



BLUEPIRAT

BY MAGNA



BLUEPIRAT Series MOST150 Streaming User Guide / 21.07.2020 Version 3.4.3

Table of contents

1	LICENSE AGREEMENT	3
2	PRODUCT LIABILITY	4
3	Overview.....	5
4	System requirements	6
	4.1 Further manuals.....	7
	4.2 Additional features by optional licenses	8
	4.3 Firmware Care	9
5	Configuring	10
6	Converting the data	11
	6.1 Format selection	11
	6.2 Setting the channel width.....	12
7	Abbreviations.....	13
8	List of figures.....	15
9	List of tables	16
10	Version history.....	17
11	Contact	18

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2 PRODUCT LIABILITY

The General Terms and Conditions of Sale and Delivery of MAGNA Telemotive GmbH can be found on our website (<https://telemotive.magna.com>) under imprint.

3 Overview

This user guide describes the feature of the license **MOST150 Streaming** for the data loggers

- BLUEPIRAT2
- BLUEPIRAT2 5E
- BLUEPIRAT Mini

of MAGNA Telemotive GmbH. This license enables the logging of:

- MOST150 synchronous/isochronous data
- MOST150 allocation messages without streaming data

This user guide describes the configuration and usage of this feature. The general configuration is described in the user guides of the used data logger as well as the System Client, which is valid together.

This document refers to **firmware version 03.04.03** and the **System Client** from **version 3.4.3**. Some features depending on model and feature license or may not be available in older versions.

Software updates and user guides for other, optional, licensed enhancements are available in our Service Center. (Please find the address under Contact at the last page.)

To ensure the most reliable operation of your system as possible, please make sure to use always current firmware and software versions.

Please note these important instructions about the handling of devices of MAGNA Telemotive GmbH!

There's a linux system running on the devices and sometimes when the device has a dirty shutdown due to a power break down or unplugging the power supply, the system is corrupt from this time. You know this situation from a PC, when you switch it off some times it maybe will not work any more or show you some mistakes.

In most cases this issue is caught up and repaired by the linux system we use, but sometimes it can happen that the system on the logger is damaged and there's no access to the device any more.

We are optimizing the handling of corrupted systems permanently and are integrating some new enhancements regarding this kind of issues with every new release to save the system. But we can't make the system for 100% save against these influences.

So please use always the provided mechanism for shutting down the device or the implemented standby function in which the device shutting down when no traffic is detected any more in an adjustable time.

4 System requirements

Control Unit

A Windows based Laptop or PC is needed to configure the devices by **System Client**. It also allows to save the recorded data and to use them offline later.

System Client

The software client is used for configuring the data logger as well as downloading the recorded data or convert these into your needed file format. A firmware update can be performed by the **System Client** too to ensure that your devices are always up to date.

BLUEPIRAT2 / BLUEPIRAT2 5E / BLUEPIRAT Mini

The communication between bus systems and control units is monitored and relevant data can be recorded very precisely with the data logger. The collected data are stored to the logger and can be downloaded via Ethernet to a PC.

The **BLUEPIRAT2** is our top-class all-in-one data logger. Seven models cover a wide range of interfaces.

Additionally, the **BLUEPIRAT2 5E** offers improved power management and power backup, five integrated Ethernet ports and super-fast start-up behavior. The BLUEPIRAT2 can be expanded flexibly via [System Link](#).

The **BLUEPIRAT Mini** is smallest data logger in the world with an outstanding functional scope. It offers a wide range of interfaces, stable temperature behavior, very low energy consumption, four GBit Ethernet ports, and much more. Different BLUEPIRAT Mini can be expanded flexibly to one cluster and therefore handled very easily by using [System Link](#).

Remote Control Touch (optional)

Operate your BLUEPIRAT Mini or BLUEPIRAT2 data loggers safely and comfortably from the driver's or passenger seat. Via System Link our new remote control becomes part of your logger network. One remote control can handle all connected loggers.

BLUEPIRAT Remote (optional)

While Remote Control Touch is just a control unit for handling unique devices or a TSL network, the BLUEPIRAT Remote additional has logger functionality by offering internal storage and some interfaces.

License

For the additional feature **MOST150 Streaming** an installed license is required. Settings for licensed features can be performed with a valid license only.

