C9 JUMPING HOUR MK III

OWNER’S HANDBOOK

Chr.WARD
LONDON
Your Christopher Ward watch has been designed and engineered by highly talented craftspeople to ensure not only accurate and precise timekeeping but also to bring a real pride of ownership that only luxury items of the highest quality can ever hope to deliver.

You have made an investment, a good one, and the aim of this handbook is to help you make the most of that investment during what I hope will be a lifetime of ownership.

Christopher Ward

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TIME ON YOUR SIDE...

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THE HISTORY OF THE JUMPING HOUR

The origins of the Jumping Hour (or Jump Hour) watch have been traced to French and Swiss pocket watches and clocks from as far back as the 1830s and 1840s. The great Swiss-based Austrian watchmaker Josef Pallweber did exemplary work with Jumping Hour pocket watch models for IWC in the 1880s and so is regarded by some as the father of the digital watch.

Despite the modern connection with electronic displays, the strict definition of a digital watch is one “that displays time in the form of numbers, rather than by a dial and hands”. So a Jumping Hour watch can be seen as a fascinating hybrid of analogue and digital.

The analogue minute hand passes round the dial and gives the impetus for the “jump” of the hour numeral, which brings in the digital element.

Watch aficionados like Jumping Hour watches for several reasons: their historical curiosity; their unusual good looks (the watch dial always looks clean); their mix of analogue and digital elements; and, in the case of the Christopher Ward C9 Jumping Hour, the advanced and highly accurate modified movement.

Another supreme selling point is the Jumping Hour’s convenient simplicity and ease of use. The prominent digit in the hour window and the position of the minute hand enable you to tell the time very quickly. And isn’t that what a watch is for?
Christopher Ward’s C9 Jumping Hour joined a number of Jumping Hour models in the world of luxury timepieces. Patek Philippe, A. Lange & Söhne, Cartier, Bell & Ross, Baume & Mercier, DMH and Perrelet are among the brands that have added this distinctive option to their ranges in recent years.
So much has already been written in praise of Johannes Jahnke's brilliant jumping hour modification of the ETA 2824-2 automatic movement that it is hard to come up with anything fresh to say.

With the Mark III version of this innovative piece of watchmaking genius, it is maybe worth focusing a little on the design of the watch which is, arguably, the most definitive of the three.

For the first time, Arabic numerals are used in preference to Roman ones in the hour change aperture and, as a result, the jumping hour complication achieves an even stronger visual status. When this is combined with the simple, beautifully crafted engineering of the rest of the dial and the perfect proportions of the case, horns and crown, it is very easy to fall in love with this watch.

Of course, it would be remiss of us not to mention the calibre JJ01 that beats beneath the dial and is visible through the exhibition case-back, especially as Johannes has continued to refine his work so that it is now, arguably, the most precise jumping hour mechanism the world has ever known. If this watch cost five times the Christopher Ward price you would neither be surprised nor short-changed. But then, it wouldn't be a Christopher Ward!
JOHANNES JAHNKE – CREATOR OF THE JJ01 CALIBRE

Born in East Germany, Johannes first dismantled and repaired a broken clock at the age of 12.

Championed by Marco Heyne of Lang & Heyne, he first made a functional escapement model by building the wheels and cogs by hand. The “King Albert of Saxony” is a column-wheel chronograph with a central minute counter. The necessity for a vertical clutch, together with the position of the chronograph, makes this construction extremely challenging. With some assistance from Lang & Heyne, in 2006 Johannes finished his watch.

In 2008 Johannes, eager to produce watches that were not merely the preserve of monied collectors, was asked to join Jörg Bader, Christopher Ward’s Swiss partner. The partnership with Christopher Ward that produced the exciting Jumping Hour and Single Pusher Chronograph suits Johannes particularly well as the relationship allows him to bring luxury watches within the reach of more people.

“WORKING WITH CHRISTOPHER WARD MEANS A DIRECT RELATIONSHIP IS POSSIBLE WITH THEIR CUSTOMERS – SOMETHING I FIND INSPIRING AND VALUE VERY HIGHLY.”

