# MOST150 Streaming User Guide

Version 3.4.1 / 22.01.2019

# Table of contents

# 1    LICENSE AGREEMENT

Please read the license agreement of this license contract carefully, before you install the software. By the installation of the software you agree to the conditions of this license contract.

This software-license agreement, in the following called "license", contains all rights and restrictions for final users that regulate the use of the accompanying software, operating instructions and other documents, in the following called as "software".

1. This license contract is an agreement between licensor and licensee, who is being licensed to use the named software.

2. Licensee acknowledges that this is only a limited nonexclusive license. This means, that the licensee has no right to allocate sublicenses. Licensor is and remains the owner of all titles, rights and interests in the software.

3. The software is a copyright property of the MAGNA Telemotive GmbH. The program or parts of it may not be further licensed to third parts, rented, sold or be further marketed in any form without explicit written approval by MAGNA Telemotive GmbH. The user may neither change the software and their components, nor modify, nor redevelop or decompile otherwise in any form.

4. This software is subject to no warranty. This software is sold as is, without any warranty. If at any time, a user changes his system, we hold no responsibility to change our software to make it work again.

5. This license permits licensee to install the software on more than one computer system, as long as the software will not be used on more than one computer system simultaneously. Licensee will not make copies of the software or allow copies of the software to be made by others, unless authorized by this license agreement. Licensee may make copies of the software for backup purposes only. Licensee is not entitled to transmit or to transfer the software or its rights from this license agreement.

6. Licensor is not liable to licensee for any damages, including compensatory, special, incidental, exemplary, punitive or consequential damages, connected with or resulting from this license agreement or licensee's use of this software.

7. Licensee agrees to defend and indemnify licensor and hold licensor harmless from all claims, losses, damages, complaints or expenses connected with or resulting from licensee's business operations.

8. Licensor has the right to terminate this license agreement and licensee's right to use this software upon any material breach by licensee. The duration of the license contract is indefinitely determined.

9. Licensee agrees to return all copies of the software to licensor or to destroy them upon termination of the license contract.

10. This license agreement replaces and supersedes all prior negotiations, dealings and agreements between licensor and licensee regarding this software.

11. This license contract is subject to German law.

12. If a regulation of this license contract is void by law, the validity of the remaining regulations is not affected. If there is such a regulation it will be replaced by a valid, according to the legal regulations and enforceable regulation with similar intention and similar economic consequence.

13. The license contract is effective by delivery of the software of the licensor to the licensee and/or by usage of the software by the licensee. This license contract is also valid without licensor's signature.

14. The license automatically goes out if the licensee does not agree to the license regulations described here or offend against the license regulations of this license contract. With ending the license contract the licensee is obliged to extinguish or to destroy the software and all copies of it no matter if installed or stored on disk or to hand all of it back to MAGNA Telemotive GmbH.

15. The licensee is liable for all damages caused to the licensor by the violation of these license regulations.

# 2      PRODUCT LIABILITY

The General Terms and Conditions of Sale and Delivery of MAGNA Telemotive GmbH can be found on our website at:
General_Terms_and_Conditions_of_Sale_and_Delivery_Telemotive_AG.pdf

# 3    Overview

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

- blue PiraT2
- blue PiraT2 5E
- blue PiraT 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 Telemotive System Client, which is valid together.

This document refers to **firmware version 03.04.01** and the **Telemotive System Client** from **version 3.4.1**. 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 the Telemotive ServiceCenter. (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 catched 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 **Telemotive System Client**. It also allows to save the recorded data and to use them offline later.

**Telemotive 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 **Telemotive System Client** too to ensure that your devices are always up to date.

**blue PiraT2 / blue PiraT2 5E / blue PiraT 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 **blue PiraT2** is our top-class all-in-one data logger. Seven models cover a wide range of interfaces.

Additionally, the **blue PiraT2 5E** offers improved power management and power backup, five integrated Ethernet ports and super-fast start-up behavior. The blue PiraT2 can be flexibly expanded via Telemotive System Link.

The **blue PiraT 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 blue PiraT Mini can be flexibly expanded to one cluster and therefore handled very easily by using Telemotive System Link.

