

# Coffee Machine Zia 1.000 series

**Instant** 

**User Manual** 

User Manual EN



Picture: Zia 1.000 series



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The machine supplier/ dealer is:
Company name: Address: Area code - City: Country: Telephone:
Fax:  Internet: e-mail:
For service and support, always contact the dealer / supplier of the machine by using the telephone service number below.
Tel. Service Number:

#### **Preface:**

- Carefully read this instruction manual before you operate the machine.
- Keep this manual in a safe place for possible later reference.
- The manual cannot be regarded as a replacement for the training and instruction, but must be seen as an addition to the training, and as a reference work.
- This user's manual is valid for the machine supplied by the manufacturer, including the options installed by the manufacturer. The manufacturer accepts no liability for any damage resulting from incorrect or improper use of the machine, or resulting from modifications that have not been authorized by the manufacturer.
- This manual gives instructions on the operation and maintenance of the machine.
   Moreover, it gives solutions to simple malfunctions that may occur. The instructions in
   some paragraphs are meant only for persons who are trained in the operation and
   maintenance of the machine.
- Besides this manual, a technical manual is also available.
   This technical manual gives directions for solving machine malfunctions and repairing the machine.
- For instructions on the installation of the machine, a separate installation manual is available.
- Always use original parts from the manufacturer when the machine needs to be repaired.
- Only properly trained personnel may carry out repairs, install the machines, or transport the machines.



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# 1. Safety

# 1.1 Safety and Risk levels:

Four safety and risk levels are used in this manual. The risk levels and explanations are described below.

	Danger:	To warn persons / readers about the possibility of serious or fatal injury to themselves or others.
<u> </u>	Warning:	To warn persons / readers about the possibility of minor injury to themselves or others.
<u>^</u>	Caution:	To warn persons / readers about possible damage to equipment or data or about potential problems in the outcome of what they are doing.
	Note:	To emphasize points or remind persons / readers of something, or to indicate minor problems in the outcome of what they are doing.



# 1.2 Safety and Warnings

The general safety warnings apply to the entire document. The risk level associated with the explanation below.

$\wedge$	Danger:	Do not use water in or near the machine unless the instructions contain explicit directions to the contrary.  Risk of electrocution when water comes in contact with internal electrical parts.
<u></u>	Jungen	HOT water! The water system (boiler, pipes, etc.) may contain hot water Risk of burning when HOT water comes in contact with a person that can cause a scalding injury.

$\wedge$	Warning:	Do not shake the machine while in use.  Risk that machine can tip and fall.  Risk of electrocution when water comes in contact with internal electrical parts.
		Do not lean on the door when open. Risk that machine can tip and fall.

		Do not use aggressive cleaning products or abrasives to clean (parts of) the machine.
	Caution:	<b>Do not use a damaged machine.</b> Please contact your supplier
		If a fault occurs, disconnect the machine from the
		electrical and water supplies.
		Please contact your supplier immediately.

		Keep this manual near the machine, so the manual is immediately available.
$\triangle$		Use the machine only in areas where trained personnel can monitor the operation.
	Note:	Damaged water connection tubes may only be repaired by trained personnel.
		The water connection must conform to local regulations.
		Do not use an extension cord.



#### 1.3 Standards and norms:

The machine is build according to CE norms

The machine complies with the following standards:

- Machine standard: 89/392/EEG
- EMC standard: 89/336/EEG,

The machine complies with the following norms:

- EN 292: safety of machines.
- UL and cUL 751: norm vending machines (only if sign is on type plate)



# 2. Description of the machine:

#### 2.1 **General:**

	Hot drinks are dispensed from the machine Take care to avoid scalding yourself.
	If cups or jugs are not correctly placed The machine will spill hot liquid down the front. This can cause serious burns.
Warning:	The outlet of the machine may occasionally drip hot liquid even when the machine is not in use.  When the hot water comes in contact with a person, this can lead to serious burns.
	The water system (boiler, tubes etc.) contains hot water with a temperature close to the boiling point <100 °C.  When the hot water comes in contact with a person, this can lead to serious burns.

