

ALIAS™ Illumina Master

Wireless Tablet Control and Interior Illumination



ALIAS™ Tablet Control and Patented Interior Illumination

SunChrom has developed a wireless tablet control for the most well-known HPLC autosampler ALIAS™ upgrading the device to become a “Stand Alone” autosampler or a master for a complete HPLC system. The modified instrument can be combined with any other HPLC module of any brand or producer. Even older instruments can be now equipped with this latest “state-of-the art” extremely fast and versatile autosampler.

The new tablet control software allows to use ALIAS™ in a slow or fast injection modus, another improvement to the standard ALIAS™ model. This new feature enables the sample/air needle to penetrate even sealed reaction vials like Eppendorf tubes through the closed plastic lid. , in fast mode the sample/air needle may not penetrate the plastic closure completely. In slow modus that will not create any problem at all.

Hardware Features

Auxiliaries for 4 independent channels

In contrast to the standard ALIAS™ model the SunChrom ALIAS offers four free programmable auxiliaries for other instrument control. For each channel, two different ON/OFF times are programmable.

Aux	On 1	Off 1	On 2	Off 2
Aux-1(min:sec)	00:00	00:00	00:00	00:00
Aux-2(min:sec)	00:00	00:00	00:00	00:00
Aux-3(min:sec)	00:00	00:00	00:00	00:00
Aux-4(min:sec)	00:00	00:00	00:00	00:00

Figure 1: Auxiliary settings for four independent channels

Interior Illumination

The new innovative interior illumination gives the user full visual access to the inside of the instrument. This feature is extremely important for the detection of potential air bubbles within the dispenser syringe. In a standard instrument the users have no ability to visually detect air bubbles inside the dispenser syringe, that will directly affect the reproducibility of the whole LC-system.

