Brief Instruction



Software AJWin from Version 4.0.0

© 09/2019 EN iret GmbH Paul Engelhard Weg 50a D-48167 Münster

 ☎
 +49.251.615138

 □
 +49.251.617631

 E-Mail
 info@iret.de

 Internet
 www.iret.de



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1 Introduction

1.1 What is AJWin

AJWin is a Windows software to create, manage and transfer print texts to an industrial continuous inkjet printer of type alphaJet-C, Evo, Into and others. Except the service functions the AJWin software can substitute nearly all functions of the printer terminal.

One of the main features of AJWin is that the print texts are independent of the actual printer: normally a print text can be used without changes for any printer of type alphaJet-C or Evo.

With additional modules the AJWin software can be connected with other IT- or production control systems of the customer.

1.2 The use of Existing Print Texts

Print texts that have been created directly on an alphaJet-C or Evo/Into printer can be used with AJWin after importing them into AJWin database.

Note!

The details of copying and importing of print texts is subject to chapter 6 of the user manual.

1.3 AJWin Limitations

The current version of AJWin has the following limitations:

- 1. There is no easy way to to make a complete printer backup/restore.
- 2. The current version of AJWin has no logo (symbol) editor included. Logos have to be prepared either with cGraphic software (mlg-format) from KBA Metronic or with an external software like paint (Windows bmp files).
- 3. It is not possible to use excel files as a database for complex print texts, although AJWin can use excel files as a source for single data fields.
- 4. For the alphaJet-Evo printer no service functions are provided.

2 Installation

2.1 Installation of AJWin Software

The installation is carried out similar to other standard Windows programs and for this reason only two things are pointed out here:

2.1.1 The Selection of the Installation Directory

15 Setup - ajwin
Select Destination Location Where should ajwin be installed?
Setup will install ajwin into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\iret\ajwin Browse
At least 34.9 MB of free disk space is required.
< Back Next > Cancel



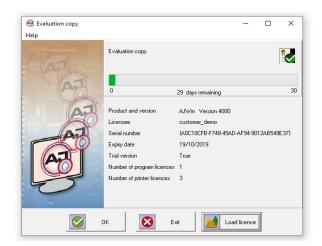
Note!

At this point you can select a directory on a network drive.

- This makes sense when different PC's shall work with the same print texts
- The base installation is done on only one PC or server.
- On all other PC's a desktop link to the ajwin exeutable file is sufficient.

2.2 Licensing

During program installation, a temporary demo license is automatically activated. When starting AJWin, the remaining time and further details of the demo license are displayed.



In the lower part of the window there are three buttons with which the further course of AJWin is controlled:

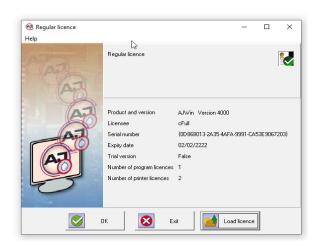
Function	Description		
Button: OK	Continue with loaded license.		
Button: Exit	Exit program. Note: If the licensing dialog is opened from the running program this button is deactivated in order not to end the program accidentally.		
Button: Load license	Opens a dialog for loading a license file.		



Hint!

If you have purchased an unlimited license from AJWin, you have received a "license.zip" file in addition to the setup files. This file contains the unlimited license, which you can install now or at a later date.

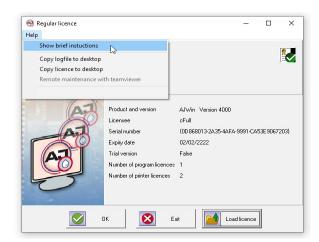
To do this, press the "Load licence" button, navigate to the "license.zip" file in your file system and load it. If the license was successfully installed, the following message appears:



After installing the unlimited license, AJWin will start without the license dialog.

Under the menu item "Help" you will find further information / help for licensing AJWin.