JOHANNES JAHNKE
Q. Why were you inspired to create a jumping hour movement?
J. The Jumping Hour is a mixture between turning and moving parts and this makes it interesting for us. There are a lot of complications with wheels and gears, but not so many with moving levers and cams. It is closer to the kinematik of a chronograph than of a moon phase or a Power reserve. We have seen a lot of Jumping Hours in the past but only in higher price ranges. There is no “affordable” Jumping Hour movement around. The Jumping Hour has, until now, been the reserve of luxury brands because it needs mainly expensive parts for an understated look. With our thinking to make luxury watches for an affordable price there was a big margin between our ideas and the existing movements on the market.

Q. You have used an ETA 2824-2 as the base movement. Why was this?
J. The 2824-2 is the main movement on the market. It is reliable and not too thick to carry the module. The module is constructed in such a way that we can use nearly every mechanical base movement behind. But with the focus on affordability, the 2824-2 is the best solution.

Q. The C9 JH keeps exceptionally good time for a jumping hour watch. How has this been achieved?
J. The main advantage of the system is, that it “eats” constantly the power of the base movements. This helps to adapt the regulation of the base movement. There are some other systems on the market where the power for the jump is taken in the last 10 minutes before the jump. There you have the problem that the watch has 50 minutes at the full power of the base movement and during the last 10 minutes
the amplitude of the balance will go down. The cam in our system is calculated so that we have a stable amplitude.

**Q.** Have you made any changes to the movement for the MK II model?

**J.** We have improved the power of the jump and the positioning of the hour disc. It is so precise now, that you cannot see the thin number "1" below the minute hand when it shows exactly 60min. The movement now is a stopping piece so that the jump is limited to exactly 30°. We can now give the jumping spring more power, the effect of which causes the movement to stop the disc more precisely.

**Q.** How do these improve the new watch?

By looking to the disc the jump is more digital. That means the disc accelerates more and stops within a tenth of a second. It gives the watch a higher feeling for the quality inside.

**Q.** You personally assemble the watches at your workshop in Biel. Is anyone else involved and how long does it take to assemble a C9 Jumping Hour from start to finish?

**J.** I try to assemble the first 50 pieces of all new constructions myself. But in the beginning I often need help as we’re working on so many projects at the same time. I’m happy to now have two highly qualified watchmakers (Frank and Stefan) in Biel and most of the time we’re working together on the same watches. Frank is focused more in the Chronograph and construction area, whilst Stefan is more involved with quality assurance and servicing. For a Jumping Hour watch we need around 60 minutes to assemble the watch but of course it varies a lot because it is all is by hand...
Q. Will you and the team be personally responsible for servicing the C9 Jumping Hour watches?

J. In general it is Stefan who takes care of the servicing but of course I would like to see the reasons why a watch is coming back. I need the feedback to improve the constructions. If it is an unusual fault I will repair it myself.
How the C9 Jumping Hour Works

The numerals for the hours are carried on a revolving disc. When 7.59, for example, changes to 8.00 as the minute hand reaches the end of the 59th minute, the 8 “jumps” into the window to succeed the 7. Many Jumping Hour watches do not keep especially good time as the surge of extra power the watch needs for the hour to change puts stress on the movement.

Johannes Jahnke’s ingenious solution has been to create a movement that ensures the watch uses a consistent amount of power throughout the course of an entire hour, resulting in much greater accuracy and reliability.

The Jumping Hour mechanism operates between the base movement and an hour disc. The hour disc is held by two screws onto a central star wheel which has 12 positions.

On the central minute wheel is directly mounted a cam which turns once per hour. When the rotary cam turns it picks up a lever once per hour and with pressure exerted upon it from a spring forces the star wheel to move 30° or a one hour jump.

