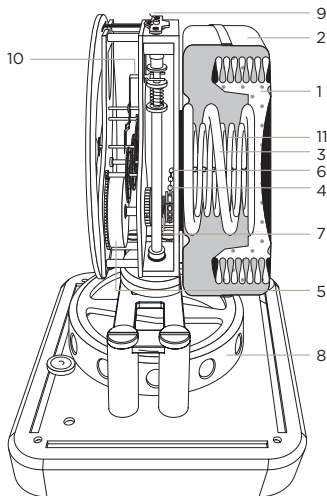


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- 1** Expansion chamber
- 2** Brass cover
- 3** Balance-spring (counterweight)
- 4** Small chain
- 5** Mainspring
- 6** Pulley
- 7** Return spring
- 8** Balance wheel
- 9** Elinvar®\* wire
- 10** Escapement
- 11** Winding spring

\* The Elinvar brand does not belong to Jaeger-LeCoultre.

# INTRODUCTION

We congratulate you on the purchase of your Atmos clock and thank you for your confidence. With no battery, electrical power, or winding, the Atmos clock has been running on air since 1928. We invite you to consult the operating instructions and hope your Jaeger-LeCoultre timepiece brings you great enjoyment.

## VIRTUALLY PERPETUAL MOVEMENT

Leonardo da Vinci had already demonstrated that perpetual motion was not feasible due to the laws of physics. But it would have taken more than that to discourage tenacious researchers. The latter included the Neuchâtel engineer, Jean-Léon Reutter, who in 1928, designed a completely revolutionary clock that drew its power from variations in the ambient temperature. It took a few more years of research by our Man-

ufacture to transpose this idea into technical reality and patent it. The result closely resembled perpetual motion and thus, the Atmos clock was born.

Its principle is amazingly simple. A gaseous mixture in a hermetically closed capsule expands when the temperature rises and contracts when it falls. Connected to the clock's drive spring, the capsule swells like the bellows of an accordion, constantly winding the clock movement. Between 15 and 30 degrees Celsius, a temperature fluctuation of a single degree is enough to provide the clock with an operating autonomy of about two days.

The Atmos clock is designed so that there is no excessive resistance opposing this minimum power. The Atmos balance wheel oscillates slowly, its lung breathing in perfect harmony with temperature variations and its heart beating quietly twice a minute, i.e. 60 times less quickly than that of a traditional clock, 240 times less

quickly than a wristwatch movement and 1,966,000 times less quickly than a quartz watch movement. To get an idea of the delicacy of this minute energy transfer, consider the fact that 60 million Atmos clocks together would consume no more energy than a weak 15-watt electric light bulb.

All the components of the Atmos clock are amazingly accurate and dependable; it has a virtually wear-free operation. It is therefore distinguished by its long service life, which theoretically, can be as long as 600 years. Due to the current state of air pollution, regular checks and services are recommended.

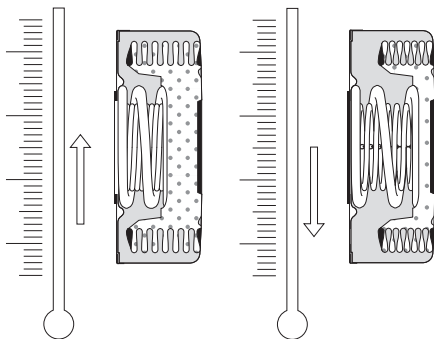
A unique gem of horological technology, the Atmos clock is a timekeeper of distinction for Heads of State and numerous sovereigns. In Switzerland, a country known to the world for its perfection of watches, it is a tradition to offer guests of honour this Swiss horological masterpiece. This has been so for decades, and emi-

ment recipients include John F. Kennedy, Winston Churchill, General de Gaulle and Charlie Chaplin.

## **ATMOS, THE CLOCK THAT LIVES ON AIR**

Temperature variations are its source of power. Its balance wheel will oscillate as long as the sun shines.

Rises in temperature expand the gaseous mixture trapped in the expansion chamber, which in turn compresses the winding spring. In the event of a fall in temperature, the reverse occurs. The gas contracts and the spring relaxes. This imperceptible back-and-forth motion is sufficient to wind the Atmos clock.