**Remote Control Touch (optional)**
Operate your blue PiraT Mini or blue PiraT2 data loggers safely and comfortably from the driver's or passenger seat. Via Telemotive System Link our new remote control becomes part of your logger network. One remote control can handle all connected loggers.

**blue PiraT Remote (optional)**
While Remote Control Touch is just a control unit for handling unique devices or a TSL network, the blue PiraT 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 Telemotive System Client**
https://sc.telemotive.de/4/uploads/media/TelemotiveSystemClient_UserManual.pdf

**User manual for blue PiraT2 / blue PiraT2 5E**
https://www.telemotive.de/4/uploads/media/blue_PiraT2_UserManual.pdf

**User manual for blue PiraT 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 blue PiraT 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.
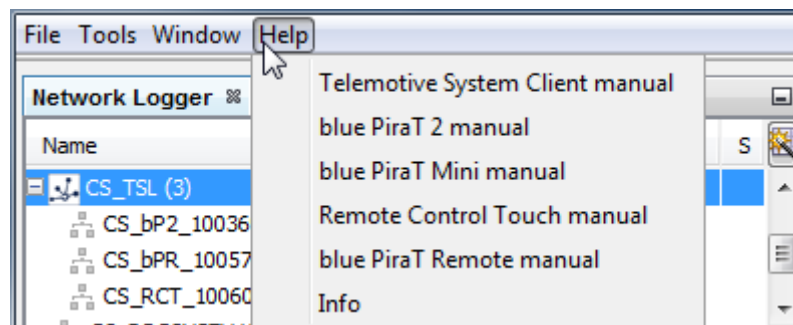


**Figure 4.1: links to the manuals**

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

Index

# 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]**.

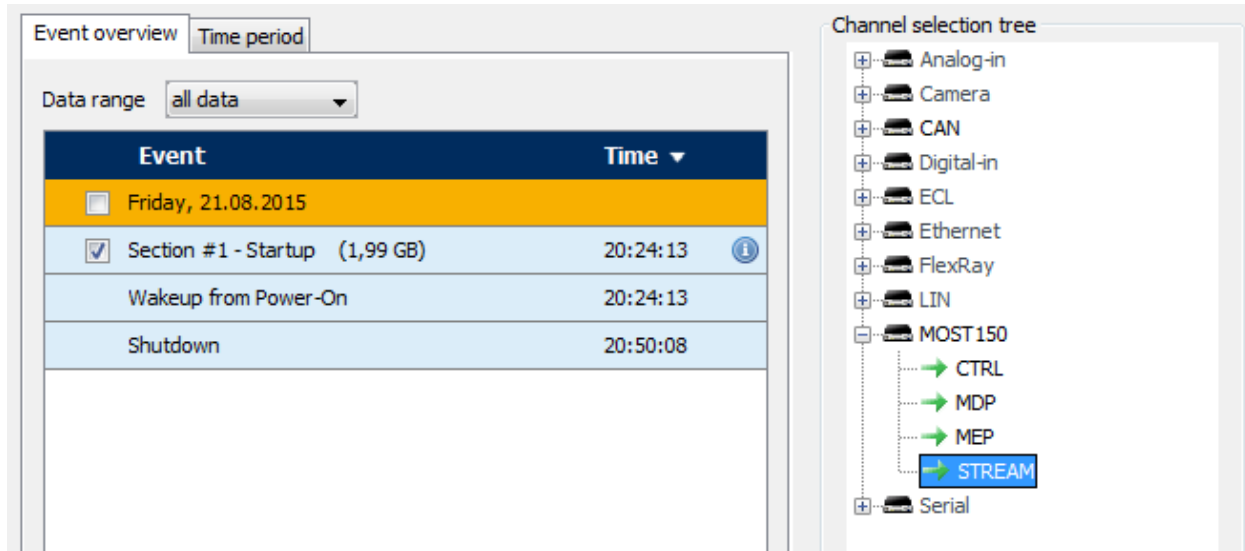It is also possible to log only the allocation messages without the streaming data with the checkbox underneath.