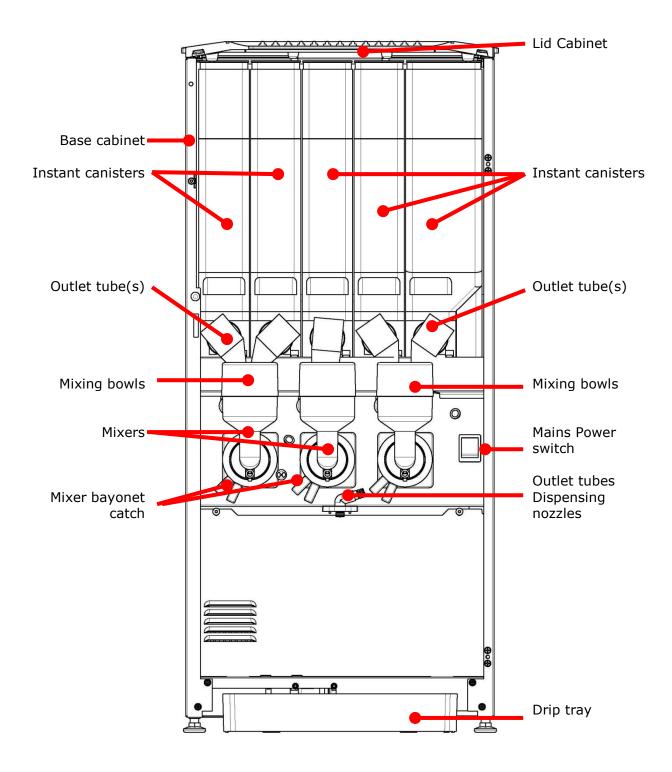
The machine is a compact semi-automatic machine for the preparation and vending of hot drinks. Your supplier can adjust the taste and sizes of the drinks.

#### 2.2 The front of the machine:

The machine can be operated using the operating panel on the door. By pushing one of the selection buttons on the screen, a product choice can be made. Before you dispense a beverage, a cup must be placed under the tap.



#### 2.3 **Overview of the machine interior:**





# 2.4 Type plate:

The type plate is mounted on the inside of the machine, at the top left. The following data is mentioned on the type plate:



WWW.DEJONGDUKE.NL SLIEDRECHT, NL MADE IN HOLLAND

Serial nr.: 2012422124001

Type: 9CNDP202A1AH00

Model: Zia 8.224 [a] CoEx® [bean2cup]

230V a.c. / 50Hz / 2.9kW

Date: October 2012

Line Pressure: 0.05 - 0.6 MPa (0.5 - 6.0 bar)







Remark: data on type plate differs based on model.

- Name of manufacturer
- Serial number
- Type/model specification
- Model specification
- Mains power specification
- Production date
- Water connection specification

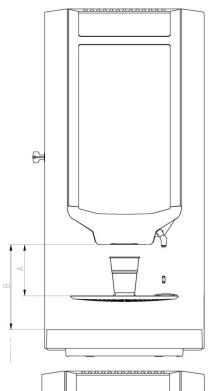


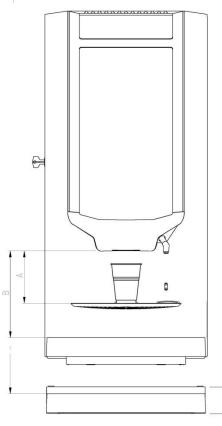
# 2.5 **Technical specifications:**

Dime	nsions of the machine:						
	Height:		mm			31.2	in
	Width:	370	mm			14.5	in
	Depth:	530	mm			20.9	in
Weigh	nt (empty):		7 ~ 41 ~ 90.4	Kg lb.	-	/- 10 /- 10	% %.
Electr	icity						
Liecti	Mains supply (Europe):	230	V AC		_	/- 10	%
	F	50 ~ 60	Hz			/- 2	%
	Max. capacity:		kW		' /		70
	Mains supply (North America):	115	V AC		+.	/- 10	%
	Frequency:		Hz			/- 2	%
	Max. capacity:	1.2	kW		,		
Water	r pressure:						
	Minimum pressure:	90	kPa		(0	,9 bar)	
	Maximum pressure:	600	kPa		(6	,0 bar)	
	Water connection:	3/4	BSP c	onne	ection		
Sound	d pressure:	< 70	dB(A)	)			
Ambie	ent temperature in storage:	+ 5	°C	~	+ 50	°C	
	ent temperature in operating:	+ 5		~		°C	
Optio	nal:						
	nsions of the Base Cabinet:						
	Height:	850	mm			33.5	in
	Width:	370	mm			14.5	in
	Depth:	530	mm			20.9	in



