Technical note

Teracue encoder configuration

Version 001A_en

Introduction

This document explains how to properly configure a teracue encoder/streamer, in order to play correctly its content through an INNES gekkota platform. This technical note is based on a precise reference of Teracue encoder, at a certain software version. The configuration given here may change with an other encoder product and with an other software version.

Prerequisites

- Gekkota 3.12.24+, on a platform which supports full-HD decode (DMB300, SMA300)
- Teracue encoder ENC-300-DVI-PORTABLE, ver. 5.09_w90

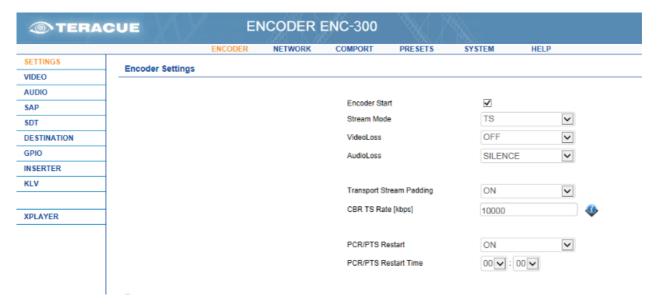## Source product configuration

Teracue encoder has an HDMI input, on which the source product feeds its content. There is one constraint for the configuration of this source product:

- The frame rate must be 50Hz instead of 60Hz, because the Teracue encodes at a frame rate which is the input frame rate divided by an integer number. By default, a 50Hz input frame rate will produce an encoded stream of 25fps (=50/2).

- Because DMB300 can't decode 1920x1080 more than 25fps, the source frame rate must be limited to 50Hz .

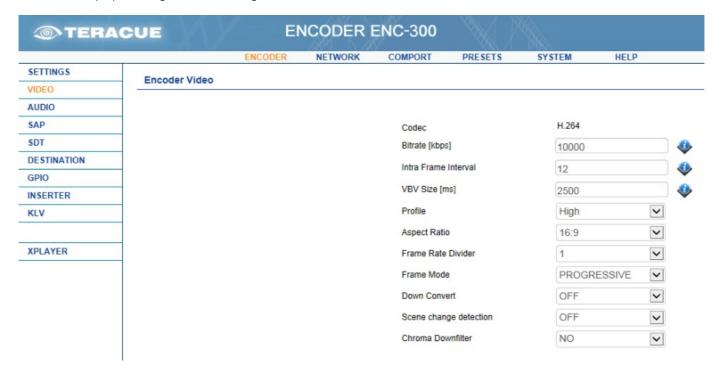## Encoder configuration

Page SETTINGS

On web UI, the proper settings are the following:

- Transport stream padding is ON, which means that we have a constant bitrate. This permits to be sure that we meet the minimum bitrate of DMB300 (which is not the case in COLORBAR mode).
- CBR TS Rate = 10000 Kb/s, to meet the DMB300 bitrate capabilities in H264 mode.
- PCR/PTS Restart = ON, to detect properly a discontinuity of the stream on DMB300.
- PCR/PTS Restart Time = 0.

Page VIDEO

On web UI, the proper settings are the following:

- Bitrate is not important here, because when Transport stream padding parameter is ON, this bitrate is not taken into account.
- Intra Frame interval = 12, to meet the constraint of minimum period for IDR/SPS at 10Mb/s bitrate.
- VBV Size = 2500, as recommanded by Teracue.
- Frame Rate Divider = 1, which means that the stream will be encoded at 25fps with a 50Hz HDMI input

Page AUDIO

On web UI, the proper settings are the following:

- Bitrate = 96Kbps is a normal value. The tunings on this page depends on your needs.

Page DESTINATION

On web UI, the proper settings are the following:

- Transport protocol = UDP, the only protocol supported by Gekkota 3.12.xx.
- TTL : this value depends on your network architecture.
- It is adviced to use only one output streams, because Teracue doesn't work properly with more than 1 stream (stream discontinuities may appear).