No battery, no electrical power, no winding.  
Accurate and silent.

## **AN APPROXIMATELY 4,000-YEAR LUNAR CALENDAR**

Living in pace with the rotational movements of the earth, the moon and the cosmos, no other instrument for measuring time was more suited to reflecting with the greatest accuracy the lunar circle in

the firmament. This function adorns certain Atmos clocks.

A conventional quartz clock with moon phase indication stays thoroughly accurate for two or three years. The most highly perfected mechanical watches, a field in which Jaeger-LeCoultre excels, deviate by one day in 122 years; the Atmos clock, for its part, is designed to display the moon phases with exceptional accuracy for more than 4,000 years.

On the Atmos clock, the moon phases are indicated according to the real phases of the lunar month, called the synodic period, corresponding to the time elapsing between two full moons. For the moon seen from the earth to have the same position relative to the sun, it will have to travel a further distance on its orbit. As a result, the lunar month lasts slightly longer than the sidereal period, i.e. on average 29 days, 12 hours, 44 minutes and 2.8 seconds (or 29.530588 days). Now, the mechanism of your Atmos clock is so precise that it



completes its travel in 29.530568 days, resulting in a tiny difference for each lunation which will amount to one day in 3,821 years.

## **PRECAUTIONS FOR THE USE AND TRANSPORT**

The Atmos clock is a very high-precision instrument manufactured with technology that only the Jaeger-LeCoultre master watchmakers are capable of handling. The power needed for the clock to operate is extremely low, which means that your Atmos clock must be placed on a completely stable horizontal surface (chest of drawers, console, etc.) to ensure optimum operating conditions. Once started, the clock should not be moved; cleaning the cabinet or the base should be carried out without handling or moving the clock.

**Important:** For transport, use the complete original packaging. If necessary, ask our dealer to replace the necessary parts.

## **PRECAUTIONS FOR USE**

### **LOCKING AND UNLOCKING THE BALANCE WHEEL**

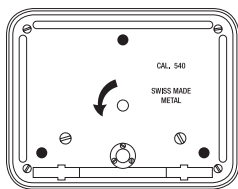
The Atmos clock balance, which is suspended from an extremely fine wire, must be locked before any transportation, even for small moves within an apartment, as well as for setting the time.

The Atmos Classique Phases de Lune clock has two balance locking systems:

- The first, accessible under the cabinet, should be used for transport.
- The second, accessible after opening the door, is used when the clock is moved short distances inside an apartment.

1. To unlock the balance before setting your Atmos clock:

In order to use your Atmos clock, it is first necessary to unlock the balance using the first balance locking system. To do so, gently raise your Atmos clock slightly so as to gain access to the underside of the clock's base. Fully unscrew the central screw.

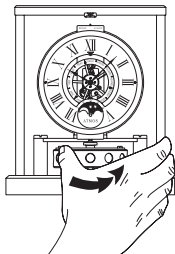


The second system, consisting of a **locking lever, should be released only after setting the time** (see section Setting the time).

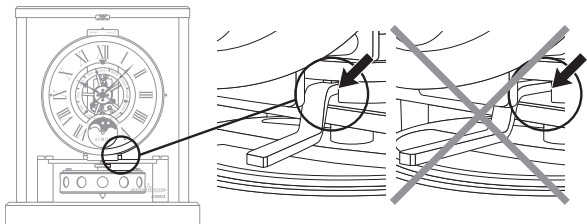
2. To lock the balance before transporting your Atmos clock:

It is first essential to lock the balance using the locking lever located at the front of the clock, just above the balance. This locking

procedure must be carried out when the balance wheel stops, before oscillating back in the opposite direction. To do so, push the lever to the right, as far as it will go.



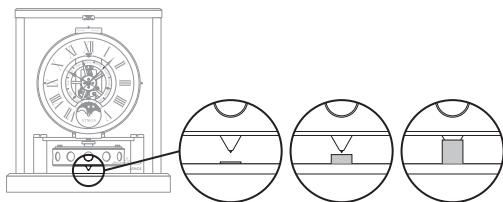
The locking process is only effective when the lever is fully over to the right, right up against the metal surface.



