

An instruction Manual and Guide to your Mechanimated Weather Clock

Hello there!

We would dearly like to thank you for purchasing your Mechanimated Weather Clock. However dark and moody the weather may get, we hope your own mood is always brightened by the charming animated artwork. We've provided this booklet not just as an instruction manual but to tell you a little of our story to date and the ethos of our budding business. As ever, we'd love to hear any comments or feedback you might have. So as well as registering your clock serial number on our website to extend its warranty, please do get in touch and tell us what you think of your new Weather Clock!

All the best,

(Brother & Sister, Founders of Bramwell Brown)

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Extend Your Warranty

All Bramwell Brown clocks come with an automatic oneyear warranty, provided you retain proof of purchase. We also offer the opportunity to extend this to two years by registering your clock number with us.

To register go to: www.bramwellbrown.com and follow the links in the 'Contact Us' Section.

Taking Care of Your Clock

We have taken every care to ensure your clock is of the highest build quality so it can be enjoyed for many years to come. However, being a complex mechanism, there is a certain degree of fragility that will obviously not withstand extreme forces or temperatures. As with any mechanical instrument, please bear this in mind when handling it and when choosing where to position it in your home. For example, we strongly advise against hanging it above a radiator or next to a South facing window. Please also note that your clock is for indoor use only!

The layers of mechanical weather scenery in your clock have been carefully optimised to work with the clock in an upright position, as hung on a wall. Therefore, to avoid putting unnecessary strain on the mechanism, do not allow the clock to move mechanically when laid horizontal. This is important to remember when first switching the clock on.

If storage is required, please store in an upright position and switched off to avoid risk of damage to the clock's mechanics. We also recommend removing the batteries if it is not going to be used for some time.

Setting and Using Your Weather Clock



Setting the Time:

To activate the clock mechanism (which runs independently to the barometer and weather scenery), locate the AA battery included with your clock and insert it into the central quartz clock movement on the back.

Adjust the time by rotating the green knob found next to where you inserted the battery.

Activating the Mechanimated Weather:

Now for the exciting part!

- If your clock is a model that includes a 'transport lock' (which protects it from damage during transport), this will be clearly labelled on the back of the clock. If in situ, this must be removed before the batteries are inserted. Some clocks in our range do not include this 'transport lock' so please do not be concerned if you cannot see one in your model.
- To remove the transport lock, simply unscrew in an anti-clockwise direction and pull out when it becomes loose. Please note reinserting the transport lock should

never be attempted as to do so can damage to the mechanism.

- 3) Ensure the red on-off switch on the back is in its "O" (off) position.
- 4) Unscrew and open both battery covers. (Peel off the temporary transport lock warning label to gain access if it is still in position.)
- 5) Install the 8 D-Cell batteries provided, ensuring all are correctly orientated and making good contact. Replace covers. It's worth taking care here as the batteries can spring up and out of position.
- 6) Turn the switch to 'on' only when the clock is in an upright position. (Remember to turn the clock off again any time the clock is to be laid flat.)
- The Mechanimated weather scenery will then immediately move to one of the five weather scenes. The clock can now be hung on the wall.

Please note, the weather scenes shown during the first 24 hours of movement may well not represent an appropriate forecast as the clocks needs a little while to track the changing air pressure before forecasting more accurately. There are no manual adjustments required to the mechanics once the clock is up and running

Demonstration Mode:

(~
Bottom of clock frame	
	Demonstration button

You can activate the 'weather artwork demonstration' function any time by pressing and momentarily holding the button on the bottom of the clock.

This makes the clock wizz around so you can show it off to friends and family.

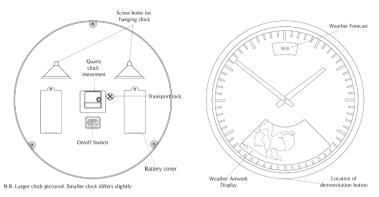
If the demonstration button ceases to work while the background forecasting continues it will be because the batteries have reached a low level and the system is conserving power.

Hanging the Clock

Depending on the size of your clock it will have either one or two screw holes on which to hang it on the wall. Included with the clock is a clock hanging template which provides further instructions and allows you to easily locate exactly where to drill and position the screws.

Start by working out where and at what height you want to hang your clock then position the drilling guide to match the desired clock outline. (If you have some masking tape to hold the guide to the wall this would make things easier!) Do also take care to ensure the horizontal line on the drill guide is level!