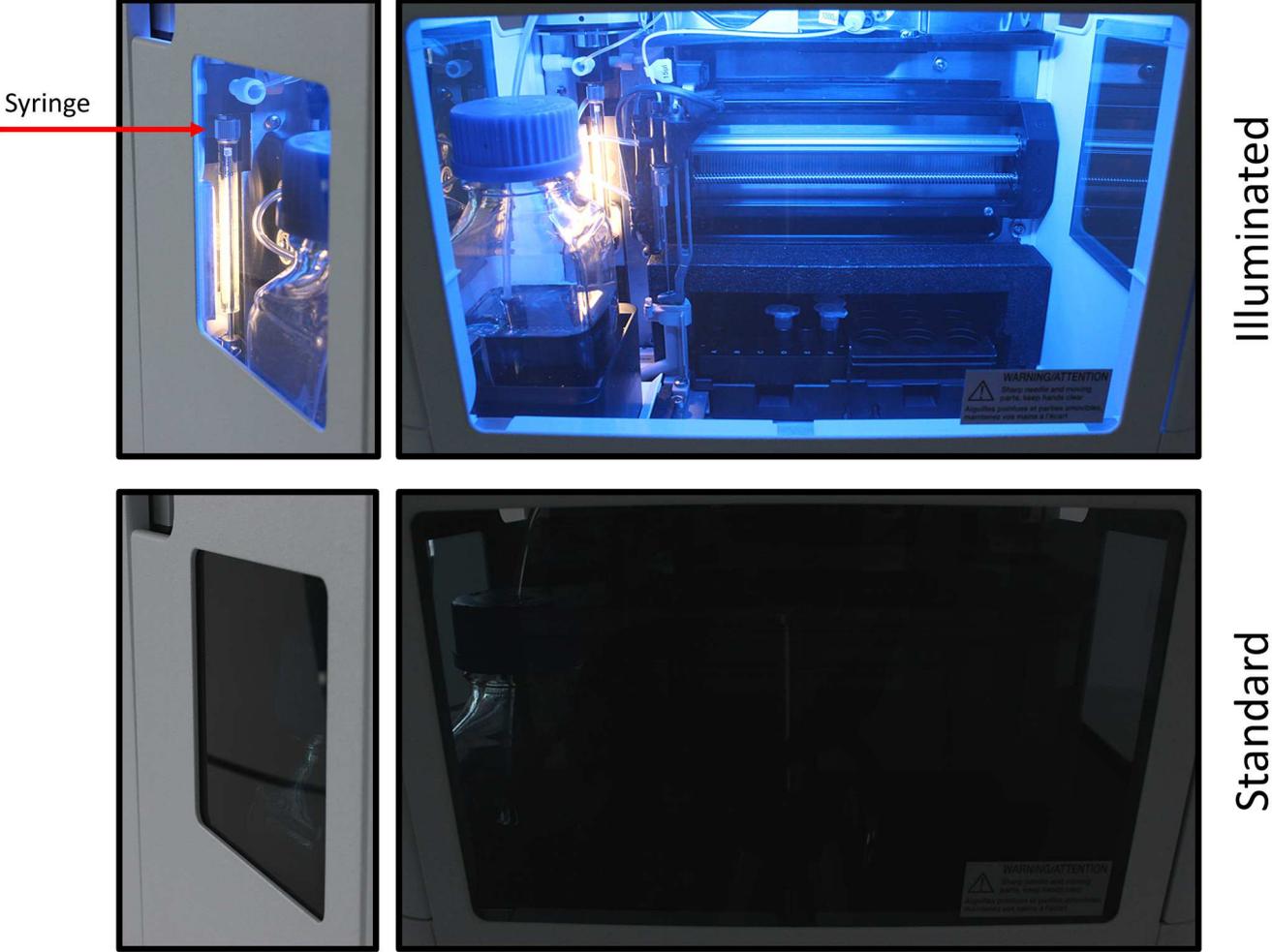


Figure 2: Inside and syringe illumination for air bubble detection in comparison with the ALIAS™ standard model.

ALIAS™ Wireless Software Control via Android Tablet

Although ALIAS™ is one of the most acknowledged state-of-the-art HPLC autosampler, it does not feature a direct user interface. The standard instrument does not have a display or keyboard for its direct control. As a result, the only way to communicate with ALIAS™ is to use a costly and complex control software. This circumstance makes it difficult to combine the instrument to other HPLC systems or modules.

To overcome this Problem SunChrom has developed a wireless dedicated software to control ALIAS™ with a handy 7" Android tablet computer.

The main advantages are:

1. A special developed Bluetooth device allows a cable free communication with ALIAS™ via any Android tablet.
2. Four freely programmable AUX channels that each can be activated twice during an analysis run. Standard ALIAS™ offers only a single "START/INJECTION" contact closure signal. This sometimes makes it impossible to control other HPLC modules using the autosampler as a "Master".
3. A SETUP menu allows to create a personalized instrument with all options of ALIAS™.
4. The user can control or check the whole instrument and its parts manually.
5. After creating a new method, the software will calculate the sample volume needed according to METHOD, instrument SETUP and ALIAS™ firmware.



Figure 3: Main Menu of the ALIAS™ tablet control software

This new and unique feature guides the user and prevents any risk of air injection if the sample volume is not present in the sample vial.

Method Editor of the Wireless Control Software

Figure 4 shows the features of the control software's method editor. All the necessary key parameters that are to run the ALIAS™ autosampler are programmable:

Status: Idle

Method Name:

Injection Type **Wash Mode**

Full Loop Between Samples

Partial Loop Between Injections

uL Pickup Wash Volume: 1 times syringe volume

Injection Volume: 0050 µL

Flush Volume: 0045 µL

Number of Injection: 1

Analysis Time: 0:01:00

Aux	On 1	Off 1	On 2	Off 2
Aux-1(min:sec)	00:00	00:00	00:00	00:00
Aux-2(min:sec)	00:00	00:00	00:00	00:00
Aux-3(min:sec)	00:00	00:00	00:00	00:00
Aux-4(min:sec)	00:00	00:00	00:00	00:00

Save Cancel

- Injection Type (Full Loop / Partial Loop / µL Pickup)
- Wash Mode
- Injection and Wash Volume
- Number of Injections
- Analysis Time
- Auxiliaries for 4 independent channels

Using the programmable auxiliaries the ALIAS™ autosampler can be used as a master device to control your complete chromatography system without the need of a complex HPLC control software.

Figure 4: Method editor window of the ALIAS™ tablet control software

For further information contact us at sales@sunchrom.de or visit us at sunchrom.de