CORRECT  
POSITION

INCORRECT  
POSITION  
the lever is not  
pushed far  
enough

Then gently raise your Atmos clock slightly so as to gain access to the underside of the clock's base. Tighten the locking screw under the cabinet; as soon as it is in contact with the nut located under the balance, make an additional one-quarter turn so as to lock it with your hand.



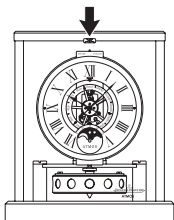
## USING AND SETTING YOUR CLOCK

### OPENING THE CABINET

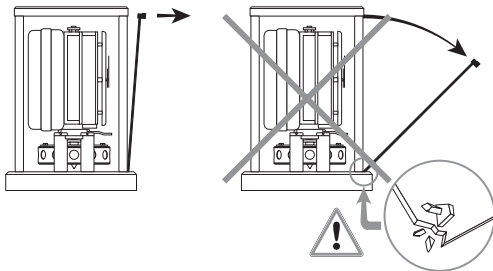
The Atmos Classique Phases de Lune clock has a glass door at the front which must be handled carefully so as not to damage it.

Precautions to be taken when opening the door:

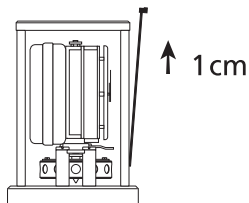
1. Press the door button downwards in order to release the door.



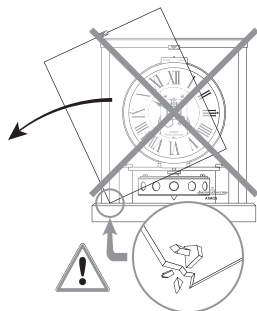
2. Tilt the door very slightly towards you. Make sure that you do not tilt the door too much when it is still in the groove of the base, so as to avoid damaging the bottom of the glass pane.



3. Lift the door upwards by sliding it in parallel to the uprights of the cabinet over about a centimetre, so as to completely remove the door from contact with the base, and then pull the door towards you.



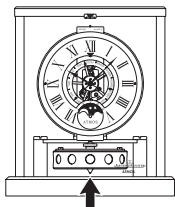
**Since the corners of the glass door are extremely fragile, please ensure that you release them gently from the base and the uprights so as not to shatter the glass.**



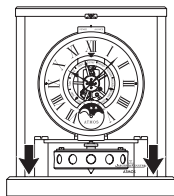
## ENSURING THE CLOCK IS LEVEL

For your Atmos Classique Phases de Lune clock to work correctly, its base must be perfectly horizontal.

To enable you to stabilise it properly, it has a spirit level. To ensure correct operation, the levelling bubble must be perfectly centred.



Spirit level



Screws for  
the adjustable  
feet

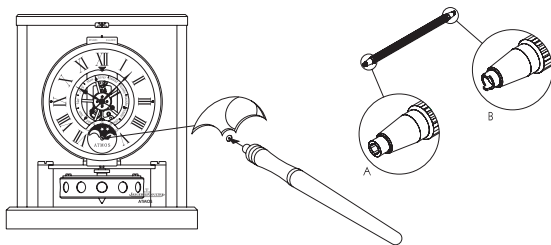
The Atmos Classique Phases de Lune clock rests on three feet, one of which is fixed (at the rear) while the other two are adjustable. When you have placed your clock in its permanent position, screw or unscrew each of the two adjustable front feet so as to ensure that its position is level. These



two screws for the adjustable feet are located at the front of the clock, above the base.

## SETTING THE MONTH AND MOON PHASE

Never set the month on your clock without first making sure that the balance wheel is locked.



To set the months, push end A of the small tool provided with the Atmos clock into the aperture located in the centre of the disc indicating the lunations and turn it (in either direction) up to the desired month, bearing in mind that the month appears centred in its aperture on the 15<sup>th</sup> of the

month. The position of the month disc is therefore set approximately depending on whether setting is performed at the start, middle, or end of the month. You will have to wait until the start of the month for a precise setting.

