



Wireless Wine Thermometer

Model: Kelvin Duo

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Please note

The transmitter clip supplied with this product should not be submerged in water.

The receiver base has a film that protected the LCD lens during manufacture. This should be carefully removed, avoid damage to the lens during this process.



Target Holdings (UK) Limited
www.mykelvin.co.uk



Kelvin Duo – Wireless Wine Thermometer

Thank you for purchasing the Kelvin Duo wine thermometer. When developing this product our goal was to provide a meaningful and easy way to understand different wine serving temperatures.

It's a common generalization that red wine should be served at room temperature and white wine should be served from the refrigerator. The reality is that the ambient room temperature of most homes is higher than the recommended serving temperature for red wine, and most refrigerators are significantly colder than the recommended serving temperature for many white wines.

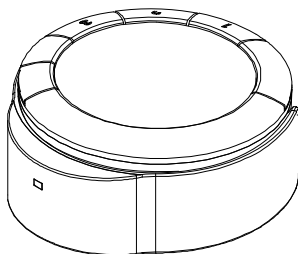
The Kelvin Duo provides an easy to use reference point that will guide wine drinkers towards the optimum serving temperatures for different types of wines. Using three words on the LCD display; 'Under, Ideal and Over' and using LED backlight indication colours; 'Blue, Green and Red' makes it easy to see when a wine has reached the optimum serving temperature. We hope that the Kelvin Duo wine thermometer will provide you with years of trouble free service, and will help you develop your appreciation of wine by serving it at its optimum temperature.

Your product is covered by a 24 month manufacturer's warranty. To register your product please visit our website at www.mykelvin.co.uk

Storage

We suggest that the retail carton is retained for future storage as this also contains a comprehensive wine guide which you may find useful. If you would like an additional copy of this wine guide it can be downloaded from our website.

The two parts of the Kelvin Duo have been designed to clip together for easy storage and transportation.



Quick start guide

For those who use the product first then decide to read the manual later, please find the following quick start steps which may help you:

Charge the battery in the bottle clip. (see page 9).

Place batteries in the receiver base (see page 4) .

Turn on transmitter clip (see page 6).

Push the transmitter clip onto the bottle (see page 5)

Turn on the receiver base (see page 5).

Select the wine type (see page 7)

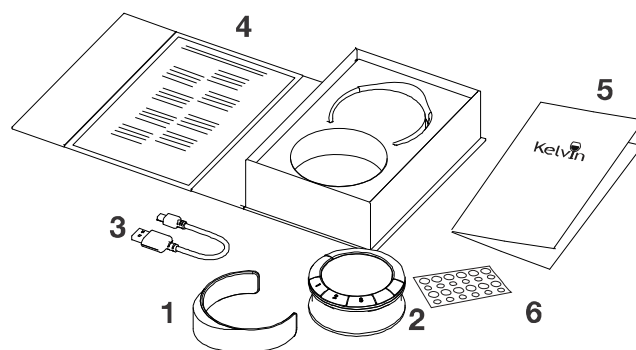
If the display glows red then the wine is too warm, put it in the fridge

If the display glows blue then it's too cold, warm up the wine

When the display glows green it's within the optimum serving temperature, enjoy your wine. Please drink responsibly.

Components supplied

1. Kelvin bottle clip thermometer transmitter
2. Kelvin base display unit and receiver unit
3. USB charging lead
4. Quick reference wine temperature guide (inner box)
5. Instruction manual
6. Colour sticker ID sheet



Best practice

Ensure the clip is always firmly registered against the exterior of the glass bottle, do not place the clip against a label.

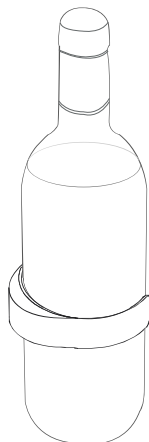
Ensure the clip is always below the level of the wine inside the bottle.

When placing or removing the bottle from the refrigerator there maybe a sudden difference in the temperature reading. This is due to the ambient temperature change on all surfaces including the internal components of the transmitter clip.

