



Frame Synchronizer APP

The Frame Synchronizer APP is used to address SDI synchronization issues in broadcast applications.

The algorithms used for frame synchronization are extremely robust and tolerates poor input signals. It uses “Flywheel” functionality, which allows the module to recover from any missing sync pulses on the input signal by predicting where they should be, and then re-inserting them.

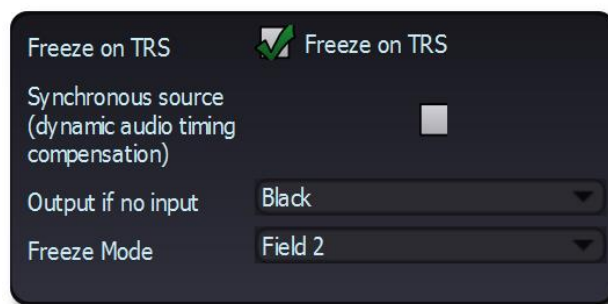
This APP offers multi-format SDI support (auto-detect) and is available per processing channel.

All embedded audio is extracted and delayed automatically to match the video processing delay. Audio is free from disturbances even when dropping and adding frames. The Frame Synchronizer APP also includes Dolby E frame synchronizers. There are four Dolby E Frame Synchronizers available per greenMachine.

The frame rate of the reference signal determines the output frame rate. If the input frame rate does not match this frame rate, the input signal will be automatically frame rate converted through a simple drop & repeat mechanism.

Settings & Features:

- Freeze on TRS Error: In the case of a detected TRS error in the input signal, the Freeze Mode can be set to Freeze or Transparent.
- Synchronous Source: In the case that the input signal is perfectly synchronous to the reference signal, activating this checkbox enables dynamic audio delay compensation. The embedded audio to video delay at the output is always minimal.
- Output if no Input: In the case of a missing input signal, the output can be set to: Freeze, Black or Test Pattern (only in combination with the Test Gen APP).
- Freeze Mode: The Freeze Mode determines the behavior of the module when it is set to Freeze. Depending on the settings of the previous parameters, this can be the case when TRS Errors are detected and/or when the input is missing. The freeze behaviour can be set to: Field 1 Freeze, Field 2 Freeze, Frame Freeze or Test Pattern (only in combination with the Test Gen APP).



This 'APP' is already installed in the greenMachine hardware unit and can be trialled on a test basis to check performance and system compatibility. An APP purchase provides an unlock code which is emailed to you by Canford's Customer Services team after purchase and verification of the serial number of the greenMachine on which it will be installed. The verification process takes place during normal business hours; overnight and weekend purchases will be processed the next working day. For very urgent requirements or out of working hours, APP licences can be purchased directly from the greenStore by logging in from greenGUI and making payment using a credit card or PayPal.