# Alca PLAST®

## **SENSOR SETUP MANUAL**

## 1. Characteristics of the program

Alca IR program is used for setting the parameters of infrared sensors M673D from ALCAPLAST. To set the sensor, it is necessary to have appropriate connecting USB (mini B) cable. If the testing of the valve is required, it is necessary to connect the sensor to a power source according to the type of valve used.

## 2. Program Options

You can use the program to do following actions:

- Set a time constant of the sensor
- Adjust the sensitivity of the sensor
- Activate the automatic functions
- Monitor the total number of splushes and from the defined date
- Test valve function (need to connect power supply)
- Set the parameters of the valve control

### 3. Work with the program

#### 3.1 Installing drivers

Before you run the setup program, you must install the drivers. Installation is required to be done by activating the driver installer.exe (CDM.exe).

(https://www.alcaplast.cz/documents/alcabox/extras/sensor\_software//CDM.exe ). The USB connector is protected by a cap that must be removed and after the work again given back. It is then possible to connect the sensor using the appropriate cable. After connecting the sensor system identifies a new hardware and loads the driver.

Device Driver Installation Wizard				
	Completing the Device Driver Installation Wizard			
	The drivers were successfully in	stalled on this computer.		
	You can now connect your dev came with instructions, please re	ice to this computer. If your device aad them first.		
	Driver Name	Status		
	FTDI CDM Driver Packa FTDI CDM Driver Packa	Ready to use Ready to use		
< Zpět Dokončit Stomo				

#### 3.2 The first start of the program

After previous driver installation and connection of the sensor you can run the setup program AlcaIR.exe. When you first start the program, a dialog box appears displaying the license agreement. Using the program is a subject to the approval of the license agreement.

The license agreement with the end user	\ST®
LICENSE AGREEMENT	E
Software under this license agreement means a program call "software"), used for controlling and setting function of products of together with the software exclusive property trading company Al 25655809, the headquarters of Biskupský dvůr 2095/8, Nové Mě Czech Republic, registered at the Regstration court in Prague, so mailing address Bratislavská 2846, 690 02 Břeclav, Czech incorp law (hereinafter the "provider"). The acquirer is any third person w	led AlcalR (hereinafter alled M673D, which ca plast, sro, ID isto, 110 00 Prague 1, ection C, file 58560, iorated under substantive ho agrees to these terms
I agree with the terms of licence.	
Save Storno	English Česky Slovensky English Deutsch

After approving the conditions it is possible to continue working with the program.

#### 3.3 Sensor settings and parameter descriptions

The program automatically identifies the sensor and displays the connected sensor type and serial number.

🚧 AlcaIR v1.A					<b>– – X</b>
File Sensor Abou	t				
- Information abou	t sensor				
Туре	0	Product	ion number	0	
Version of SW	0	Product	ion date	0	
Control	_			Power supply	
Type of valve		Monostable	-	Choice of power su	pply Power source
Polarity reversals	s [				
Test of valve		Open	Close	- Automatic splush a	fter time
Mode of operatio	n /	ASP4, ASP4	-K, A! 👻	After time [hrs]	0
Sensitivity		Middle100cr	m 🔻	Splush duration [s]	0
Timing				Automatic splush a	fter count
Start time of regi	stration [s]		0	Number of splushe	s 0
Stop time of regi	dtration [s]		0	Splush duration [s]	0
Splush duration	[s]		0	Splush delay [s]	0
Pre-rinse [s]			0	-Number of splushe	S
After-rinse [s]			0	Total	0 Reset
After-rinse delay	[s]		0	From date	0 0
Signalling LED;				Choice of profile	
Mode of signaling	g	Flash	•	Factory setting	ASP3 -
AlcaPlast (C) 2017	7				

Displaying of above mentioned data is a sign of good reading and driver recognition of the sensor by the operating system. From this point it is possible to read and write parameters of the sensor. Reading the parameters can be done by selecting **Sensor/Read Sensor**. User access parameters are set in the main window, which is divided into several sections. Bottom status bar shows the progress of data loading and after loading also supply voltage.

🛶 AlcaIR v1.A		
File Sensor About	_	
-Int Read sensor	]	<b>k</b>
Ty Write sensor	Production number	0
Ve Service setting	Production date	
Control		Power supply
Type of valve	Monostable 👻	Choice of power supply Power source -
Polarity reversals		
Test of valve	Open Close	Automatic splush after time
Mode of operation	ASP4, ASP4-K, A! 👻	After time [hrs]
Sensitivity	Middle100cm 👻	Splush duration [s]
Timing		Automatic splush after count
Start time of registration [s]	0	Number of splushes 0
Stop time of regidtration [s]	0	Splush duration [s]
Splush duration [s]	0	Splush delay [s]
Pre-rinse [s]	0	Number of splushes
After-rinse [s]	0	Total 0 Reset
After-rinse delay [s]	0	From date 0 0
Signalling LED;		Choice of profile
Mode of signaling	Flash 👻	Factory setting ASP3 -
AlcaPlast (C) 2017		

#### 3.3.1 Section "Information about sensor"

This section contains information that can not be changed by this program. These data were entered during the production of the sensor. It is the type, serial number, software version and date of manufacturing.