If you need a license for your logger, please contact our sales department (please find the address under contact at the last page).

4.1 Further manuals

Beside this user guide we offer the main manuals for our client as well as for the different data logger generations in our ServiceCenter at <https://sc.telemotive.de/bluepirat>.

User manual for the System Client

https://sc.telemotive.de/4/uploads/media/TelemotiveSystemClient_UserManual.pdf

User manual for BLUEPIRAT2 / BLUEPIRAT2 5E

https://www.telemotive.de/4/uploads/media/blue_PiraT2_UserManual.pdf

User manual for BLUEPIRAT Mini

https://www.telemotive.de/4/uploads/media/blue_PiraT_Mini_UserManual.pdf

User manual for Remote Control Touch

https://sc.telemotive.de/4/uploads/media/RCTouch_UserGuide.pdf

User manual for BLUEPIRAT Remote

https://sc.telemotive.de/4/uploads/media/blue_PiraT_Remote_UserGuide.pdf

For having an easy access if necessary, the most important manuals are linked in the client under the menu item [Help] and are reachable easily from there.

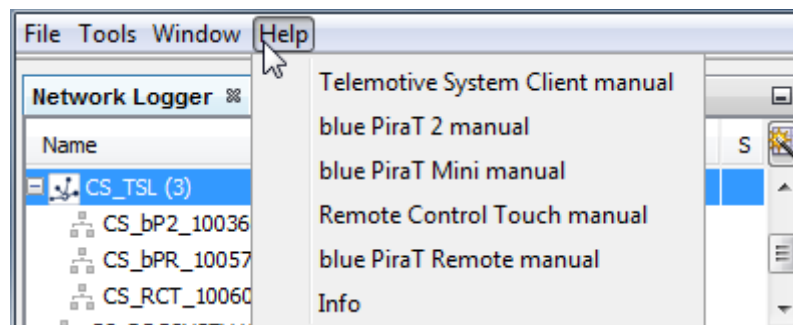


Figure 4.1: links to the manuals

Our licensed enhancements have own manuals which are stored in the Service Center too. You will find a list of these enhancements in the user manuals in the chapter **Additional features by optional licenses**.

4.2 Additional features by optional licenses

Additional features can be activated by purchasing and installing licenses. Licenses can be ordered at our sales team. You find the user guides for these additional features in our Service Center. Currently the following licensed features are available.

Feature	Description
Camera Link	video recording via video server or network cameras
WLAN	supporting wireless LAN (802.11, 802.11a, 802.11n), (802.11ac from FW 02.04.01)
GPS logging	tracking of GPS data
Measurements with CCP	CAN Calibration Protocol
Measurements with XCP	Universal Measurement and Calibration Protocol Currently the functionality for Ethernet (XCP on Ethernet) and the CAN-bus (XCP on CAN) are available.
MOST150 Streaming	logging MOST150 synchronous/isochronous data
MLBevo	The license Connected-Gateway MLBevo enables the recording of data of the ATOP control unit MLBevo via USB to the Telemotive data logger and convert these data with the System Client. (from FW 02.03.01)
Download Terminal	Download Terminal allows an automatization of configured tasks for a defined group of devices. (from FW 02.03.01)
TPE	TPE = Telemotive Performance Extension Increasing the logging rate for Ethernet data up to 100Mbit/s (from FW 02.04.01)
Test automatisation	Interface for connecting to test automation tools. At the moment, the sending of CAN messages is supported. (from FW 02.04.01)
Cellular network	Allows the logger to send status messages over cellular network. (from FW 03.01.01)

Table 4.1: Additional features by optional licenses

4.3 Firmware Care

MAGNA Telemotive GmbH invests a great amount in the further development of its products.

For this we regularly provide new functions and enhancements via firmware and client releases.

Basic conditions

As part of the " Service Product Firmware Care ", new software and firmware versions are made available for download for a limited period of time. This service is available for 12 months from the date of purchasing the **BLUEPIRAT Rapid**. This period can be extended.

For details, please contact your sales partner (see contact at the end of the manual for addresses).

Affected products

- **BLUEPIRAT Mini**
- **BLUEPIRAT2 5E**
- **BLUEPIRAT2**
- **BLUEPIRAT Remote**
- **Remote Control Touch**
- **BLUEPIRAT Rapid**

Note:

Enhancements are only possible in current firmware releases.