You can nevertheless perform time setting (see section on Setting the Time).

Once this has been done, you can set the moon phase. To do this, consult a lunar calendar and choose the date of a full moon to fine-tune the setting. Insert end B of the adjustment tool into the centre of the moon disc and turn in a clockwise direction until the moon is perfectly centred.

If you decide to set the month more accurately at the start of the month, a new moon setting will also need to be performed.

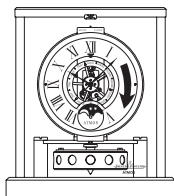
## **SETTING THE TIME**

**Never perform time setting without first making sure that the balance is locked.**

To set your Atmos Classique Phases de

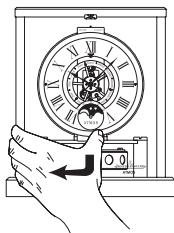
Lune clock to the right time (and also for the summer/winter time change), move the minute hand forward in a clockwise direction with one finger.

**Note: Never turn the minute hand anti-clockwise and never touch the hour hand.**



## **UNLOCKING THE BALANCE AND STARTING THE CLOCK**

Unlock the balance using the locking lever located at the front of the clock, under the dial. Lower the lever by pressing it slightly while moving it to the left. Make sure you do not touch the balance during this operation. Thus released, the balance begins to oscillate slowly.



If the balance remains motionless:

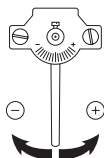
- Check the level setting.
- Delicately rotate the balance half a turn by hand, without exerting vertical pressure, then leave it to resume its own movement by itself. When the balance is oscillating normally, put the door back in place.

**Warning: never move an Atmos clock without first locking the balance.**

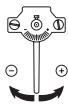
## **ADJUSTING THE GAIN AND LOSS**

Your Atmos clock has been set in the Jaeger-LeCoultre Manufacture, situated at an altitude of 1,000 metres in the heart of the Swiss Jura range. If, after about one month's operation (one month is still nee-

ded to ensure that the balance is completely stabilised), you observe that it is gaining or losing time slightly, you can correct this using the adjusting lever which is located at the top of the movement.



The table below shows you how many graduations the adjusting lever must be moved depending on the number of minutes time lost or gained on your clock. In accordance with the information in the table, to correct for time gained, move the lever to the left, towards the “-” sign; to correct for time lost, move the lever to the right, towards the “+” sign.



| Gain or loss observed after 1 month |                   |   |                            |
|-------------------------------------|-------------------|---|----------------------------|
|                                     | Minutes per month | Correction by moving the adjusting lever by |                            |
| Gain                                | + 2.5 min         | 1/2   |                            |
|                                     | + 5 min           | 1   |                            |
|                                     | + 7.5 min         | 1.5   | graduation(s) to the left  |
|                                     | + 10 min          | 2   |                            |
|                                     | + 15 min          | 3   |                            |
|                                     | + 20 min          | 4   |                            |
| Loss                                | - 2.5 min         | 1/2   |                            |
|                                     | - 5 min           | 1   |                            |
|                                     | - 7.5 min         | 1.5   | graduation(s) to the right |
|                                     | - 10 min          | 2   |                            |
|                                     | - 15 min          | 3   |                            |
|                                     | - 20 min          | 4   |                            |

Once you have started up your Atmos Classique Phases de Lune clock, avoid touching it. It will operate without any intervention, because the Atmos clock simply lives on air.

# JAEGER-LECOULTRE ATMOS CLOCKS

In order to benefit from the International Guarantee and/or the Limited Warranty and/or the Manufacturer's Guarantee for Australia, Jaeger-LeCoultre products must be purchased exclusively from authorised Jaeger-LeCoultre retailers or from Jaeger-LeCoultre Boutiques. Maintenance and repair work must also be entrusted to an authorised Jaeger-LeCoultre retailer, or a Jaeger-LeCoultre boutique or an authorised Jaeger-LeCoultre Service Centre. If these conditions are not met, the manufacturer's guarantee does not apply. Please contact Jaeger-LeCoultre to obtain the list of authorised Jaeger-LeCoultre retailers across the world.

