Brunswick

SERVICE BULLETIN

Subject: Computer Lane Monitor Notification and Maintenance Tips   Date: 6/6/02

Distribution: All Computer Lane Monitor Users   Letter No.   CEB02-2

This bulletin will advise you as to:

- How To Adapt New Computers That Utilize a USB Port
- How To Set Your COMM Port When Installing Computer Lane Monitoring Software
- How To Determine If Your UV Source Tube Needs To Be Replaced
- New "Zero Tape" Procedure
- Proper Use of Calibration Strips
- Other Suggestions

USB Port

Many new computers today no longer have a 9-pin serial port commonly used for the COMM1 port. New laptop and desktop computers today have USB ports only. The current model of the Computer Lane Monitor System (CLM) comes with a 9-pin serial cable and requires a specific USB adapter to properly connect with any computer USB port. This adapter, **Belkins model F5U103**, is currently the only adapter we have found that is DOS compatible for 16-bit applications and may be purchased at Radio Shack, Best Buy, or Circuit City.

COMM Port Settings

Follow these instructions for verifying that your COMM port is set properly after installing the Computer Lane Monitor software and selecting an available COMM port.
First reboot your computer. **Do not** use a COMM port that is used by another program!

1. Open **MY COMPUTER.** (Windows 3.1-Follow instructions in Operating System manual)
2. Open **CONTROL PANEL.**
3. Open **SYSTEM** – This opens the System Properties window.
4. Click the tab labeled **DEVICE MANAGER** – Displays all devices installed on your computer.
5. Click the plus (+) sign next to **Ports (COM & LPT)** – Displays all active ports.
6. Select the communications port you wish to use for the Computer Lane Monitor.
7. Click the button labeled **Properties** – Another window will open.
8. Click the tab labeled **Port Settings** – Make sure that the following selections have these settings:

   - Bits Per Second: 9600
   - Data Bits:8
   - Parity: None
   - Stop Bits:1
   - Flow Control Hardware

UV Source Tube Replacement

As the UV source tube ages, the Empty Tape Slot reading will decrease and become less stable. You may notice that it takes longer to pass the warm-up check and that the unit does not maintain its calibration as long. The age of the source tube will also effect the Calculated Calibration Value. You should monitor both the Empty Tape Slot reading and the Calculated Calibration value during the calibration process. When the Empty Tape Slot reading drops below 15 and the Calculated Calibration Value increases above 1.5, it is time to replace the UV source tube, Brunswick part number 61-100061-000. Normal operating ranges: Empty Tape Slot reading 15-30 and Calculated Calibration Value 0.8 – 1.5.

New replacement UV source tubes now require 96 hours of "burn-in" time. Previously, the burn-in period was 48 hours, but this has changed due to manufacturing environmental regulations. New UV source tubes will rattle, which is caused by a special pellet that is injected into the source tube and will evaporate during the burn-in period. DO NOT use GE brand UV source tube replacements. These bulbs are less stable and may cause improper readings.

When replacing the UV source tube, it is also a good time to clean the lens for the optical sensor. The lens can build up with dirt and tape residue and will create similar changes in calibration readings when the UV source tube deteriorates. To clean the lens, you will have to remove the lens plate, then use Isopropyl Alcohol (IPA) and cotton swabs. Handle the lens with care making sure not to leave fingerprints or smears.

New "Zero Tape" Procedure

For maximum accuracy, it is recommended that you use the "Manual" Read Tape option to monitor the tape value as you advance the tape and assure that the Zero Tape Reading is taken on a stable part of the tape header that has not been contaminated with oil. Insert your tape sample into the Lane Monitor until it just engages into the drive rollers. Use the Advance Tape .21" button to move the tape to the first marked line (at 3.5", as per the manual) while noting the **lowest repeatable Tape Value** that is displayed after each advancement. Use the Reverse Tape .21" button to reposition the tape over the lowest repeatable Tape Value and then click on the Take Zero Tape Reading button. You can now advance the tape to the second marked line (at 5.5") and click on the Start Reading Tape button. This procedure is much more accurate than depending on first marked line at 3.5" or the Automatic Read Tape option to position the tape for the Zero Tape reading. Negative lane oil readings are most commonly caused when the Zero Tape Reading is taken too close to the lane edge marker or a section of the tape sample which contains oil.

Calibration Strips

The Standard calibration option must be used the first time that the Computer Lane Monitor software is loaded into your computer. After that, it is recommended that you routinely use the Short calibration option, since the software program will automatically prompt you when it is necessary to run the Standard calibration. You should record the first use date on one of the three calibration strips and use this same strip for Short calibration for the first four months. The second strip and third strip should be used in the same manner as the first strip. The four-month suggested life for each calibration strip is based on normal (daily) use of the same strip. Actual life of each calibration strip is dependent on the frequency of use and proper care. Occasional use of all three calibration strips over a one year period will not cause them to age prematurely if properly stored in the provided envelopes. Never expose the calibration strips to direct sunlight and remove the strips from the Optical Reader as soon as each calibration is complete.

Other Operating Suggestions:

1. The best accuracy is obtained when the tape samples are read immediately after the reader is calibrated. For this reason, it is recommended to repeat the Short calibration every hour while reading tape samples.

2. Another tip is to use the Optical Reader without the stand while calibrating and reading tapes. This reduces most bright ambient light from entering the "Tape In" slot which may cause errors in accuracy.
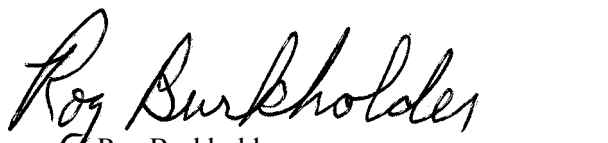
Contact Information

If you have questions regarding this bulletin, or need any lane equipment information, please contact the Brunswick TechTeam at 1-800-323-8141 (select option #1, then option #3) or internationally at 1-231-725-4966. Our E-mail address is *TechTeam@brunbowl.com*

If you are not completely satisfied with the technical support you receive from Brunswick, please contact:

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