

Quick Start: AV sync test

(Refer to picture on back of this sheet or on page 2 of your User Manual)

- 1. Perform your first test in a quiet room with low light.** Bright ambient light may affect results. Start with lowered lights until you are comfortable with SyncheckII's operation. Noise from nearby activity and talking should be avoided.
- 2. Use a FRESH 9 volt battery.** We strongly recommend using a new battery. A weak battery will likely cause erratic operation that is not obvious to a new user.
- 3A. If you are a WORKSTATION user** load an appropriate test file. Our CDR contains a selection of test movie files in many popular codecs. We suggest starting with One Per Second DV. Import a file that matches your system's frame rate: PAL, NTSC, 24, or 23.976 frames per second. Standard definition files can be used with high definition, standard definition, and low resolution display systems. Import audio and video from the same movie into your workstation so they may be played together. Test movies are relatively short. To extend playback time, duplicate the files back-to-back several times. *Looped playback is not advised. Some systems cannot maintain perfect audio-video synchronization during looped playback.*
- 3B. If you are using our optional test DVD** (Screening room and home theater systems) load the Syncheck DVD into your player. Select the One Per Second menu, then select 3kHz pips
- 4. Turn on SyncheckII. Place Mode switch to the up position, toward the 4 red LEDs.** Click the Select switch down a few times to cycle through display mode choices to match your system frame rate. An NTSC user (29.97 frames per second) should select "30", a PAL user should select "25", 24 (23.976) users should select "24". Avoid "MS" milliseconds until after you have verified that your system's offset is less than about 4 video frames.
- 5. Play the test movie and adjust audio pips to a comfortable level.** Your playback volume must be high enough to flash SyncheckII's upper green "A" LED in exact step with the audible pips. If the microphone picks up unwanted ambient or handling noises, those noises will cause extra flashes and incorrect readings. In a noisy environment you may bypass the microphone by plugging in an unbalanced signal directly. A cable has been provided that matches Syncheck's 9mm input jack.
- 6. Point SyncheckII toward your flashing video display.** The upper yellow "V" LED should flash in exact step with the video flashes. If it does not, try moving closer to/further from your screen or lowering the ambient light level. If ambient light level is very high SyncheckII may detect inaccurately or not at all. **Some plasma** screens emit high amounts of infrared light that effectively blinds Syncheck's sensor and prevents good detection. It may help to hold Syncheck at an angle to the screen. Consult the user manual for other tips if you have trouble.
- 7. During operation, both upper "A" and "V" signal LEDs should flash** exactly in step with your screen's visible flashes and audible pips.
- 8. Determine whether picture or sound is arriving first.** Look at the green and yellow LEDs located at the bottom of the column of 16 red LEDs. If the yellow LED is lit, video flashes are earlier than audio pips. If the green LED is lit, audio pips occur earlier than flashes. Both LEDs will be lit if the flash and pip arrive at nearly the same instant, within approximately $\frac{1}{2}$ millisecond of each other.
- 9. Read the amount of audio-video offset.** There will be one or two LEDs lit. The digit next to a steady LED (when present) indicates whole frames values. Digits beside the blinking LED indicates additional $\frac{1}{16}^{\text{th}}$ fractions that are added to the whole frame value to make up the total offset time. A single blinking LED without a second steady LED means the same digit is used for whole and fractional values. **Examples:** if you see a steady "3" and a blinking "11", the error is **3** and **$\frac{11}{16}^{\text{th}}$** frames. If you see a blinking 3 and no steady digit, the error is **3** and **$\frac{3}{16}^{\text{th}}$** frames. **(For Milliseconds indication, the steady LED indicates tens of milliseconds, while a blinking LED indicates single milliseconds. For example if you see a steady "9" and a blinking "3", the offset time is 93 milliseconds. A steady "10" and a blinking "3" indicate 103 milliseconds.)**
- 10. Readings may seem to jump around.** This is common with many playback system configurations. Variations within $\frac{1}{2}$ video frame are generally considered acceptable. A fully gen-locked system will not exhibit any jumping digits.
- 11. Read your User Manual, included on the CDR or DVD with your SyncheckIII!**

