[Sync-it]

Sync-it is a battery-operated audio-video synchronisation tool for assessing timing between audio and video in the broadcast industry.

A rotating multicolour LED and OLED display and a precisely timed beep at the sync point provides an easy way to check on-camera sync. Using a slow motion EVS replay, the exact audio-video offset can be read on the OLED display.

In 25fps, normal mode, LEDs increment at a rate of 1 every frame (40ms), a beep is precisely timed to the start of the zero frames white LED. When viewed on a monitor or EVS playback, if the beep coincides with the red LEDs, sound is early, if green sound is late. The OLED displays the audio-video offset in frames.

In double speed mode LEDs increment at a rate of 1 every 1/2 frame (20ms), the increased speed improves the precision of the sync measurement, and is ideal for 4k/UHD use. In 25fps mode, OLED display shows audio-video offset in milliseconds.

Slow speed is intended for assessing long delay times (e.g satellite delays), slow speed increments the LEDs at half second intervals with a per half second display on the OLED.

In Pause mode LEDs rotate as in normal speed, but with a random pause introduced halfway through the cycle in case your sync happens to be exactly 1s adrift.

When switched on, the blue LEDs represent the percentage of battery remaining, also displayed on OLED screen.
Sync-it starts up in the mode it was last used, the select button (bottom right) toggles between normal, double speed, slow and random modes. Each LED represents 1 frame (40ms) in normal speed, 1/2 frame (20ms) at double speed.
To switch the unit to 30fps mode, hold down the select button when switching on the unit. Each LED represents a 30fps frame (33.3ms) and 1/2 frame (16.6ms) in double speed mode. Holding the select button when next powering on returns the unit to 25fps mode.

An alternative sync flash mode is available in which all LEDs flash white at the sync point. To activate this mode, press and hold the select button for 10s while the unit is running until the buzzer beeps. Release the button and it will reset in the alternative mode. You can repeat the process to return to normal mode.

The LED brightness adjusts to ambient light level, and the LEDs change to white in bright conditions. A push and hold of the select button shows information about the unit, such as times used and total run time.
You can either look at the LEDs through a suitably fast monitor and judge sync by eye, or for greater certainty, record mixer out and replay on an EVS in slow motion with audio. If you freeze the EVS at the point you hear the bleep, the LEDs and OLED display the audio/video offset.
Power is from a PP3 battery, current consumption between 40 and 60mA depending on the brightness of the LEDs. A new battery should last around 12 hours.

www.sync-it.co.uk