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Function	Description	
Show brief instructions	Shows this document. A pdf-reader must be installed.	
Copy logfile to desktop	Copies a logfile of the previous program run to the computer desktop. This function is mostly for maintenance purposes.	
Copy licence to desktop	Copies the licensing informationto the desktop.	
Remote maintenance with teamviewer	Starts remote maintenance (teamviewer).	

If the program is protected with a dongle, it must be plugged into a free USB port of the PC. If the dongle is not connected, an error message appears. In this case, please exit the program (button "Exit"), insert the supplied dongle into a USB port and restart the program.



Via the menu item <Help / Load license> in the main menu of AJWin a new licence can be loaded at any time. However, a license can only be replaced by a higher license. Thus a temporary demo license can be upgraded to an unlimited full version. However, it is not possible to extend the trial period by installing a further demo license.

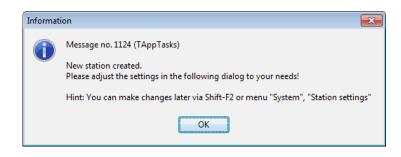
2

😪 AJWin [4.2.1] [VM305]				
System Edit View Pri	nt texts Administration	Extras	Hel	p
<u>×</u>			٠	Show manual
VM305		<u> / </u>	1	Show brief instuctions
	-			System information
Standard-AJC-COM1	Item number	TE		Remote maintenance with teamviewe
			ŝ	About ajwin
Text ???	Short term			Save list of error messages
State unknown				Load licence

3 The First Startup

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When first starting AJWin a number of dialog boxes with the most important settings for your PC will appear (in this case the PC is referred to as a "station").



Confirm with "OK".

3.1 Notes for a Basic Configuration

In this dialog some basic properties of AJWin are configured. When you first start AJWin you should only configure the "Main window" and the "Language". All other settings can be adjusted later (see user manual chapter 5.4)

🛞 Station Settings	;				
Base settings	Operation	modes	Path	Preview images	
Station/Compu	uter Name	TEST-F	°C		
Machine numb)er	001			
Auto Logon		Admin			•
Language		en_EN			•
Main window		Single p	orint job		•
		 ✓ 	ок	X Cancel	

Main window option	description		
Single print job	 This is the default value! The main window shows exactly one print text. Typical application: The PC is always connected to the printers. The operator selects the current print text at the PC: 		
Item list processing	 The display of the printer is only used for maintenance. The main window contains a list with several different print texts. Typical application: Several print texts have to be sent at the same time. They are stored 		
Multiple printhead application	 permanently in the printer. The operator selects the actual print text at the display of the printer. The main window shows two or three print texts for every article number. 		

Main window option	description		
	Typical application: • Pharmaceutical industry where one box needs multiple printouts		
Customer application	Must not be used without explicit permission from a service technician.		

3.1.1 Add a Printer

3.1.2 Immediately after Installation

Confirm	ı 🔀
2	Message no. 1145 (TAppTasks) Do you want to add an printer to the new station? Yes No

You see this dialog at the initial configuration of a station. When you confirm with "Yes" a list of predefined printers is shown, see also chapter 3.2.

3.1.3 From Main Window

The list of printers configured for use at this PC is shown at the left side of the main window.

To add a new printer open the context menu of the station (right mouse button) and select "add printer" to show you a list of all printers available (see chapter 3.2).



3.2 Select and Edit Printers

After the selection of a printer (picture 1) you can change the communication parameters with the button "edit" (picture 2).

For a detailed description see chapter 5.2 in the user manual.

🚱 Manage printers					
Search: New Edit Delete					
Printer name	Printer model	Color of ink Type of ink Nozzle 🔺			
Standard-AJC-COM1	AlphaJet-C				
Standard-AJC-COM2	AlphaJet-C				
Standard-EVO-TCP	alphaJET evo	E			
		-			
K					
	✓ ОК	ancel			

With the buttons "new" and "edit" you get the printer settings. After selection of the printer type (tab "Base settings") you have to configure the communication.