# 2.6 Measure of cup and jug heights:





#### **CUP**

Max cup diameter:	85	mm	3.34	in
Measure A: Mounted default Max cup height:	110	mm	4.33	in
Mounted low Max cup height:	125	mm	4.92	in
Mounted high Max cup height:	95	mm	3.74	in

Min height:

Able to receive a volume of consumption

#### JUG

Max Jug diameter:	135	mm	5.31	in
<b>Measure B:</b> Max jug height:	190	mm	7.08	in
Optional: With higher machine	elevat	tion uni	t for jugs	5.

Measure D is:	60	mm	1.97	in
Measure B:				
Max jug height:	250	mm	9.84	in
Measure D is:	120	mm	4.72	in
Measure B:				
Max jug height:	310	mm	11.81	in

# Min height:

Able to receive a volume of consumptions.



#### 3. Before use:

#### 3.1 **Installation:**

Installation, transportation, and adjustment of the machine is specialized work. Only properly trained service personnel should carry this out. For instructions about transportation, unpacking, and installation of the machine, see the technical manual.

#### 3.2 **Operation site:**

These machines may only be used indoors, in a hygienic dry room, with a temperature between 5 and 40 degrees Celsius.

Place the machine on a flat, stable surface.

#### 3.3 Putting the machine out of order:

If the machine will not be used for a long period of time (for example: during the weekend,) it is recommended to turn off the water supply and the electricity (pulling the plug from the socket is sufficient). This will prevent unnecessary use of energy.



# 4. Operation:

# 4.1 Operating the machine in free vend mode:

		Risk of burn injuries when taking out the HOT	
<u></u>	Warning:	beverages.	
		When the hot beverages come in contact with a person, this	
		can lead to serious scalding injuries.	
		If cups or jugs are not correctly placed.	
		The machine will spill hot liquid down the front.	
		This can cause serious scalding injuries.	
		The outlet of the machine may occasionally drip hot	
		liquid even when the machine is not in use.	
		When the hot liquid comes in contact with a person, this can	
		lead to serious burn scalding injuries.	
		The water system (boiler, tubes etc.) contain hot water	
		with a temperature close to the boiling point <100 °C.	
		When the hot water comes in contact with a person, this can	
		lead to serious scalding injuries.	
$\triangle$	Note:	Place the cup in the centre of the cup stand.	
		All beverage selections are dosed on the left cup stand.	
		Except the selections of hot water and chilled water they are	
		dosed on the right cup stand.	

- 1. Place a cup under the outlet on the cup stand.
- 2. Select your desired drink.
- 3. Follow the instructions on the screen.
- 4. After pressing the start button, the machine prepares your drink and dispenses it into the cup.
- 5. Your drink is ready after the beep and the message 'ready' is on the screen.

# 4.2 Operating the machine in pay mode:

In pay mode, first insert the required money and continue with step 1 of the free vend operation.



#### 4.3 Jug dispensing.

# <u>^</u>

# Risk of burn injuries when taking out the HOT beverages.

When the hot beverage comes in contact with a person, this can lead to serious scalding injuries.

# If cups or jugs are not correctly placed.

The machine will spill hot liquid down the front. This can cause serious scalding injuries.

The outlet of the machine may occasionally drip hot liquid even when the machine is not in use. When the hot liquid comes in contact with a person, this can lead to serious scalding injuries.

The water system (boiler, tubes ect.) contain hot water with a temperature close to the boiling point <100 °C.

When the hot water comes in contact with a person, this can lead to serious scalding injuries.