**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]**.
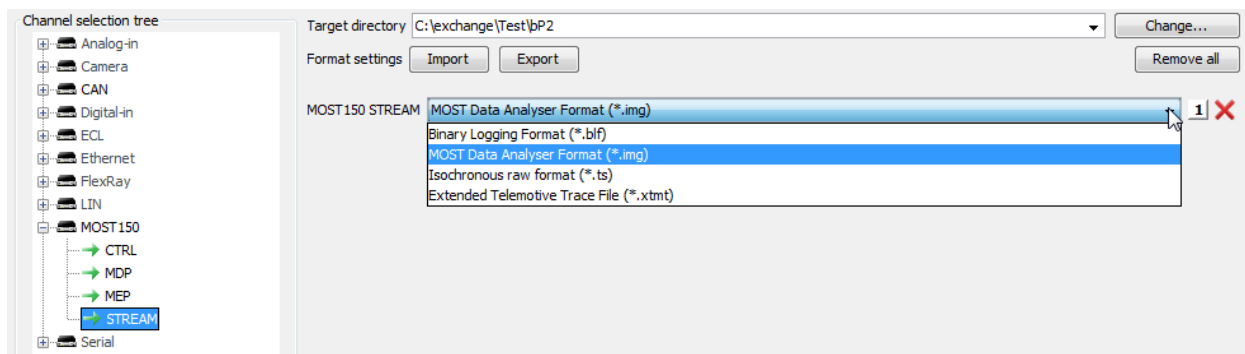


**Figure 3: conversion**

## 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)
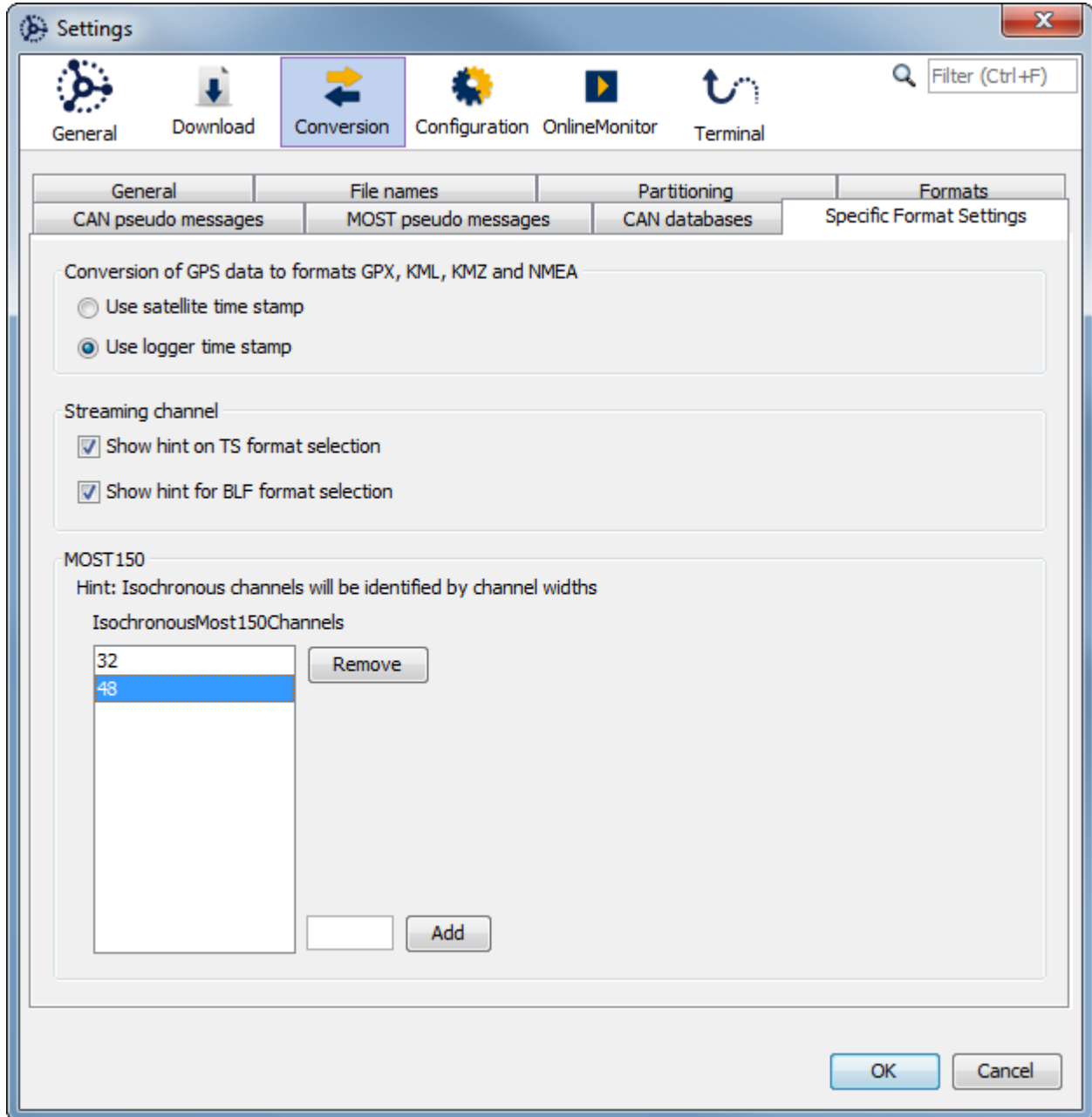- Extended Telemotive Trace File (*.xtmt)