🚱 Printer settings	
Base settings Communication	Shaft encoder Print trigger I/O Options
SystemID Printer ID and Head Interface	P A 1 • COM 1 •
Baud rate Parity	38400
IP-address / hostname	127.0.0.1
Port for receiving data	4001
Port for sending data	4001
	✓ OK X Cancel

Note!

When configuration is finished, both dialogs must be closed with "OK", to see the printer in the main window.

3.3 Logon to the Software

🚱 Please login	
Username	Admin
Password	boook
🗸 ОК	🗶 Cancel

For the first login you should type

- User name: Admin
- Password: didu

Create and Edit Print Texts

4 Create and Edit Print Texts

4.1 Create a New Print Text

If you want to make a new print text you must create one first:

- In the "Item list" main window use the buttons on the right side of the main window (see user manual chapter 3.11).
- In the "Single Print Job" or "multiple printhead application" main windows you can create a new print text either by using the menu "Print Texts" or through the "Product Overview" (also see user manual chapter 7.6.1)

After you created the print text you can edit it.

4.2 Insert, Move and Edit Objects

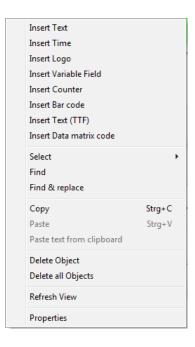
At the bottom of the program window there is a white area which is used to display the print text.

here 10mm 20mm 30mm 40mm 50mm 70mm 70mm 80mm 90mm 100mm 110mm 120mm 130mm 130mm



The print text is a selection of various objects (text, logo (symbol), barcode and others):

• By clicking the right mouse button, you open a menu that is used to create new objects. Before selecting a menu item the according dialog box will appear (see user manual chapter 4.2.1).



- An existing object can be changed by double clicking the object.
- When you want to move an existing object, click and hold the left mouse button over the object and then move it to a new position.
- Objects can be moved pixel by pixel using the arrow keys. (Left click to select then move)
- Multiple objects can be moved or deleted simultaneously. To mark multiple objects, click on each object while holding the CTRL-key pressed.

To edit a print text a new dialog box will appear, that means no print texts can be edited directly in the print text display area.

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Please note

- A print text should always start at the bottom edge to ensure that maximum printing speed can be achieved.
- In order to freely place objects you must deactivate the "Auto arrange" option. If necessary you may also need to select a smaller grid size then 8. (see also chapter 7.4 in the user manual)

4.3 An alternative for Prompted Fields

In AJWin these fields are named "variable fields", they have extended capabilities. In contrast to the alphajet the variable fields have to be declared before using them.

🚱 Manage Variable Fields				×
Search		<u>N</u> ew Edit	<u>D</u> elete	
Displayname	Fieldlength	Default value	VarValue	(^
Machine-number	4	0001		0 1
Personnel-number	4	0815		0 /
				H
•				T.
	🗸 ОК	X Cancel		



Note!

Variable fields are described in detail in the user manual.

5 Notes on Printout Configuration

5 Notes on Printout Configuration

5.1 Managing Configurations

Every print text has some additional settings associated. These settings are called the configuration, and they affect various aspects of the printout, e.g. density of strokes, orientation and maximum printing speed.

Managing configurations with AJWin differs from what alphajet-C and Evo users may expect:

- Every print text has its own configuration
- The selected print mode is part of the configuration
- The configuration values are widely independent from the printer model
- Settings concerning adjustment (shaft encoder) and product sensor are stored with the printer and not together with the configuration
- The expected length of the printout is stored with every print text

Some details of this concept are explained in the following sections.

5.2 Configuring Print Mode

The print mode is stored with every print text and is a result of "print height" and "print quality". The native print mode is determined not before sending the print text to the printer.