You can then mark the wall through the card (perhaps with



the tip of a nail) and remove the template prior to drilling on the newly marked locations.

Please take care to ensure you use a drill bit, wall plugs and screws that are appropriate to your wall type as well as taking appropriate safety precautions when using a drill. This includes ensuring the section of wall is suitable to drill into, for example, free of electrical wires. Take advice if necessary or ask a professional for help!

How the Clock Works

The clock has a barometric air pressure sensor at its core that continually measures the atmospheric air pressure throughout the day.

Even inside a relatively air-tight home, the air pressure changes are sufficient for your clock to forecast from, as you will see.

By monitoring the air pressure, the clock can tell whether it is rising or falling in relative terms over time – an important

aspect of weather forecasting. (See the following sections for further details.)

Very simply, if the clock notices the air pressure is rising then it will forecast sunnier weather. Conversely, if air pressure falls then the clock will forecast rain. The faster the rate of change, the more extreme the swing in either direction.

What is a Barometer?

The story starts in the 16th Century when Italian clever-man Evangelista Torricelli is thought to have been the first person to recognise that the world's atmosphere was not weightless but applied a force, now known as atmospheric pressure.

Only in the 18th Century was the link between atmospheric pressure and changing weather conditions noted. Water-filled "storm glass" barometers did what their name suggests and predicted impending storms.

The 19th century saw the development of the aneroid barometer which became widely used for meteorology and a popular accessory in the home. These aneroid barometers were produced in all manner of ornate designs in response to the insatiable British appetite for a topic of conversation, the use of umbrellas and organising picnics.

With the advent of improved satellite weather forecasting, barometers became more regarded as an instrument for an older generation with their natural interactions overshadowed in an ever digitalised world. Your new Weather Clock is a reaction against this and a celebration of the intricate mechanics of bygone eras brought up to date for the contemporary home.

Forecasting the Weather with a Barometer

The traditional barometers of old required a certain degree of familiarity and regular observation to be used accurately. This is because it is not the absolute value of the air pressure at any given moment that matters, but the amount and direction in which it changes.

Your own Weather Clock contains a nifty electrical barometer that calculates the rate of change in atmospheric pressure. It therefore does more than a traditional barometer, monitoring the changes and their rapidity for you – translating these into forecasts. This means that what you see in the mechanically animated sky should, more often than not, be what you get when you step outside.

Large, swift changes in pressure usually lead to significant changes in the weather. Fast drops in atmospheric pressure often results in unsettled weather and rapid rises are associated with improving conditions and clearing skies.

Whilst there is nothing else at all that affects the clock's weather scenery movements apart from changing air pressure, other variables such as temperature and humidity do also have an important part to play in modern weather forecasting. Barometers (and air pressure), therefore, have always been more often used as a simple and convenient guide to changing conditions. For example, the air pressure in the clock's location could drop leading it to change its forecast to rain. The rain may not, though, arrive at that moment or in the subsequent hours if other meteorological factors are at play such as temperature and humidity. Whilst

this may seem rudimentary, at Bramwell Brown we hope it also adds a level of charm to the clock!

As well as this, taking its design from traditional barometers, your clock only has five weather scenes to categorise all the possible weather conditions. These being: 'Stormy', 'Rain', 'Change', 'Fair' and 'Very Dry'. It is not unusual, therefore, for the clock to change relatively infrequently during periods of steady pressure. As well as this, it is worth noting that the forecast for 'Very Dry' is reached rarely as this requires periods of especially high – and further rising – air pressure. The adjacent forecast for 'Fair' most often covers periods of good (even glorious!) weather conditions.

What the Clock should not be used for:

Our top 3 "No no's"

- Do not rely on the clocks as a replacement for publically available meteorological weather forecasting in situations where you or others depend on such information for personal safety or security. Please remember that the weather clock is primarily for visual enjoyment rather than a serious guide to changing weather.
- 2. If you are lucky enough to have one, do not use the clock in your home sauna. Similarly, do not position the clock directly above a hot radiator as this will damage the delicate internal mechanism.
- 3. Like a Queen's guard on parade outside Buckingham Palace, the clock must not lie on its back whilst on duty. Its mechanism may be damaged if it is switched on and the animated artwork moves whilst it is not in an upright position.