Attention:

Please note that updates to main firmware versions (04.00.01 / 05.00.01) need a special update license and can't be flashed to a device without this license.

To buy these licenses please contact our sales department under TMO.Sales@magna.com (please find the complete address under *Contact on the last page*).

5 Configuring

To activate the recording of MOST150 synchronous/isochronous data, the feature has to be active in the configuration. This activation is done by selecting the checkbox **Streaming channel active** in the configuration menu at **[MOST] → [MOST150]**.

It is also possible to log only the allocation messages without the streaming data with the checkbox underneath.

MOST150

- Wakeup system
- Keep awake on busload
- Control channel active
- Streaming channel active
 - Only record allocation messages
- Network status active
- Packet channel active

Packet channel

MDP channel (MOST Data Packets)

- MDP channel active
 - Limit message length

max.
Quadlets (3...512)
- MDP filter active

Source address (hex)	Target address (hex)
0	0

MEP channel (MOST Ethernet Packets)

- MEP Channel active
 - Limit message length

max.
Quadlets (3...512)
- MEP filter active

Target address MAC (hex)
0

Figure 2: activating the streaming

6 Converting the data

The conversion of MOST150 streaming data can be performed either directly from the logger or offline with an offline data set. If the logger or the offline data set contains MOST150 streaming data, a submenu “STREAM” will appear in the channel selection tree within the entry **[MOST150]**.

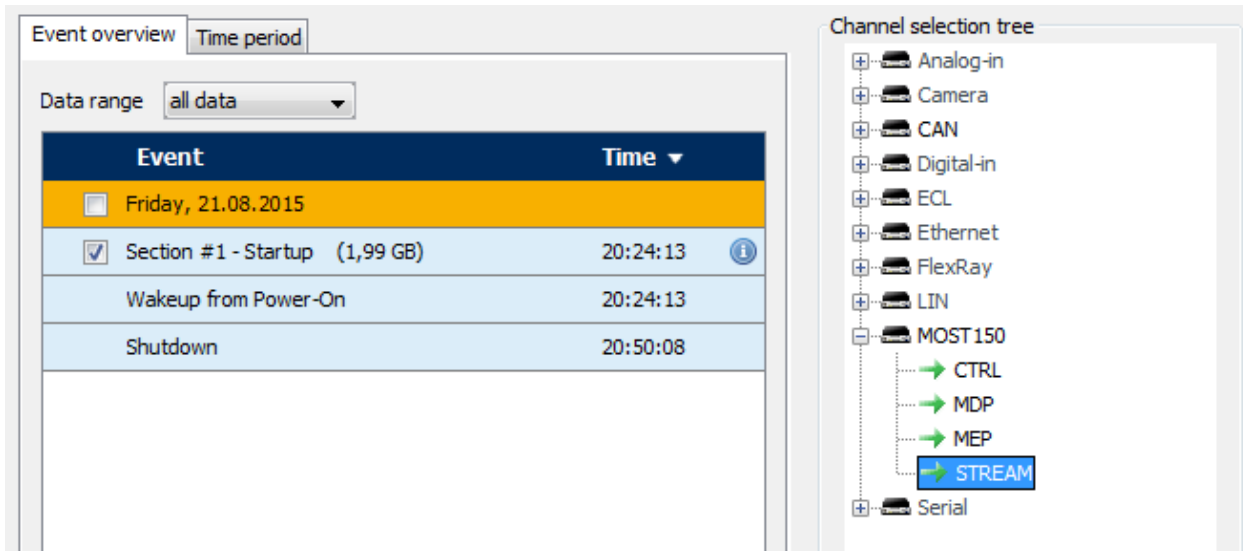


Figure 3: conversion

6.1 Format selection

If you select the “STREAM” channel, the standard target format for the conversion will be displayed. You can select the following target formats:

- Binary Logging Format (*.blf)
- MOST Data Analyser Format (*.img)
- Isochronous raw format (*.ts)
- Extended Telemotive Trace File (*.xtmt)