This may take up to 10-15 minutes to normalize after which a predictable steady temperature change will be observed.

When chilling the wine we suggest allowing the temperature to drop below the ideal target zone until the backlight turns 'blue' and displays the word 'Under'.

Remove the wine from the refrigerator, this will then provide the longest possible drinking time as the temperature starts to rise again and the backlight turns "green' and displays the word 'Ideal". When the backlight turns 'red' and displays the word 'Over' place the wine back in the refrigerator to repeat the process.



Precautions

Do not fully submerge the transmitter clip in water, although a rubber plug is provided for sockets, this is splash resistant only and not fully waterproof.

Do not submerge the receiver base in water.

Do not expose the clip or receiver parts to extreme sunlight or humidity

Remove batteries from the receiver base if the product is not going to be used for long periods of time.

Do not dismantle the receiver base or clip components; the unit does not contain user serviceable components.

Battery installation

It is necessary to fit 3x AAA batteries (not supplied) into the receiver base.

Turn the receiver base over to reveal the base plate of the product.

Using a suitable screwdriver carefully remove the 4 securing screws from the base plate putting them to one side. Take care not to lose these screws.

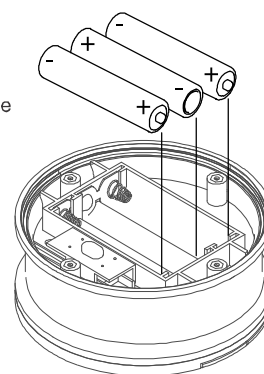
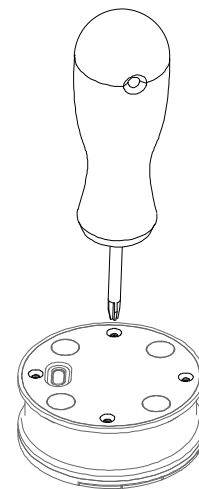
Carefully remove the base plate from the product to expose the battery compartment.

Observe the correct polarity of the 3 battery positions, carefully insert the batteries pushing the '-' end of the battery in at an angle against the spring first, then push the battery downwards to connect the '+' end to the contact accordingly.

Repeat this process for the other 2 batteries.

Carefully replace the base plate ensuring the 4 screw holes and power switch hole are aligned correctly.

Replace the 4 screws and tighten, do not over tighten.



Using the product

Turning the power on

It is necessary for both the clip and the receiver base to be turned on.

Turn on the receiver base:

Turn the receiver base over.

Use the slide switch to turn on the power

Either push the switch to the left for Fahrenheit operation, or to the right for Celsius operation. The LCD display on the front of the unit will display characters when the power is applied.

Turn on the transmitter clip:

The power switch is located on the side of the clip adjacent to the USB charger socket.

Depress the rubber switch once to turn the power on. The LED light will illuminate for 1 second to indicate the power is on, it will then flash every 1 minute to indicate the clip is operational.

Depress and hold the power switch again to turn off the power. The LED will illuminate for 3 seconds before powering off completely.

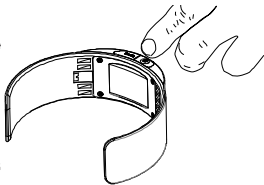
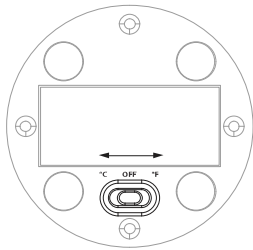
Transmitter clip and receiver base pairing

The transmitter clip and base receiver will pair automatically; this may take up to 1 minute. If during use the display suddenly reads '00' then this is an indication that the receiver base has lost the transmitting signal from the clip.

Please check the clip is working and ensure the receiver base is within a suitable working distance from the transmitter clip (10m). The transmitter will work from within a closed refrigerator, however the workable range may be affected.

When the clip is working, by depressing the power button momentarily this will force data to be transmitted to the receiver base. This may be useful if the transmission has been lost and you wish to test the connection.

