1.1.1 Menu: LTC generator

This is the menu for setting the parameters for the two LTC outputs.

The LTC outputs are named LTC A and LTC B. LTC A and LTC B are output at the XLR connector or BNC connector.

Settings of the LTC generator:

```
MENU  : LTC, select                ◀ ♦ ▶
<LTC A> OFFSET  FORMAT  TIME  SYNC  ESC
```

- Use the ♦ buttons to switch between LTC A or B setup, when marked as shown above. Notice, that switching between LTC A and B, only determines which generator to be setup, and does not yet alter the outputs.

- Select the parameter, you wish to setup, then press ▼ to enter the parameter submenu for selected LTC generator.

To set offset, select OFFSET:

```
SUBMNU: ../LTC A/OFFSET, edit delay ◀ ♦ ▶
OFFSET: <+0000000000.0>ns        OK   ESC
```

Each LTC generator can be individually timed, relative to absolute (GPS) time. The offset can be in the range of +/- 500 ms, in steps of 6.7 ns.

Operation:
- Use the ▲ and ▼ buttons to increase/decrease delay. Pressing OK will apply the delay.
- For faster adjustment, you can go into coarse mode. By pressing the *execute* button, you can edit the individual digits. Select a digit by pressing ◀ and ▶, and edit the offset, by pressing ♦. Notice, that the lowest digit cannot be selected. This is because the stepsize is greater than what this digit represents.
- When done, move the cursor to OK and EXECUTE or move to ESC and press ▲ to cancel. *Leaving the function takes you back to the LTC submenu.*

To change between formats, select FORMAT

```
SUBMNU: ../LTC A/FORMAT, select      ◀ ♦ ▶
FORMAT: <25.00  FPS> SYNCMODE   OK   ESC
```

Operation:
- Use the ▲ and ▼ buttons to find the system setting you want.
- When the desired system appears in the display, press OK to confirm. Otherwise move the cursor to ESC and press ▲ to cancel.
  Leaving the function takes you back to the LTC submenu.

LTC options:
- 24 FPS
- 25 FPS
- 29.97 FPS Non-dropframe
- 29.97 FPS Dropframe
- 30 FPS

Note: When selecting 29.97 FPS modes, go to the main LTC menu, and select <SYNC> to reset the frame-counter.

To change how the 29.97 FPS LTC resync the framecounter, select SYNCMODE

```
2NDMNU: ../LTC A/SYNCMODE, edit        ◄ ♦ ►
SYNCMODE:<AUTO> TIME: 00:00      OK    ESC
```

When running at 29.97 FPS, the framecounter does not match realtime. One second at 29.97 FPS are a bit longer than a realtime second. Therefore, the LTC time lags behind realtime after a while. To prevent this, the LTC generator can resync the framecounter. The LTC generator can do this in three modes: NONE, CONFIRM mode and AUTO mode. When NONE is selected, the framecounter never resets (you can reset the framecounter manually from the LTC main menu). In CONFIRM mode, the PT5300 will ask for confirmation at the time specified in the SYNCMODE menu. In AUTO mode, the framecounter resyncs automatically, at the time specified in the SYNCMODE menu.

Operation:

- Use the ◄ and ► buttons to select either mode, hours or minuttes.
- Use the ▲ and ▼ buttons to find the mode you want.
- Use the ▲ and ▼ buttons to find specify, at which time the resync shall occour.
- When the desired system appears in the display, press OK to confirm. Otherwise move the cursor to ESC and press ▲ to cancel.
  Leaving the function takes you back to the LTC submenu.

To change time and date settings, select TIME

```
SUBMNU: ../LTC A/TIME, select         ◄ ♦ ►
2NDMNU: <TIMEZONE> DAYLIGHT           ESC
```

In the TIME menu, the clock and date can be setup, as well as daylight saving parameters.

Operation:

- Use the ◄ and ► buttons to select the time setting you want alter, then press ▼.
- TIMEZONE and DAYLIGHT will open a new menu.
  Leaving the function takes you back to the LTC submenu.

To change time zone, select TIMEZONE

```
2NDMNU: ../LTC A/TIMEZONE, edit       ◄ ♦ ►
TIMEZONE:  +00:00                OK    ESC
```

In the TIMEZONE menu, you can set the time zone, by offsetting the UTC time in steps of 30 minuttes.

Operation:

- Use the ◄ and ► buttons to select either hours or minuttes.
- Use the ▲ and ▼ buttons to set the desired offset.
- When the desired UTC offset appears in the display, move the cursor to OK and press EXECUTE.
  Leaving the function takes you back to the TIME submenu.

To change daylight saving options, select DAYLIGHT

```
2NDMNU: ../LTC A/DAYLIGHT, select    ‹♦›
MODE:<AUTO>DST: on    START END   OK   ESC
```

In the DAYLIGHT menu, the daylight saving settings are made. There are three different modes, to choose from. AUTO mode switches to, and back from daylight saving time automatically. This means the time advances one hour, at the chosen start date, and resets at the end date. The PT5300 will notice you of this change. In CONFIRM mode, the PT5300 does NOT change the time automatically, but will instead notice you and wait for confirmation to switch time. In OFF mode, no daylight saving changes will be made. You can also immediately change the state, by setting DST (daylight saving time) on or off in the menu.

Operation:
- Use the ‹ and › buttons to select desired parameter.
- Use the ▲ and ▼ buttons to switch between modes, when marked.
- Use the ▲ and ▼ buttons to switch daylight saving on/off, when marked.
- Use the ▼ button on START or END, to setup daylight saving start and end date.
- Press EXECUTE on OK to confirm settings.
  Leaving the function takes you back to the TIME submenu.

To change daylight savings start or end date, select START or END

```
3RDMNU:../LTC A/DAYLIGHT/START, edit‹♦›
START DATE:<10>29  HOUR: 02    OK    ESC
```

You can set month, day and hour for when the switching should occour.

Operation:
- Use the ‹ and › buttons to select month, day or hour.
- Use the ▲ and ▼ buttons to set the desired date/time.
- When the desired time appears in the display, move the cursor to *OK* and press EXECUTE or press ▲ on ESC to cancel.
  Leaving the function takes you back to the DAYLIGHT submenu.