The Atmos clock operates without batteries, electricity or winding. It is accurate and silent but very sensitive, as it requires

only an extremely low amount of energy to operate.

To ensure that your Atmos clock functions properly, you must place it on an absolutely stable horizontal surface (chest of drawers, console table, mantelpiece, etc.). We advise you to keep your Atmos clock away from any magnetic fields (computer, television, etc.), as these may interfere with its functioning.

The Atmos clock must not be moved once it has been started. Should you have to transport your Atmos clock, do not forget to lock the balance beforehand (this operation must be carried out just as the balance stops and before it starts moving again in the opposite direction).

In order to use your Atmos clock correctly, particularly before starting or transporting it, please read the attached User Manual carefully.



# INTERNATIONAL GUARANTEE

The International Guarantee applies to Jaeger-LeCoultre products sold or presented for guarantee repairs in all countries, except the United States of America and Canada (for these two countries, see the Limited Warranty) and Australia (for this country, refer to the Guarantee for Australia).

## TERMS AND CONDITIONS OF THE JAEGER-LECOULTRE INTERNATIONAL GUARANTEE

Your Jaeger-LeCoultre Atmos clock is guaranteed to protect against all manufacturing defects for three years from the date of purchase, subject to the following conditions.

Any part found by our technical services to be defective as a result of a manufacturing defect will, at the sole discretion of Jaeger-LeCoultre, be repaired or replaced

free of charge. The Jaeger-LeCoultre International Guarantee is only applicable if the guarantee certificate attached to this document is duly completed, dated, stamped, and signed by the authorised Jaeger-LeCoultre retailer or the Jaeger-LeCoultre Boutique that sold you your Atmos clock, or if the guarantee certificate is valid.

The International Guarantee does not cover defects resulting from accidents, mishandling, incorrect or abusive use (for example, knocks, dents, crushing, excessive temperatures, powerful magnetic fields); unauthorised alteration or repair, or the consequences of normal wear and ageing.

**As a consumer, you may have legal rights under applicable national legislation governing the sale of consumer goods; those rights are not affected by this guarantee.**

# LIMITED WARRANTY (UNITED STATES OF AMERICA AND CANADA)

The following Limited Warranty applies to Jaeger-LeCoultre products sold or presented for warranty repairs in the United States of America and Canada only.

## TERMS AND CONDITIONS OF THE JAEGER-LECOULTRE LIMITED WARRANTY

Your Jaeger-LeCoultre Atmos clock is guaranteed against all manufacturing defects for three years from the date of purchase, subject to the following conditions. Any part found by our technical services to be defective as a result of a manufacturing defect will, at the sole discretion of Jaeger-LeCoultre, be repaired or replaced free of charge.

The Jaeger-LeCoultre Limited Warranty is only applicable if the guarantee certificate

attached to this document is duly completed, dated, stamped, and signed by the authorised Jaeger-LeCoultre retailer or the Jaeger-LeCoultre Boutique who sold you your Atmos clock.

This Jaeger-LeCoultre Limited Warranty does not cover defects resulting from accidents, mishandling, incorrect or abusive use (for example, knocks, dents, crushing, excessive temperatures, powerful magnetic fields); unauthorised alteration or repair, or the consequences of normal wear and ageing.

**Except while as prohibited by applicable law, this Limited Warranty shall be the exclusive manufacturer warranty. This Limited Warranty, together with any other explicit or implicit guarantees, including, but not restricted to, any implicit guarantee of correct functioning for the intended use or in accordance with a particular use, will be strictly limited to a period of three years starting from the date of purchase.**

The liability of Jaeger-LeCoultre is limited solely and exclusively to repair or replacement under the terms and conditions stated herein. Jaeger-LeCoultre will not be held liable, under the terms of this Limited Warranty or in any other respect, for any loss or damage following from the use of, or the inability to use, this Atmos clock, or for any indirect or fortuitous damage of any kind relating to your Atmos clock. Some States, Provinces, and Territories do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This Limited Warranty grants you specific legal rights, in addition to which you may have other legal rights that vary from one Country, State, Province, or Territory to another.