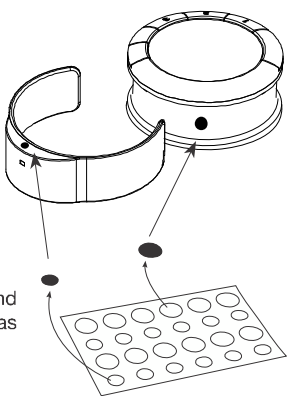
If the clip and receiver seem unresponsive, please refer to the trouble shooting guide on page 11 for advice on how to reset pairing.



Colour sticker identification

The product is supplied with a sheet of 24 coloured stickers (2 x 12 different colours). The purpose of these is to provide two corresponding coloured stickers which can be placed on both the transmitter clip and receiver base to allow quick identification when using more than one Kelvin Duo in close proximity.

Remove the stickers from the sheet and place them carefully on the recessed areas provided within the tooling mouldings.



Selecting your wine

The Kelvin Duo has been pre-programmed with 10 different wine types, each has its optimum serving temperature stored:

Wine Type	Optimum Target Temp. (°C / °F)	Suggested Ideal Range (°C / °F)
Light white wine	7 / 45	5-8 / 41-47
Medium white wine	10 / 50	8-11 / 46-52
Full white wine	12 / 53	10-13 / 50-53
Dessert wine	8 / 46	6-9 / 42-48
Light red wine	11 / 52	9-12 / 48-54
Medium red wine	15 / 59	13-16 / 55-61
Full red wine	17 / 63	15-18 / 59-65
Vintage sparkling	9 / 48	7-10 / 41-47
General sparkling	7 / 45	5-8 / 44-50
Rose	7 / 45	5-8 / 41-47

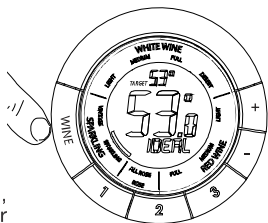
It is necessary to select the correct wine type for the wine you wish to measure. If you are not sure which type of wine you are drinking we have provided a comprehensive list of wine varieties on the inside cover of the retail box. This list contains over 100 of the most popular wine varieties.

We have also provided a colour reference chart which will give you an indication as to the type of wine based on its colour. If you are still unsure as to the type of wine you are drinking please refer to the wine producer who will be able to clarify this for you.

Use the wine button to select the wine type you are measuring. The LCD segment adjacent to the wine will be illuminated to denote the wine type chosen, the target temperature for the wine type will also change as different wine types are selected.

Pressing the wine button repeatedly will advance the wine selection in a clockwise fashion; the LCD segment will flash for a period of 5 seconds after which the wine type will be selected.

The wine button can be pressed again after the selection has been made, the LCD segment will flash in the current selection, press the wine button again to advance, or leave for 5 seconds for the current selection to be confirmed.



Making a manual adjustment to the target temperature

It is possible to alter the pre-programmed target temperature to suit your own preference.

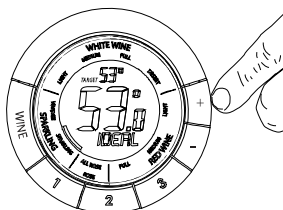
During the wine selection process when the LCD segment is flashing it is possible to alter the target temperature of the wine.

If the LCD segment is not flashing it is not possible to alter the target temperature, this avoids any inadvertent alteration of the target temperature during normal operation.

If necessary press the wine button to invoke the LCD segment to flash.

Using the '+' & '-' keys adjust the target temperature to your desired setting.

After the LCD segment has stopped flashing the new target temperature will be used.

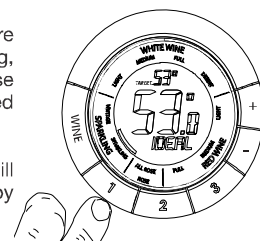


Storing your preferences

The Kelvin Duo has the ability to store the settings for 3 of your favourite wine types, saving you time if you drink a particular wine type frequently. It will also allow you to store any manual adjustments made to temperature for quick recall.