- 1. Remove the cup stand. (picture 4.3.1 & 4.3.2)
- 2. Place a jug under the outlet in the centre for all consumption except water. (picture 4.3.3)
- 3. Place a jug under the outlet at the right for all water consumption. (picture 4.3.4)
- 4. Select the jug button.
- 5. Select the drink and jug size.

Warning:

- 6. Select the start button.
- 7. The machine dispenses the selected drink into the jug.
- 8. Your drink is ready after the beep and the message 'ready' is on the screen.
- 9. Place back the cup stand. (picture 4.3.1)

Jug placement



picture 4.3.1



picture 4.3.2



picture 4.3.3



picture 4.3.4



# 5. Maintenance and filling:

# 5.1 **Daily maintenance:**

Failing to perform the daily maintenance negatively affects the quality of the products and can lead to malfunctioning of the machine.

- 1. Open the door of the machine.
- 2. Install the safety key (see paragraph: install safety key)

#### Flush mixers:

- 3. Place a jug underneath the nozzle to collect the hot water.
- 4. Press the "rinse" button on the screen. Hot water from the boiler flows through the mixers.
- 5. Repeat step 4 until clean water comes out of the machine

Check if there are still enough ingredients in the canisters.

If necessary, fill up the canisters, following instructions in paragraph "Fill canisters".

#### Empty drip tray:

- 1. Remove the external drip tray, the cup stand, and the drip grid.
- 2. Rinse the drip trays, cup stand and grid in warm water...

#### Clean the outside of the machine:

- 1. Clean the outside of the machine with a soft damp cloth.
- 2. Install the drip trays, grid and cup stand.
- 3. Remove the safety key.
- 4. Close the door of the machine, and leave the service mode.



#### 5.2 Weekly maintenance:

Failing to perform the weekly maintenance negatively affects the quality of the products and can lead to malfunctioning of the machine.

1. Open the door of the machine

#### Clean the mixing system:

- 2. Remove the mixing system according to paragraph "Disassembling the mixing bowl".
- 3. Rinse out all loose parts of the mixing system in warm water.
- 4. Clean the parts of the mixing system that remains in the machine with a wet brush.
- 5. Mount the mixing system according to paragraph "Assembling the mixing bowl". Make sure that the parts are dry before you mount them.

Check if there are still enough ingredients in the canisters.

If necessary, fill up the canisters, following instructions in paragraph "Fill canisters".

#### Empty drip tray:

- 1. Open the door.
- 2. Remove the drip tray, the cup stand and the grid.
- Rinse the drip trays, cup stand and grid in warm water.

#### Clean the outside of the machine:

- 1. Clean the outside of the machine with a soft damp cloth.
- 2. Install the drip trays, grid and cup stand.
- 3. Remove the safety key.
- 4. Close the door of the machine, and leave the service mode.



#### 5.3 **Monthly maintenance:**

Failing to perform the monthly maintenance negatively affects the quality of the beverages and can lead to malfunctioning of the machine.

Apart from the weekly maintenance, the following tasks must be performed monthly to ensure the machine operates correctly and optimal beverage quality is maintained.

#### Cleaning the canister with water:



- 1. Open the door.
- 2. Lift the upper lid.
- 3. Remove the canister from the machine.
- 4. Remove the lid from the canister.
- 5. Empty the canister.



#### Warning:

# Do not fill the canister while it is not completely dry.

The product may form lumps, which makes the system unusable.



- 6. Rinse out the canister with warm water until all product residues are removed.
- 7. Dry the canister very thoroughly on the inside and outside.
- 8. Fill the canister and place it back in the machine according to the procedure in paragraph "Fill canisters".

#### Cleaning the brewer with water:

- 1. Remove the brewer from the machine according to the procedure in paragraph "Removal of the brewer".
- 2. Rinse the brewer with warm water.
- 3. Place the brewer back according to the procedure in paragraph "Install the brewer".



#### 5.4 Fill canisters:

Do not fill the canisters further than necessary for one or two days. This will keep the products fresh. Make sure that the canisters remain filled with a layer of at least 4-cm of product. Only use products that are recommended by the supplier of the machine.