Example: print height "7 Pixel", "high quality"

- \rightarrow results in print mode "1g" for the alphajet-C
- \rightarrow and for Evo in PM_B15 or PM_15" (depending on model)

🚭 Configuration settings		
Base settings Print trigg	er D)istance measurement (WSM)
Printing guality		2 - standard 🗸 🗸
Finning quality		
Print height		48 pixel 🗸 🗸
Resulting printing mode		6g

5.3 Adjustment of the Encoder

The encoder settings are stored with the printer parameters. The given values are the base for calculating the length of the printout.

🚱 Printer settings	
Base settings Communication Shat	tencoder Printtrigger I/O
Shaft encoder phases ⊚ internal	
Invert encoder phases	
Circumference measuring wheel [m	213
Shaft encoder pulses/rotation	5000
Resolution (AJC)	106
Print orientation	↓*UBC - Upside down ▼

5.4 Setting the Print Length

For every print text the expected length is set in the main window:

printed Desired	l <u>ength</u> I ∨alue [mm]	60		Actua	al value [mm]	61	.15
) Dmm	10mm	20mm	30mm	n 40mm	n 50mm	60mm	70m
		۳		11	<u>co</u>		
Pr.	Int	16	2ny	τn	60 m	n m	

Besides the desired length you see the actual length which depends on the type of printer and its encoder values.



Technical note

Internally AJWin only uses the distance between two strokes instead of the total length of the printout. Thus the print length is automatically adjusted when the print text changes.

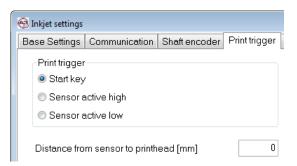
The resulting distance between two strokes is shown in the configuration:

	Stroke distance [mm]	0.3000	*	resulting divisor 29
--	----------------------	--------	---	----------------------

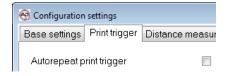
5.5 Setting Print Trigger

How the print is triggered is determined at two different places: "printer settings - print trigger" and "configuration - print trigger".

• In the printer settings you select if a product sensor is installed or not



• In the configuration you select for every print text if autorepeat is on or off.



Mode AJC / Evo	AJWin: printer settings	AJWin: configuration	
continuous	Start key	autorepeat on	
repetition	sensor active high / low	autorepeat on	
start key	Sstart key	autorepeat off	
product sensor	sensor active high / low	autorepeat off	

5.6 Setting Print Distance

In AJWin there are two parameters for the print distance:

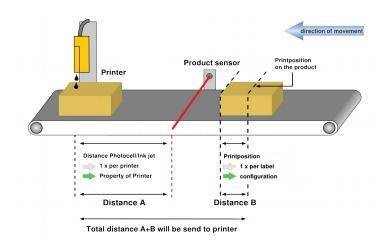
- The distance between product sensor and printer: this value is given by the mechanical installation of printhead and product sensor.
- The position of the printout on the product: this value is given by the customers request where the print is placed on the product.

When sending the print text to the printer these two values are added together and stored in the parameter "print distance" of the alphaJet.

Using two values instead on one has the following advantages:

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- When mechanical installation changes, the first value must be set only once and not for every product.
- The print text can be used without changes on different production lines.



6 Sending Print Texts to the Printer

6 Sending Print Texts to the Printer

6.1 General

To send a text first select the printer and then click on the button "Send". Before the transmission starts you will be prompted for the actual content of all variable fields used in the print text.

🔞 FormMainSingleRepeat	-
System Edit View Pri	int texts Administration Extras Help
≥ DESKTOP-OJ9S3JE	
STANDARD-AJC-COM1	Item number Test-2
Text 0000	Short term
State Ready to print	Any taking Tost wird im Abstand 1000mm and yelt / Label will be printed with
Counter 209	Annotation Text wird im Abstand 1000mm gedruckt / Label will be printed with 1000mm distance
STANDARD-EVO-TCP	
STANDAND-EVO-TCP	
Text ???	Release statue 0 - new ~
State unknown	
Counter · 1	Counter at start 0 - nothing -
	Color of ink - Nozzle (µm) 0 -
	printed length Desired value [mm] 50 Actual value [mm] 50.84 Strokes (total): 154
	10mm 20mm 30mm 40mm 50mm 60mm 70mm 80mm 90mm 100mm 110mm 120mm 130mm 150mm 150mm
	50mm text text
	F2 F3 F4 F5 F6 F6 Counter 0 F8 F11 F12 Copy
???	Position:

After transmission has finished the following data should appear on the printer:

- 1. A new print text
- 2. A configuration with the same name as the print text
- 3. For alphajet-C you find transmitted logos on the ram disk (see chapter 7.1)



Take care!

Sending a print text will interrupt a running printout

- This can result in wrong printouts
- Be sure the printer is not in use while sending print texts

6.2 Common Settings for Transmission

Many customers have their own ideas how the print texts are named on the printer, therefore you can choose between some variants in the station settings.

Station Settings					
Base settings Ope	ration modes	Path	Preview images		
-Names for labels-			-Delete old label	s in printer-	
 Create automatically 			⊙ no		
 Short name 			 Only current label 		
Oltem number			O Delete all labels		
O Position in item	list		O Ask everytim	e	

Typical settings are:

- Create automatically: the names are consecutively numbers (0000, 0001...)
- Item number: the same name as in AJWin

6.3 Copy Print Texts on an USB Flash Drive

Since AJWin version 3.6.4 you can save print texts for an Evo printer in an directory of choice (e.g. an USB drive). You do this in the same way as if you send the text to the printer, but you the communication interface has to be of type "FILE".

🗑 Printer setti	ings					
Base settings	Communication	Shaft encoder	Print trigger	1/0	Options	
SystemID		P				
Printer ID and	l Head	A 1 💌				
Interface		FILE	~			
Baud rate		38400	~			
Parity		2 - even (gerac	le) 🗸			
IP-address / ł	nostname	192.168.1.169				
Port for receiv	ving data	3000				
Port for sendi	ng data	3000				
Data directory	/	K:\				
		🗸 ок	× c	ancel		

At transmission two subfolders are created in the data directory:

- in the subfolder "Label" all print texts are stored
- in the subfolder "Config" the configurations are stored

Tip

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The data directory can be a located on a hard disk drive but may also be:

- an USB Flash Drive
- an UNC path to a location on a network drive (i.e. <u>\\printer1\user</u>)

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7 Logos and Fonts

7.1 Logos on alphaJet C

When transmitting a print text AJWin will copy all logos for this print text to the ramdisk of the printer. The ramdisk is used because the number of write accesses on the flash drive is limited.

Normally the logo files are consecutively numbered and have not the same names as on the PC.



Take care!

After restarting the printer the print text has to be send again, because any logo file on the ram disk is lost during restart.

7.2 Logos on alphaJet evo

At transmission to alphajet-Evo a logo is not stored as a separate file on flash- or ramdisk but it is directly embedded into the print text.

7.3 Fonts

AJWin exclusively uses fonts in metronic alphajet-C format (MFT format), the TTF fonts of the evo are not supported natively. This has the following consequences:

- On the screen of your PC you see the alphajet-C font.
- You can not simply copy a TTF font to the printer and use it on the PC, because the font also has to be present on the PC as an MFT-font.

Note!

A print text with an unknown font is displayed as a blue rectangle in AJWin.

7.3.1 Installation of custom MFT fonts

For the representation in AJWin you only have to copy the font to the directory "ajwin font" and restart AJWin.You can transmit the font to the printer with the function "Extras" - "Copy files" - "Copy fonts to printer".

7.3.2 Mapping of MFT fonts to TTF fonts

Normally you can use all standard fonts that are present in MFT format, because KBA Metronic provides TTF fonts with the same name. For technical reasons there are some exceptions to this rule and AJWin maintains a translation table:

AJC-Font	Evo-Font	
A15x12	A15x11	
A23x15	A24x15	