Once you have selected the wine you are drinking and made any personal temperature adjustments, whilst the display is still flashing, hold down the memory button you wish to use (1,2 or 3) until the LCD display has stopped flashing.

This wine type and any adjustments made will be stored and can be recalled at any time by simply pressing this memory button.



Placing the transmitter clip on the bottle

It is necessary to place the transmitter clip onto the bottle against the exterior glass. The Kelvin Duo transmitter clip is fitted with a conductive heat transfer pad that ensures a good surface contact with the bottle and improved heat transfer characteristics.

Ensure the clip is placed onto the glass below the level of the wine in the bottle. It maybe necessary to move the clip down periodically as the wine is consumed.

It is suggested that the clip is completely removed and repositioned rather than trying to slide the clip down the bottle as this may damage the heat transfer pad.



Push the open section of the clip against the bottle.

This will widen the aperture allowing the clip to pass onto the bottle.

Ensure the heat transfer pad is sitting firmly and squarely against the bottle.

Ensure the power switch on the clip is activated as described on page 5.

Clip charging process

The thermometer transmitter clip has been fitted with a rechargeable battery to avoid having to repeatedly open the sealed back plate; it also reduces the overall running cost of the unit by not having to replace batteries periodically.

Use the USB charging lead supplied and plug the large USB lead into a suitable USB power supply (PC, laptop, USB PSU).

Remove the rubber plug on the side of the clip to expose the USB socket.

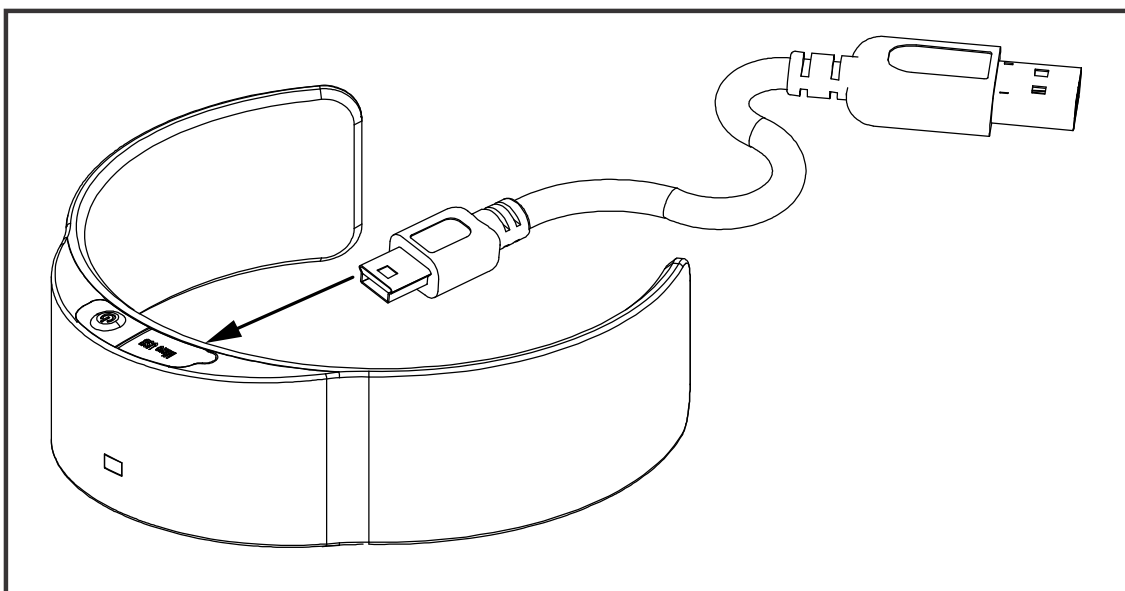
Plug the small end of the USB cable into the USB socket on the side of the clip. The clip will start charging immediately.

The LED indicator will be illuminated permanently to indicate the charging sequence is underway. When the battery charging cycle is complete the LED will turn off.

