## Rosendahl mif4 Midi Control Change Protocol

Some software/ media controllers do not support the MMC midi machine control protocol.

In addition to MMC midi machine control it is also possible to control a mif4 with so called MIDI controller messages. Set option "Enable MCCP" with the mif4 control software. Requirement: mif4 must run firmware 3.1

MIDI controller messages are standard 3-byte midi messages and are much easier to implement by software then so called system exclusive messages (sysex). MMC messages are midi sysex messages.

This document describes how to control your mif4 using MIDI controller messages. Each controller message consists of a channel number (in mif4 MCCP always = 1), a event/ controller number [25..31] and data [0..59].

(1) Set the mif4 to mode SOURCE = GEN Channel 1, Control 31, Data 3 sets the mif4 to GENERATOR mode (0, 1, 2, accordingly to LTC, MTC, USB mode)

## (2) Display mode:

Channel 1, Control 29, Data 0, 1, 2, 3 sets the mif4 display to TC, UB, CAL, REF

## (3) Generator commands:

Channel 1, Control 20, 21, 22, 23 sets the internal generators start position (hours, minutes, seconds, frames)

Channel 1, Control 24 sets the TC format: 0 = 24fps, 1 = 25fps, 2 = 29drop, 3 = 30fps.

Channel 1, Control 30 data 0 (1,30,0) is setting the generator to this start position with the according time code format.

Attention: mif4 must be set to GENERATOR mode, see section (1).

- 1,30,0 sets the generator to the starting point (locate start)
- 1,30,1 is starting the generator (play)
- 1,30,3 stopps the generator (stop)
- 1,30,2 plays until defined endpoint.

Endpoint is set by controllers 25, 26, 27, 28 (hours, minutes, seconds, frames)