode Scanner BCST-70

Table of Contents

1. General Information.

Firmware version:	03.27.12.Rev.93 (FMB0XY)
	03.27.13.Rev.443 (FMC1XY, FMC2XY Meig module)
	03.27.14.Rev.00 (FMB920, FMB1XY , FMM1XY, FMU1XY, FMB2XY, FMT100)
	03.28.02.Rev.195 (FMC920)
	03.28.02.Rev.192 (FMM920)
	03.27.13.Rev.03 (FMB2XY, FMM2XY)
Hardware revision:	FMB0YX, FMX9X0, FMB1YX, FMU1YX, FMM1YX, FMC1YX, FMB2YX, and the model FMT100
Notes:	This test report contains the steps on how to integrate Inateck Barcode Scanner (BCST-70) on the Teltonika Telematics Devices with Configuration Settings, Data received, and Data Parsing on the server.

2. Requirements.

- Inateck Barcode Scanner (BCST-70)
- Teltonika FMX device.
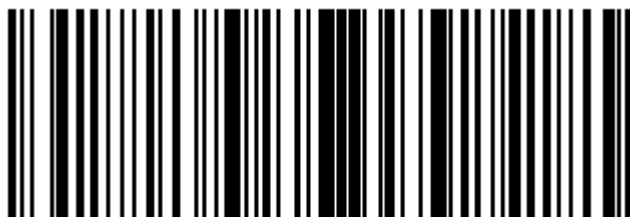- Server that supports Teltonika Data Protocol

3. Barcode Scanner First Start

Power on Inateck BCST -70 by toggling switch from OFF to ON

Configure Scanner to use Enter as Suffix

Step 1: Make sure Scanner is configured for using *Enter* as *Suffix*.

1). Read the "Enter Setup" barcode;

Enter Setup

2). Read the "Apply Enter as Stop Character" barcode;

(*) Apply Enter as Stop Character

3). Read the "Exit with Save" barcode

Exit with Save

Note: *Inateck Scanner could not scan Barcodes through screen/monitor, barcodes should be printed as hard* copy to proceed on the configuration.

Configure Scanner to SPP Mode

BCST-70 has Bluetooth capability that supports data transmission under HID and SPP two modes. When under HID mode, the BCST-70 connects your phone or computer automatically after pairing successfully. When under SPP mode, the BCST-70 can only finish connecting your phone or laptop with help of serial debugging tools after pairing successfully. For connection with Teltonika FM devices, scanner must use SPP Mode.

Step 2: Configure Scanner to SPP Mode

1) Scan "Enter Setup"
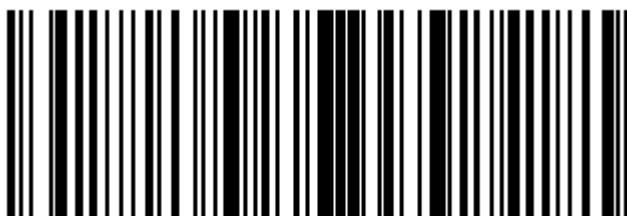
Enter Setup

2) Scan "Enable SPP mode"

Enable SPP Mode

3) Scan "Exit with Save"
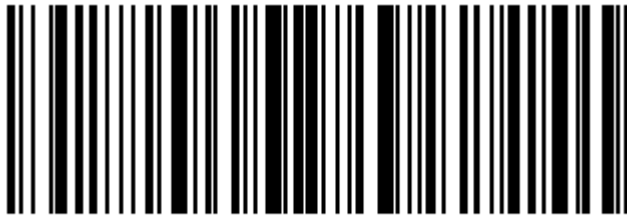
Exit with Save

Note: *If scanner does not use SPP mode, Teltonika FM device would not detect the scanner under the Bluetooth tab*