Remove the USB lead from USB sockets in the clip and the charging unit. Replace the rubber plug back into the USB socket on the side of the clip.

When the battery power within the clip has become low, the LED will flash every 2 seconds to indicate that recharging is required.

Ensure the power is turned off after use to conserve the battery life.



Receiving information on the receiver base

The clip will start to transmit data immediately after power up, ensure the receiver base is also switched on as detailed on page 5 to receive temperature data.

Based on your previous wine selection the target temperature will be shown at the top of the LCD screen.

The current bottle temperature will be shown as large numerals in the centre of the LCD display.

The status will be shown below the temperature display as a word:

Under - the temperature is below the target zone.

Ideal - the temperature is within the target zone.

Over - the temperature is above the target zone.

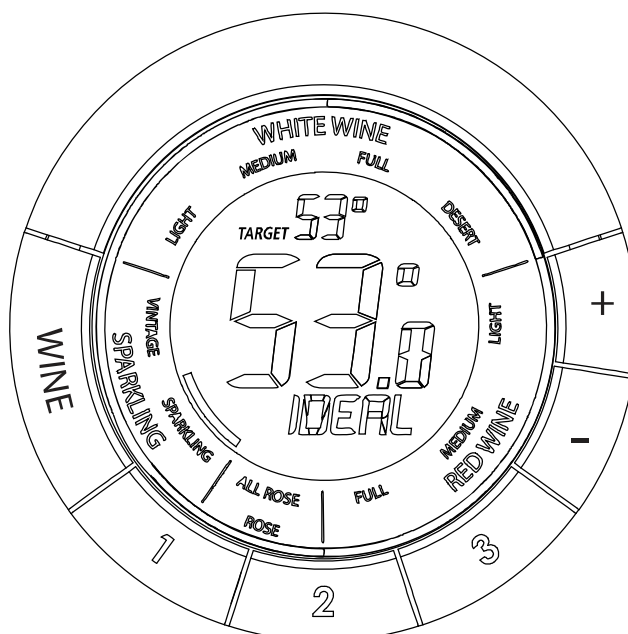
The backlight LED will pulse to indicate the temperature status;

Blue - the temperature is below the target zone.

Green - the temperature is within the target zone.

Red - the temperature is above the target zone.

The temperature data will be updated on average every 60 seconds.



Troubleshooting

Problem	Likely cause
LCD characters on the receiver base are faint	Batteries are low in receive base, change for new cells . See page 4 for details on how to change.
LCD display reads '00'	Receiver base has lost transmission signal from the transmitter clip. Ensure battery is fully charged in the clip. Ensure the receiver base is within workable distance from the transmitter clip (10m). Check if other high powered radio frequency devices are in close proximity which may affect the performance of this product. Whilst the clip and receiver are on, press the power button on the clip momentarily to re transmit data to check the connection.
Transmission distance between bottle clip and receiver seems poor	Ensure battery is fully charged in the clip. Check if other high powered radio frequency devices are in close proximity.
LCD display reads '00' and clip does not seem to work with the receiver	To reset pairing between clip and base, ensure clip is on but turn receiver base off. Press and hold down “-” and “+” keys together. Then turn on power of receiver base whilst still holding down the keys. Then release the “-” and “+” keys, after a short while the LED will show the word 'DEAL' this confirms the clip has been successfully paired with the base. Turn the power off on the receiver base, and then turn it on again to resume normal operation.

Contact details

For more information about the Kelvin range please visit our web site:
www.mykelvin.co.uk

Kelvin Duo is distributed by:
 Adventure Labs, Inc.
 974 Commercial St, Suite 109
 Palo Alto, CA 94303
www.adventurelabsinc.com

Kelvin Duo is a product manufactured by: Target Holdings (UK) Limited
 Unit 11 High March, Daventry,
 Northamptonshire, NN11 4HB,
 United Kingdom
www.targetholdings.co.uk

Patent pending
 Kelvin is a trademark of Target Holdings (UK) Limited
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FCC Statement:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF warning statement:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

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