Changing the Batteries & Recycling Advice

The batteries included with your Weather Clock will, of course, not last forever. When the remaining battery life reaches a lower level a clever mechanism switches off the demonstration function to conserve power. This helps maximise the amount of time your clock will continue its day to day function – which in normal circumstances should be over a year. Other signs that the battery power has reached an insufficient level can be quite strange and include the mechanism juddering, sticking or becoming lazy. See 'Problem Solving and FAQs' for further details.

When the batteries need replacing you can choose to either replace all 8 or just 4, with either the left or right hand battery chamber completely empty. The clock will run as normal with just 4 batteries but the demonstration function will not work and, clearly, the battery lifespan of 4 will not match that of a complete set of 8.

When the batteries have expired please dispose of them responsibly and recycle them where local facilities allow. If you are in the UK you can find out where your nearest recycling service by entering your postcode at:

www.recycle-more.co.uk

Bramwell Brown has also gone to great lengths in making sure that your clock has been designed in a way that has minimal environmental impact. Central to this is the ability to have any of the clocks in the Bramwell Brown range serviced, repaired and updated like you would with any other family clock or valuable timepiece. We hope, therefore, that you would never consider simply 'throwing out' your Weather Clock before either seeking repairs undertaken by Bramwell Brown, another expert or perhaps even yourself. If, for whatever reason, you think you're clock might need some attention, please see the FAQs page on the website for further advise and how to get in touch.

About Bramwell Brown Clocks

Bramwell Brown was founded with the simple idea of using imaginative design to reinvent classic time-pieces and barometers for the 21st century.

We are a London-based brother and sister team from the weather beaten West-Pennine Moors of the North of England. Our inspiration came from the analogue displays and mechanics of traditional time pieces that our Dad tinkered with at home, plus a desire to create clocks that were simply a bit more exciting!

It is our aim that through modern innovation we give our time-pieces functionality to match any digital device. By incorporating intriguing mechanics and inventive design they are more visually engaging and bring a smile to your face!

Not only do we cater for the British obsession with the weather, we are proud to design and build all of our clocks in the UK.

Our range of 'Mechanimated' clocks, is always developing. To see the currently available range, do revisit our website, follow us on social media or sign up to our mailing list.

We'd also really welcome your feedback on your customer experience with Bramwell Brown or suggestions for changes or improvements to our range. The FAQ section on our website will point you to the best contact route for this.

Problem Solving and FAQs

We, of course, hope you do not have any concerns over the functioning of your clock, however, below you will see a list of the most commonly seen issues and how to solve them. There are also more in-depth answers to FAQs on our website if you cannot find the answer to your query here.

The weather scenery in my clock is juddering

It is natural to assume this signifies that there is a problem or jam in the weather mechanism, however, fear not! This is in fact a well-recognized sign that the motor is receiving insufficient power from the batteries because either (a.) The batteries are running low and need replacing or (b.) One or more of the batteries have popped out of position and so are not making good contact with the circuit. Try checking the batteries are correctly installed or replace with new ones and normal working order should be restored.

The weather scenery and text seems to be stuck between scenes

Very similarly to above, this is usually due to lack of power to the motor that moves the weather scenery between its different forecasts. The clock may seem to get 'lazy' and change less frequently or not move far enough when the forecast updates. A juddering effect may also be seen when the demonstration button is pressed. Again, check that none of the batteries have popped out of position and/or try replacing with fresh batteries.

The forecast doesn't seem to be accurate

If you haven't already, we would recommend you read the above sections on 'How the Clock Works' and 'Forecasting

the Weather with a Barometer'. This will advise a little further on how the clock relies entirely on atmospheric air-pressure changes for forecasting and, subsequently, has some idiosyncrasies.

It is also worth noting that forecasts can become less accurate when the clock is drained of battery power. If the clock's forecasts become erratic after a sustained period of good use, then it may be worth considering swapping in new batteries for the existing ones.

I can see a small dimple in the frame

Some small dimples on the surface of the metal clock frame are unavoidable. This is where the essential mechanism fixing brackets are hand welded to the inside of the spun steel frame. While we go to great lengths to keep them minimally visible, it is usual to find one or two on close inspection. They reflect the nature of this handmade product.

I've dropped my clock and it's broken

Oh no! Don't panic though, our friendly workshop team will be happy to accept clocks back to assess the damage and get it repaired for you. Please visit the website and follow the links in the FAQs to report the problem and we'll get back in touch with suggestions and/or a plan of action to help you out.



www.bramwellbrown.com





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