The hour disc therefore moves on 30° also under the main dial. The main dial has an aperture cut out at 12 o’clock to display the hour underneath. The cam solution means that immediately after the hour has jumped the cam starts to pick up the lever again, gradually moving it closer to the star wheel ready for the next jump. The beauty of this is that the power consumption is consistent over the 60 minutes giving a much higher degree of accuracy than a lot of other jumping hour complications in the market. Other Jumping Hour movements will typically use power in the last 15 minutes, and therefore during the course of an hour there is terrific variation in both power consumption and therefore accuracy.
It also means that a much more stable amplitude is achieved over the hour and in the long term is much better for the life of the watch. Regulation is also that much easier due to the consistent power consumption. This is more complicated than other jumping hour movements granted, but then reliability is that much better.

And this reliability didn’t just fall in our laps. We insisted that all the parts be Swiss-made, and we made the bold move to make some of the parts outside of the watch industry using state of the art Laser cutting technology only found in the medical sector. This means cutting is unbelievably precise and also gives greater anti-corrosive properties.
C9 JUMPING HOUR MECHANISM

1. Lever Spring
2. Jumping lever
3. Detector and Spring
4. Push Rod
5. Cam (below star, not visible)
6. Centre Star
7. Position Spring
8. Excentric
9. Dial Fixation
HOW THE JJ01 MODIFICATION WORKS

1. In the centre of the main movement is a cam (5) which turns clockwise once per hour.

   Over a 60 minute period the Cam lifts the detector (3) together with the jumping lever (2) which is pushed by the lever spring (1) towards the cam.

   After exactly 60 minutes, the lifting time of the cam ends. The lever can fall down and it takes the centre star with it.

2. The centre star has 12 positions and it supports the turning disc.

   While falling, the push rod (4) of the jumping lever (2) forces the star wheel to move 30°. The jumping Hour disc with the roman numerals is directly screwed to the star.

3. The excentric (8) enables precise adjustment of the centre star position. This allows the numbers to be centred in the window accurately.

The system is not new, but it is more complicated than other systems.
THE C9 JUMPING HOUR MK III

TECHNICAL INFORMATION

FEATURES

- Bespoke ETA 2824-2 Jumping Hour automatic modification by Johannes Jahnke
- 38 hour power reserve
- Personally assembled by master Watchmaker Johannes and his team
- 40mm or 43mm surgical grade stainless steel case and crown
- Water resistant to 50m/164ft
- Optic white one-piece metal dial
- Anti-reflective sapphire crystal
- Screw-down transparent case back with anti-reflective mineral crystal
- Unique engraved serial number
- Embossed alligator pattern Italian leather strap with CW motif clasp

TECHNICAL DATA

Diameter: 40 or 43mm
Height: 13.3mm
Case weight: 71g or 84g
Calibre: JJ01 Jumping Hour modification of ETA 2824 automatic movement
Vibrations: 28,800 per hour (4 Hz)
Timing Tolerance: +20 / -20 seconds per day
Case: 316L stainless steel
Water Resistance: 5 bar
Strap: 20mm (40mm case)
22mm (43mm case)
DISPLAY AND CONTROL BUTTONS

The C9 Jumping Hour has a maximum power reserve of 38 hours when fully wound. To re-power the watch after a period of non-use, simply wind the crown for approximately (a minimum of) 20 revolutions. Normal wearing will very quickly allow the rotor to start re-powering the watch over time after putting it on your wrist.
HOW TO OPERATE YOUR C9 JUMPING HOUR

SETTING THE TIME

- Position 1 is for winding in power. Wind in a clockwise direction to re-power the watch.
- Pull gently into position 2. For rapid hour correction, turn hand in a clockwise direction.
WATER RESISTANCE

Although your watch has been through vigorous static pressure testing, it is worth remembering that there are many variables that can affect the water resistance of your watch.

For instance, arm movements during swimming and the sudden impact of diving and water sports will drastically increase the pressure the watch is under. Wearing your watch in the bath, shower, or sauna can also have an effect as a rapid increase in temperature can cause seals to expand and in extreme cases, malfunction or create condensation.

For these reasons, the water resistance rating of your watch (as shown) should only ever be considered a guideline and we strongly recommend they are always adhered to.