#### 3.3.2 Section "Control"

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Here you can set the values of the basic sensor functions:

- Valve type - Displays the type of solenoid valve at which the sensor is programmed. Bistable - It is a valve designed for the battery operation, which is controlled by two short pulses with opposite polarity.

**Monostable** – A valve which is necessary to permanently charge during opening. It is used when the power is supplied.

- **Polarity reversals** If the valve closes instead of opening and vice versa, this can be eliminated by checking this box.
- **Test of valve** By clicking on the appropriate button it is tested opening and closing the valve.
- Mode of operation Displays the basic function of the sensor.

- ASP4, ASP4-K, ASP4-KT Urinal with monostable valve (12V AC power supply). Opens according to preset duration with a defined delay, or the pre-rinsing and after-rinsing are used.
- ASP4-B, ASP4-KB- Urinal with a bistable valve (6V battery power supply)Opens according to the preset duration with a defined delay,<br/>or the pre-rinsing and after-rinsing are used.
- ASP3, ASP3-K, ASP-3KT Toilet splush with a monostable valve (12V AC power supply). Opens according to the preset duration with a defined delay.
- ASP3-B, ASP3-KB, ASP3-KBT Toilet splush with a bistable valve (6V battery power supply). Opens according to the preset duration with a defined delay.
- M279S, M37OS, M371S Toilet splush with a monostable valve (12V AC power supply). Opens according to the preset duration with a defined delay.

M279SB, M370SB, M371SB - Toilet splush with a bistable valve (6V battery power supply). Opens according to the preset duration with a defined delay.

**Sensitivity -** This element sets sensor reach (Low ... 50 cm, Central ... 100 cm, High ... 200 cm) at three levels. In each stage it is possible to tune to the specific lighting conditions of space in which the sensor is installed by the trimmer implemented on sensor body. The setting affects power of IR LEDs and thus has an impact on battery life.

#### 3.3.3 Section "Timing"

In this section are set timing parameters of the sensor.

- **Stop time of registration** Time period during which it is possible to pass before the sensor without registration of the person by the sensor.
- **End time of registration** Delay of pre-rinse (if enabled) from the registration time of the person.
- **Splush duration** Duration of the main splush.
- **Pre-rinse** The duration of the pre-rinse.
- After-rinse The duration of the additional rinse after the main splush. Setting value 0 deactivates the function.
- After-rinse delay Delay of additional rinse after the main splush.

#### 3.3.4 Section "Signalling LED"

Mode of signaling - Sets LED signals during person registration.
Off - LED signaling during registration of a person is permanently deactivated.
Flash - LED flashes when registering a person in the interval of one second.
Permanent shine - LED permanently illuminates when registering a person.

#### 3.3.5 Section "Power supply"

- Displays the type of power supply for which is the set (valve - sensor) intended.

#### 3.3.6 Section "Automatic splush after time"

In this section is set the automatic splush if the defined time period from the last splush has passed.

- **After time** Time in hours from the last splush to performe automatical splush. Setting value 0 deactivates the function.
- **Splush duration** The duration of the auto splush.

#### 3.3.7 Section "Automatic splush after count"

The sensor having enabled this feature adds an additional splush after defined number of splushes.

- **Number of splushes** determines after how many splushes to perform an additional automatic splush.
- **Splush duration** The duration of the auto splush.
- **Splush delay** An extra delay time of the addtional splushing after normal splush.

#### 3.3.8 Section "Number of splushes"

- **Total** it shows the number of splushes from the sensor production date.
- From day Shows the number of splushes since the last reset. Button Reset resets the counter and writes the sensor current date.

#### 3.3.9 Section "Choice of profile"

When doing unwanted changes to the sensor settings you can quickly return to the factory settings by selecting one of the predefined profiles.

After setting the required values, you can save them by selecting item from the main menu. **Sensor / Write Sensor**. The setting procedure is indicated by the green indicator on the bottom status bar.

After successful writing there appear signaling LED flashes on the sensor. In case that the LED does not flashes you have to repeat the writing.

🚧 AlcaIR v1.A		
File Sensor About		
Int Read sensor		
Ty Write sensor	Production number	er O
Ve	Production date	
Control		Power supply
Type of valve	Monostable 👻	Choice of power supply Power source -
Polarity reversals		
Test of valve	Open Close	Automatic splush after time
Mode of operation	ASP4, ASP4-K, A! 💌	After time [hrs]
Sensitivity	Middle100cm 👻	Splush duration [s]
Timing		Automatic splush after count
Start time of registration [s]	0	Number of splushes 0
Stop time of regidtration [s]	0	Splush duration [s]
Splush duration [s]	0	Splush delay [s]
Pre-rinse [s]	0	Number of splushes
After-rinse [s]	0	Total 0 Reset
After-rinse delay [s]	0	From date 0 0
Signalling LED)		Choice of profile
Mode of signaling	Flash 🔹	Factory setting ASP3 -
AlcaPlast (C) 2017		

#### 3.4 Service setting

Service settings are available by selecting **Sensor / Service setting** from the main menu.