**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 |
| --- | --- |
| blue PiraT | **P**rocessing **I**nformation **R**ecording **A**nalyzing **T**ool |
| bP | **b**lue **P**iraT |
| bP2 | **b**lue **P**iraT**2** |
| bP2 5E | **b**lue **P**iraT**2** 5E |
| bPMini | **b**lue **P**iraT Mini |
| RC Touch | **R**emote **C**ontrol **T**ouch |
| bP Remote | **b**lue **P**iraT **R**emote |
| | |
| | |
| A2L | **A**SAM MCD-**2** MC **L**anguage |
| AE | **A**utomotive **E**lectronics |
| ACK | **ACK**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 | **FI**eld **B**us **Ex**change Format |
| FW | **F**irm**w**are |
| GMT | **G**reenwich **M**ean **T**ime |
| INCA | **IN**tegrated **C**alibration and **A**pplication Tool |
| | |
| 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 **EX**change Format |
| MEP | **M**OST **E**thernet **P**acket |
| MOST | **M**edia **O**riented **S**ystems **T**ransport ([www.mostnet.de](www.mostnet.de)) |
| | |
| ODT | **O**bject **D**escriptor **T**able |
| ODX | **O**pen **D**ata **EX**change |
| OEM | **O**riginal **E**quipment **M**anufacturer |
| | |
| | |

| | |
|---|---|
| **PHY** | **PHY**sical Bus Connect |
| **PW** | **P**ass**w**ort |
| **RX** | **R**eceiver Data |
| | |
| **SD** | **S**ecure **D**igital |
| **SFTP** | **S**ecure **F**ile **T**ransfer **P**rotocol |
| **SHA** | **S**ecure **Ha**sh |
| **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**ele**m**otive **P**acketformat |
| **TSL** | **T**elemotive **S**ystem **L**ink |
| **UDP** | **U**ser **D**atagram **P**rotocol |
| **USB** | **U**niversal **S**erial **B**us |
| **UTC** | **U**niversal **T**ime, **C**oordinated |
| | |
| **Wi-Fi** | **Wi**reless **Fi**delity |
| **WLAN** | **W**ireless **L**ocal **A**rea **N**etwork |
| | |
| **XCP** | Universal Measurement and **C**alibration **P**rotocol |

**Table 7.1: Abbreviations**

# 8    List of figures

Index

# 9 List of tables

# 10   Contact

**MAGNA Telemotive GmbH**

Office München
Frankfurter Ring 115a
80807 München

Tel.:                        +49 89 357186-0
Fax.:                       +49 89 357186-520
E-Mail:                    TMO.info@magna.com
Web:                       www.telemotive.de

Sales
Tel.:                        +49 89 357186-550
Fax.:                       +49 89 357186-520
E-Mail:                    TMO.Sales@magna.com

Support
Tel.:                        +49 89 357186-518
E-Mail:                    TMO.productsupport@magna.com
ServiceCenter:        https://sc.telemotive.de/bluepirat