1. Filling the canisters must be done outside the machine.

To facilitate taking out the canisters, the lid of the machine can be flipped up (after opening the door).

Perform the following procedure to fill a canister:



2. Turn the nozzle of the canisters upwards



3. Slightly lift up the canister at the front, until the positioning ridge comes out of the hole.



4. Pull the canister towards the front and take it out of the machine.



#### 5.4 **Fill canisters:**



5. Fill the canister with the product indicated on the canister. Place the lid back on the canister.



6. Place the canister back in the machine. Make sure the drive at the back of the canister fits well on the motor drive.



7. Push the canister at the front over the positioning ridge.



8. Turn the nozzle of the canister downwards.
Check the position of the nozzle of the canister. It must be positioned correctly above the brewer or mixing bowl.

- 9. Close the door or place safety key.
- 10. Flush the mixers.

  This is necessary because product may fall into the mixers when the canister is place back into the machine.
- 11. Check correct functioning by taking test beverages.

Picture may be different based on model.



# 5.5 Place safety key:



# Warning:

The machine is now powered up with open door.

Parts in the machine can move automatically and hot water can flow out.

Open the door and locate the safety key. Insert the safety key and turn a quarter turn clockwise or counter clockwise.









# 5.6 Disassembling the mixing system:



- 1. Open the door.
- 2. Remove the mixers using the following procedure.



3. Remove the outlet pipes from the mixers.



4. Turn the bayonet catch counterclockwise (approx. 10°).



5. Remove the mixer house.



# 5.6 **Disassembling the mixing system:**



6. Pull the mixer parts towards you.



7. Pull the whipper blade towards you and off the shaft.



8. Turn the base plate counterclockwise and pull it towards you.



9. Ready

Picture may be different based on model.



# 5.7 Assembling the mixing system:



1. Procedure to assemble the mixer.



2. Install the base plate.



# Caution:

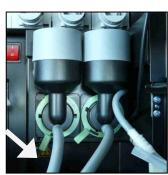
The arrow on the whipper blade must on the flat side of the mixer shaft.





3. Install the whipper blade.

Be sure that the arrow is at the flat side of the shaft.



4. Install the mixer house.



# 5.7 Assembling the mixing system:



5. Turn the bayonet catch clockwise until it is locked.



- 6. Install the outlet pipes on the mixers.
- 7. Close the door.
- 8. Check correct functionality by taking test beverages.

Picture may be different based on model.



# 6. Failure and Error messages:

Always check whether an error message is shown on the display. If no error message is shown and the machine does not work correctly, you may find the possible cause and solution in the following table. For failures not mentioned in this manual, contact the service engineer.

#### Communication error

Consult the service engineer

#### Door open

Close door or install service key to run the machine.

#### Drip trav full

Empty the drip tray in front of machine and the waste bucket, make sure the probes are dry.

#### Filling boiler

Wait until boiler is filled.

If message is still shown after 10 minutes, consult the service engineer

#### Heating boiler

Wait until boiler is heated.

If message is still shown after 10 minutes, consult the service engineer

#### Mixer blocked

Clean the mixing bowl

#### No water connected

No water detected for more than 2 minutes for open boiler system.

Open and close the machine door for restart.

# Open boiler leaking, inlet closed

A leak is detected. Close water tap and consult the service engineer.

#### Place cup left or Place cup right

Cup needs to be placed under the dispenser before the start button is available.

#### Water filter installed?

Consult the service engineer.

#### Replace water filter

Consult the service engineer

#### Shortcut temp.sensor

Consult the service engineer

#### Temp. sensor disconnected

Consult the service engineer

#### Temp. boiler to high

Consult the service engineer



Water level to low Consult the service engineer

<u>Shortcut temperature sensor</u> Consult the service engineer

<u>Temperature</u> sensor disconnected Consult the service engineer

<u>Temperature boiler too high</u> Consult the service engineer

Water level too low
Consult the service engineer

# **Document control:**

Date:	Version:	Reason of change:	Resp.
2012-12-17	v01-00	Initial release	DH
2013-02-04		correction specifications	DH



Notes:	