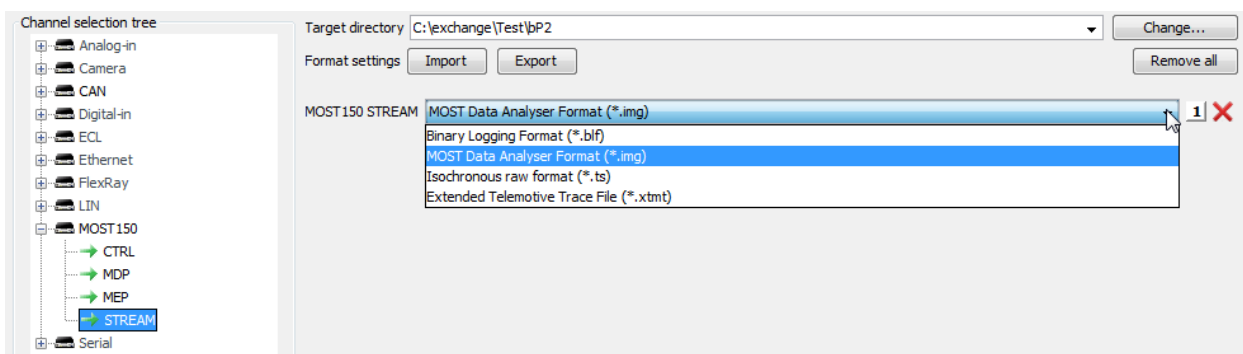


Figure 4: format selection

The distinction between synchronous and isochronous data is done only during the conversion by the analysis of the streaming data. The Isochronous raw format (*.ts) can only save isochronous data. Therefore, this format should be selected only if it is ensured that such data has been sent through the streaming channel. If there are no data available, no output file is written.

6.2 Setting the channel width

The identification of the isochronous channels is performed by the channel width. The channel width can be appointed in **[Tools] → [Settings] → [Conversion] → [Specific Format Settings]** by using the buttons **[Add]** or **[Remove]**.