🛶 AlcaIR v1.A			
File Sensor About			
Int Read sensor	1		•
Ty Write sensor	Production numb	oer 0	
Ve	Production date	0	Alcave
Control		Power supply	
Type of valve	Monostable -	Choice of power supply	Power source 👻
Polarity reversals			
Test of valve	Open Close	Automatic splush after ti	me
Mode of operation	ASP4, ASP4-K, At 👻	After time [hrs]	0
Sensitivity	Middle100cm 👻	Splush duration [s]	0
Timing		Automatic splush after c	ount
Start time of registration [s]	0	Number of splushes	0
Stop time of regidtration [s]	0	Splush duration [s]	0
Splush duration [s]	0	Splush delay [s]	0
Pre-rinse [s]	0	Number of splushes	
After-rinse [s]	0	Total	0 Reset
After-rinse delay [s]	0	From date	0 0
Signalling LED		Choice of profile	
Mode of signaling	Flash 👻	Factory setting	ASP3
AlcaPlast (C) 2017			

These settings are password protected and is not appropriate to change under normal operating conditions. They have an impact on energy consumption and inappropriate setting shorten operating time while on battery power.

🚧 AlcaIR v1.A				
File Sensor Abou	t			
-Information abou	t sensor			
Туре	0	Production number	0	
Version of SW	0 Ser	vice settings	×	Alca <sup>v</sup>
Control Type of valve Polarity reversals	3	Password	ОК	y Power source 🔹
Test of valve Mode of operatio	n	Bistable valve timing		r time
Sensitivity		Duration of opening pulse [ms]		0
Timing		Duration of closing pulse [ms]	- UU	r count
Start time of regi	stration [s	Battery		0
Stop time of regi	dtration [s	Voltage shutdown [mV]	171 *	
Splush duration	[s]	Scanning		0 🗐
Pre-rinse [s]		Scanning interval [s]	0.0	
After-rinse [s]				0 Reset
After-rinse delay	[s]	Save	ancel	0 0
- Signalling LED)				
Mode of signaling	و ر		ry setting	ASP3 •
AlcaPlast (C) 2017	7			

#### 3.4.1 Section "Password"

Password - 12345678

#### 3.4.2 Section "Bistable valve timing"

- Duration of opening pulse Sets the opening duration of the bistable pulse valve.
- Duration of closing pulse Sets the closing duration of the bistable pulse valve.

#### 3.4.3 Section "Battery"

- Voltage shutdown - setting the voltage level at which the battery sensor evaluates as discharged and stops.

Improper setup threatens that after opening the valve there may not be enough energy left in the battery on his resealing.

#### 3.4.4 Section "Scanning"

**Scanning interval** - Sets the interval between pulses IR LED and affects the response time of the sensor to the incoming person.

Saving settings must be done by clicking on the button **Save** and then selecting from the main menu **Sensor / Write Sensor**.

le Sensor About				
Open file				
Save file	Production	number		R.
Language 🕨 🕨	Česky			
End Alt-F4	Slovensky			<b>C</b> d'
Control	Englisch	- h	Power supply	
Type of valve	Deutsch		Choice of power supply Power s	ource 🔹
Polarity reversals	Русский			
Test of valve	Polski		Automatic splush after time	
	Magyar			
Mode of operation	Românesc		After time [hrs]	0
Sensitivity	Middle100cm	-	Splush duration [s]	0
Timing			Automatic splush after count	
Start time of registration [s]		0	Number of splushes	0
Stop time of regidtration [s]		0	Splush duration [s]	0
Splush duration [s]		0	Splush delay [s]	0
Pre-rinse [s]		0	Number of splushes	
After-rinse [s]		0	Total 0	Reset
After-rinse delay [s]		0	From date 0	0
Signalling LED;			Choice of profile	
Mode of signaling	Flash	•	Factory setting ASP3	•

#### 3.5 Main menu item "File"

**Open File** - through this entry you can load a saved configuration from a file.

- **Save File** saves the current sensor parameter settings to a file.
- Language enables to change the language. Settings will be stored even after the end program.
- **End** terminates the program.

#### 3.6 The main menu item "About"

Displays information about the purpose of the program and the license agreement.

AlcaIf	R v1.A
File Se	ensor About
Infe Tyr Vei Coi Tyr	About About About About About Revealed a PLAST ®
Po Tes	AlcalR is a program for configuration of the IR sensor AlcalRv1 and M673D.
Mo	
Se	=
Tin	LICENSE AGREEMENT
Sta Sto Sp	Software under this license agreement means a program called AlcalR (hereinafter "software"), used for controlling and setting function of products called M673D, which together with the software exclusive property trading company Alca plast, sro, ID 25655809, the headquarters of Biskupský dvůr 2095/8, Nové Město, 110 00 Prague 1,
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Απ	
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Signa Mode	e of signaling ED Flash
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