- **1 BAR (10 METRES)**
  Safe to wear your watch while washing your hands with tap water.

- **3 BAR (30 METRES)**
  Washing your car and/or general hose pipe usage.

- **5 BAR (50 METRES)**
  Water resistant to most household shower units.

- **10 BAR (100 METRES)**
  Safe to use while snorkelling in open water.

- **30 BAR (300 METRES)**
  Ideal for experienced divers and those practising scuba-diving.

- **50 BAR (500 METRES)**
  Professional divers, experiencing prolonged exposure underwater.

- **100 BAR (1000 METRES)**
  Professional deep sea diving.
STRAPS & BRACELETS

As you would expect, we place as much emphasis on the quality of our straps and bracelets as we do our watches. We only use the finest leathers for our straps and our premium alligator straps are all ethically sourced from CITES approved farms in Louisiana. Similarly, we only use the finest metals in the construction of our bracelets, all of which are precision engineered for durability, efficiency and comfort. The following guidelines explain how easy it is to use and adjust your Christopher Ward strap or bracelet.

LEATHER STRAP WITH BADER DEPLOYMENT

1. Press to release
2. Pull open the clasp
3. Locate the opening and thread the strap through
4. Close the clasp

INTEGRATED BRACELET

1. Press to release
2. Pull open the clasp
OUR WATCH CARE PROGRAMME

Your watch is constructed from the finest components and materials available, including one of Switzerland’s finest mechanical movements. As with all watches of this quality, with the right care and attention, your new Christopher Ward watch has the potential to become an heirloom piece giving further joy to future generations. It’s for this reason we have created our industry leading approach to after-sales care, starting with our famous 60/60 Guarantee which remains the most comprehensive guarantee in the world of watchmaking.
Christopher Ward’s 60/60 Guarantee is designed to deliver complete peace of mind and the best support possible throughout the lifetime of your ownership. The guarantee has two key elements and sits alongside our Servicing and Repairs Programme:

**60/60 GUARANTEE**

**1. 60 DAY FREE RETURNS**
Our success depends on you being completely happy with your new Christopher Ward watch. You have up to 60 days to return your watch, absolutely free of charge, and receive a replacement or full refund by return – so long as it has not been worn and is returned in box-perfect condition.

**2. 60 MONTH MOVEMENT GUARANTEE**
Your watch, at its heart, has a top quality precision engineered Swiss movement – so it’s very unlikely to give you problems with the minimum amount of care and attention, including a regular service. We recommend you return your watch to us every 3/4 years for a service, so our expert technicians can keep your fine timepiece in peak condition.

**SERVICING & REPAIRS...THE CHRISTOPHER WARD WAY...**
Our innovative approach to servicing and repairing your Christopher Ward watch means that having your watch serviced or repaired doesn’t mean months of waiting followed by an exorbitant bill – which is more or less the experience guaranteed by every other luxury watch brand. We have developed an easy, quick and affordable expert service and repairs programme that doesn’t cost the earth and has your watch back where it belongs – on your wrist – in double-quick time.

Visit our website for more details about our 60/60 Guarantee and Service and Repair Programme.
From small beginnings just a few short years ago (our first workshop was actually a refurbished chicken shed!), Christopher Ward has won a worldwide following for his eponymous watch brand and can justifiably claim to manufacture the most affordable luxury watches in the world.

For many, the philosophy behind the brand, of trying to put luxury watches within the reach of everyone, is as attractive as the watches themselves, as is the very open approach of the business which means that Chris and the team spend a lot of time communicating personally with our customers – many of whom have become friends.

As the owner of a Christopher Ward watch, if ever you need to get hold of us we are at your service. We have listed some useful contact details on the back cover.

There is also always something new going on at our website at www.christopherward.co.uk and, if you haven’t already discovered the independent forum dedicated to our brand at www.christopherwardforum.com we would recommend a visit. Informative and fun, it’s a great place to hear the unexpurgated view of Christopher Ward of London!