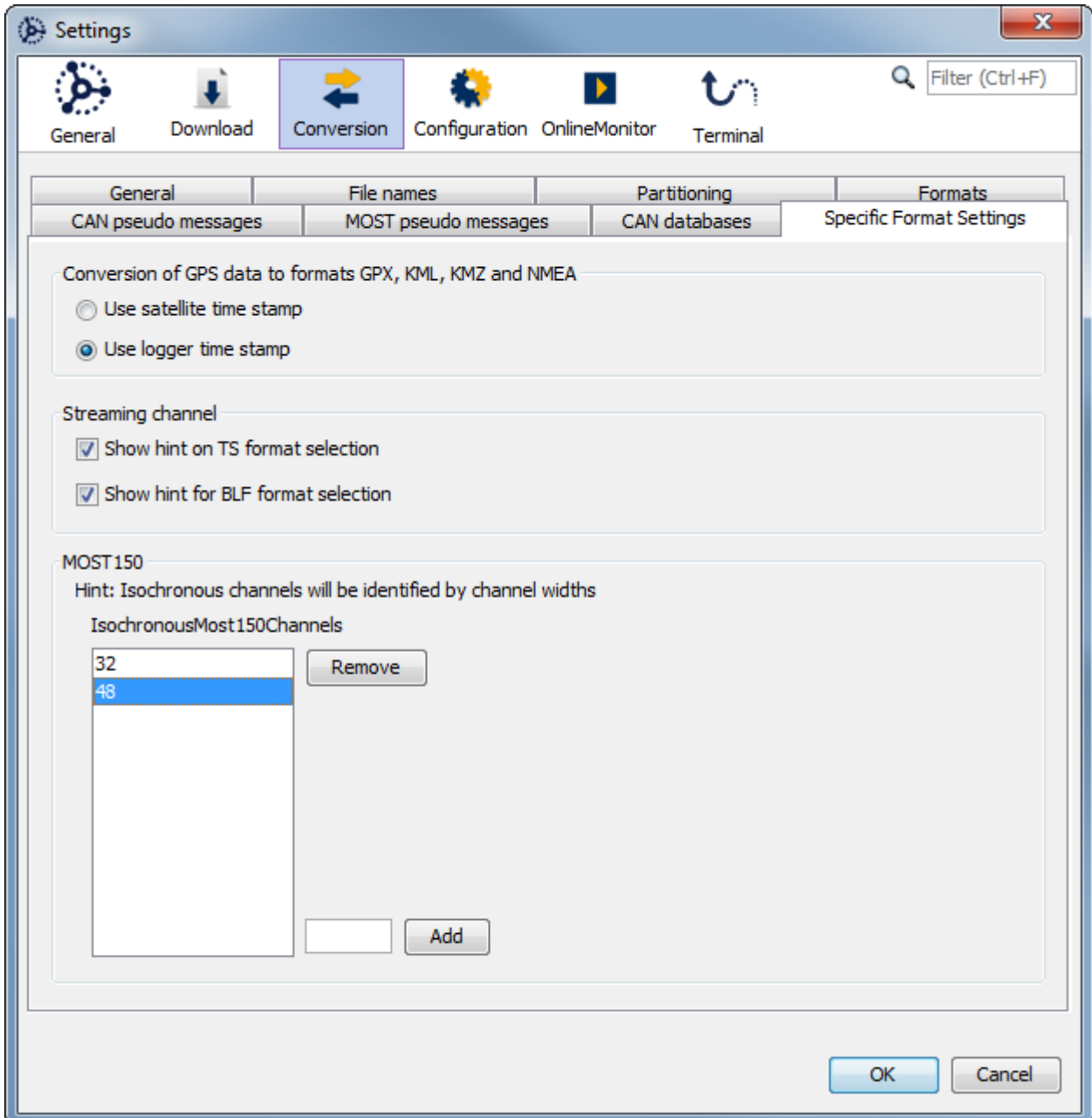


Figure 5: Setting the channel width

7 Abbreviations

Kürzel / abbreviation	Bedeutung / meaning
BLUEPIRAT	P rocessing I nformation R ecording A nalyzing T ool
bP	BLUEPIRAT
bP2	BLUEPIRAT2
bP2 5E	BLUEPIRAT2 5E
bPMini	BLUEPIRAT Mini
RC Touch	R emote C ontrol T ouch
bP Remote	BLUEPIRAT Remote
A2L	A SAM M CD-2 M C L anguage
AE	A utomotive E lectronics
ACK	A C K nowledged
CAN	C ontroller A rea N etwork
CCP	C AN C alibration P rotocol
CF	C ompact F lash
CRO	C ommand R eceive O bject
DAQ	D ata A cquisition
DTO	D ata T ransmission O bject
ECL	E lectrical C ontrol L ine
ECU	E lectronic C ontrol U nit
FIBEX	F ield B us E xchange F ormat
FW	F irmware
GMT	G reenwich M ean T ime
INCA	I N T egrated C alibration and A pplication T ool
LAN	L ocal A rea N etwork = Netzwerk
LIN	L ocal I nterconnect N etwork
MAC	M edia A ccess C ontrol
MCD	M easure C alibrate D iagnose
MDX	M eta D ata E Xchange F ormat
MEP	M OST E thernet P acket
MOST	M edia O riented S ystems T ransport (www.mostnet.de)
ODT	O bject D escriptor T able
ODX	O pen D ata E Xchange
OEM	O riginal E quipment M anufacturer
PHY	P H Y sical B us C onnect
PW	P asswort
RX	R eceiver D ata
SD	S ecure D igital
SFTP	S ecure F ile T ransfer P rotocol
SHA	S ecure H ash
SSL	S ecure S ockets L ayer
TCP/IP	T ransmission C ontrol P rotocol/ I nternet P rotocol
TLS	T ransport L ayer S ecurity
TMP	T elemotive P acketformat
TSL	T elemotive S ystem L ink
UDP	U ser D atagram P rotocol
USB	U niversal S erial B us

UTC	Universal Time, Coordinated
Wi-Fi	Wireless Fidelity
WLAN	Wireless Local Area Network
XCP	Universal Measurement and Calibration Protocol

Table 7.1: Abbreviations

8 List of figures

- Figure 4.1: links to the manuals 7
- Figure 2: activating the streaming..... 10
- Figure 3: conversion 11
- Figure 4: format selection 11
- Figure 5: Setting the channel width 12

[Index](#)

9 List of tables

Table 4.1: Additional features by optional licenses 8
Table 7.1: Abbreviations 14
Table 10.1: Version history 17

[Index](#)

10 Version history

Version	Änderung	Datum

Table 10.1: Version history

11 Contact



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