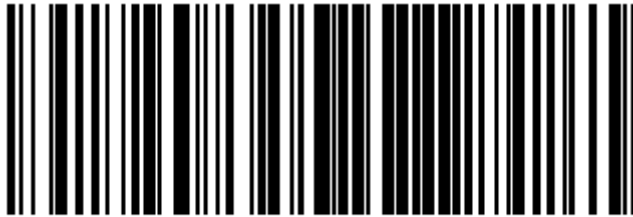## 4. Barcode Scanner Configuration

Step 3: Configure FM device using Teltonika configurator:

1. In System settings, enable Codec8 Extended;

Data Protocol

| Codec 8 | Codec 8 Extended |

2. In GPRS settings, configure GPRS Settings and Server Settings
3. In Bluetooth settings,

- Enable Bluetooth, set this setting as either "Enable (hidden)" or "Enable (visible)", otherwise Bluetooth will be disabled;
- Under Bluetooth Control, enable Discover so it would detect devices within vicinity.
- Once devices are discovered, select **BCST-70-XXXX-SPP** then proceed to tick **Pair.**

Bluetooth Control

Discovered Devices

303235AD2527
                    Bluedroid TV 1.0
30215395C694
                        S-01F
AE2B0000778B
                BCST-70-778B-SPP

Discover   **Cancel**

Pair

QUALITY SYSTEM CERTIFICATION
DNV
ISO 9001

SAFETY SYSTEM CERTIFICATION
DNV
ISO 45001

ENVIRONMENTAL SYSTEM CERTIFICATION
DNV
ISO 14001

Note: If in case the Scanner is not discovered, do the following steps below.

Step 3a: Enable Bluetooth Pairing

1. Scan "Enter Setup"
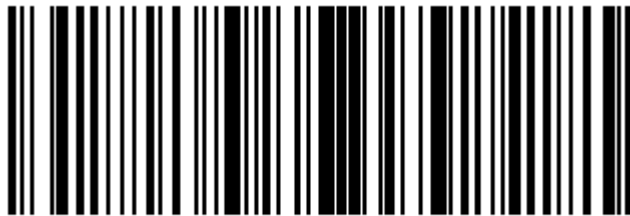
Enter Setup

2. Scan " Bluetooth Pairing"

Bluetooth Pairing

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www.teltonika-gps.com
info@teltonika.lt
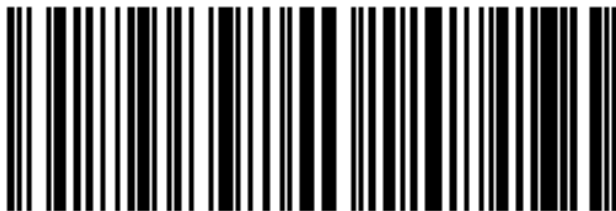
3. Scan "Exit with Save"
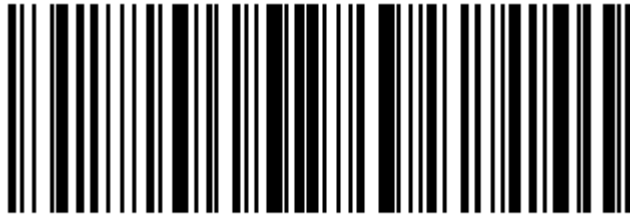
Exit with Save

- ▪ Once Pairing is successful, scanner should show under Paired Devices.

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9
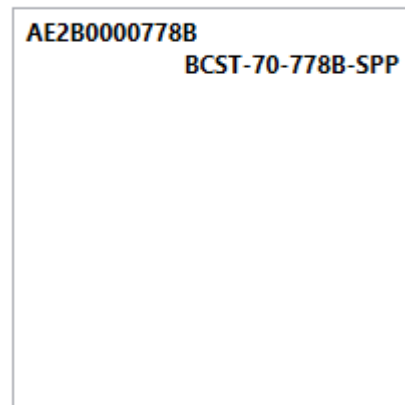
▪ Fill up the "Auto Connect To External Device" with as follows:

- Select Connection Mode as, Inateck Scanner.
- Enter the External MAC, can be seen on Paired Devices at the upper left corner.
- Enter the External Name, can be seen on Paired Devices at the lower right corner.
- Enter the External Pin, if the scanner has pin code set otherwise leave as blank.