# **GUARANTEE FOR AUSTRALIA**

**This Guarantee for Australia applies to Jaeger-LeCoultre products purchased or presented for guarantee repairs in Australia only.**

## **TERMS AND CONDITIONS OF THE JAEGER-LECOULTRE GUARANTEE FOR AUSTRALIA**

Mandatory Statutory Rights. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced, if goods fail to be of acceptable quality and the failure does not amount to a major failure.

This Jaeger-LeCoultre Guarantee gives you additional rights and remedies un-

der the Australian Consumer Law and any other laws in relation to the goods. Every Jaeger-LeCoultre product is made and tested to meet the Jaeger-LeCoultre quality standards. Nevertheless, should your Jaeger-LeCoultre product prove defective, please contact the Jaeger-LeCoultre retailer or Jaeger-LeCoultre Boutique indicated on your guarantee certificate; only authorised Jaeger-LeCoultre retailers or Jaeger-LeCoultre Boutiques are entitled to provide a guarantee service as defined in this Jaeger-LeCoultre Guarantee. In order to benefit from this guarantee you will be required to present this Jaeger-LeCoultre guarantee certificate duly completed, dated, stamped, and signed by an authorised Jaeger-LeCoultre retailer or a Jaeger-LeCoultre Boutique.

This Jaeger-LeCoultre Guarantee covers defects of materials or workmanship of your Jaeger-LeCoultre product. Subject to your Mandatory Statutory Rights under the Australian Consumer Law,

Jaeger-LeCoultre will remedy these identified defects free of charge for up to three (3) years from the date of purchase for Atmos clocks. Thereafter, Jaeger-LeCoultre will repair any defective product or part subject to a service charge.

The Jaeger-LeCoultre Guarantee does not cover defects and damage caused by accident, improper use (including knocks, dents, crushing, etc.), normal wear and tear, alteration, dismantling, or repair by persons other than authorized Jaeger-LeCoultre repair specialists, or the use of components other than those recommended by Jaeger-LeCoultre.

Subject to your Mandatory Statutory Rights under the Australian Consumer Law, if you make a claim under this Jaeger-LeCoultre Guarantee (instead of your Mandatory Statutory Rights) you may be responsible for transportation costs, including but not limited to postage, insurance and packing materials.



In Australia, a claim under the Jaeger-LeCoultre Guarantee may be sent to Richemont Australia Pty Ltd, provider of the guarantee service, at the address below or as specified above:

Richemont Australia Pty Ltd

PO Box 4780

Sydney, NSW 2001

Tel+1 800 71 0665

Email: [client.relations.asia@jaeger-lecoultre.com](mailto:client.relations.asia@jaeger-lecoultre.com)

# CUSTOMER SERVICE

The Atmos clock is a very high-precision instrument, manufactured with technology that only the Jaeger-LeCoultre master-clockmakers are capable of handling. All the components of the Atmos clock are amazingly accurate and dependable; hence it has a virtually wear-free operation. Nevertheless, as a result of pollution in the surrounding atmosphere, it is recommended that you should have your clock checked and serviced regularly. As soon as the setting of the clock begins to vary, a servicing of its movement may become necessary.

The time required to have it serviced and repaired is 5 to 10 weeks.

Maintenance and repair work must be entrusted to an authorised Jaeger-LeCoultre retailer, a Jaeger-LeCoultre Boutique, or authorised Jaeger-LeCoultre Service Centre. The list of our points of sale and service centres is available on our website:

[www.jaeger-lecoultre.com](http://www.jaeger-lecoultre.com). You will also find this information at the end of this document, under the heading “Where to entrust my timepiece for maintenance?”

Our authorised Service Centres are staffed by watchmakers trained at the Jaeger-LeCoultre Manufacture, and have the workshops, tools and parts required for the repair and maintenance of Jaeger-LeCoultre watches and clocks. In certain cases, especially for operations requiring special tools and parts, the Service Centres will send your Atmos clock to the Jaeger-LeCoultre Manufacture in Switzerland to have the necessary work carried out.