Note: *It is important to fill out the auto connect so you won't need to Pair the device again on the Configurator.*

- Fill up the "Authorized Devices MAC List" same with the External MAC.

Authorized Devices MAC List

1	AE2B0000778B
2	
3	
4	
5	
Import CSV	
Export CSV	

- To receive the data to server enable corresponding BT Status IO element to Low.

BT Status	2		None	Low

Note: *If Scanner is connected BT Status value would be read as 2.*

5. Barcode Scanner Data

In our testing, we configured Inateck Barcode Sensor for FMC 130 device.

Here are the DATA sending parameter ID:

263	BT Status	1	Unsigned	0	4	-	-	0 - BT is disabled 1 - BT Enabled, not device connected 2 - Device connected, BTv3 Only 3 - Device connected, BLE only 4 - Device connected, BLE + BT	FMBXXX [Expand]	Permanent I/O elements
264	Barcode ID	Variable	ASCII	0	32	-	-	Barcode ID	FMBXXX [Expand]	Permanent I/O elements

Here are the actual data from the flespi server:

```
barcode.id : "12301600007099"
battery.voltage : 3.585
channel.id : 112317
custom.param.263 : 2
device.id : 3127549
device.type.id : 579
engine.ignition.status : true
```

Actual RAW Data:

```
00000000000000C98E0300000181A39D645000000000000000000000000000000000000000
00006000200EF01010701000400B5000000B6000000423C2300430E640000000000000000
0000181A39DCDC80000000000000000000000000000000000EF0006000200EF0101070
1000400B5000000B6000000423D9F004300000000000000000000181A39E2F700000000
0000000000000000000000000000000001080007000200EF01010702000400B5000000B60000
00423DD900430E01000000000010108000E3132333031363030303030373039390300000
114
```

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12

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Actual Data from the Parser

```
▲   I/O Element              var
      Event ID               2    264                        01-08
      Element count          2    7                          00-07
      1b Element count       2    2                          00-02
      ID                     2    239                        00-EF
      Value                  1    1                          01
      ID                     2    263                        01-07
      Value                  1    2                          02
      2b Element count       2    4                          00-04
      ID                     2    181                        00-B5
      Value                  2    0                          00-00
      ID                     2    182                        00-B6
      Value                  2    0                          00-00
      ID                     2    66                         00-42
      Value                  2    15833                      3D-D9
      ID                     2    67          Sensor Data    00-43
      Value                  2    3585                        0E-01
      4b Element count       2    0                          00-00
      8b Element count       2    0                          00-00
      Xb Element count       2    1                          00-01
      ID                     2    264                        01-08
      Value                  14                              31-32-33-30-31-36-30-30-30-30-37-30-39-39
   AVL Data Count            1    3                          03
Crc                          4    276                        00-00-01-14
```

Note: *In order to read the actual data, header "3" in front should be removed.*

Example:

Hex Data from the server: 31 32 33 30 31 36 30 30 30 30 37 30 39 39

--Eliminating 3 from the header would make the data look likes this:

Actual Data: 12301600007099

Barcode Scanned:

13

Data From FMC130 Device

6. Conclusion

The **Inateck Bluetooth Barcode Scanner (BCST-70)** was tested successfully, and concluded that it is compatible with Teltonika devices. We can use the same configuration for Inateck Barcode Scanner with Teltonika device like FMB0YX, FMX9X0, FMB1YX, FMU1YX, FMM1YX, FMC1YX, FMB2YX, and the model FMT100

7. Change Log.

Revision	Date	Author	Changes
01	2023-30-04	patrick.sangalang	Initial Document Created