

# FROM THE COCKPIT TO THE WRIST





## BELL & ROSS AND AERONAUTICAL INSTRUMENTATION

The iconic BR 01 AVIATION collection is directly inspired by the instrumentation of aircraft cockpits, and addresses four fundamental requirements: legibility, functionality, precision and water-resistance.

Pushing its exploration of aeronautical navigation instruments further, Bell & Ross innovates year after year with completely new high-tech models —BR 01 COMPASS in 2010, and RADAR in 2011—, offering a completely new way of reading time, inspired by flight instrumentation. In 2012, Bell & Ross introduced three new versions: BR 01 HORIZON, BR 01 ALTIMETER, and BR 01 TURN COORDINATOR. The result was a collection of exclusive watches with an innovative display and uncompromising legibility: an absolute priority for professionals and for every Bell & Ross watch.

## A NEW TRIO AND A REVISED INSTRUMENTATION PANEL

In 2013, Bell & Ross is enhancing the AVIATION collection with three new instruments directly inspired by the cockpit, – HEADING INDICATOR, AIRSPEED and CLIMB – and essential to flying and navigation.



- The gyrocompass, course indicator or heading indicator, is a vital instrument for flying, used during both manual flight and autopilot, which indicates the course the plane is on.



- The anemometer, or airspeed, indicates speed. It measures an aircraft's speed in relation to the air through which it is moving and allows the plane to be flown in a controlled way without visibility.



- The variometer or vertical speed indicator, climb, indicates to the pilot at all times whether the plane is ascending, descending or in level flight. This instrument works using atmospheric pressure and is graduated in hundreds of feet per minute.

## FROM THE COCKPIT TO THE WRIST

With this new trio, Bell & Ross recreates the graphic style of navigation instruments as closely as possible, once again going beyond the traditional approach to reading the time.

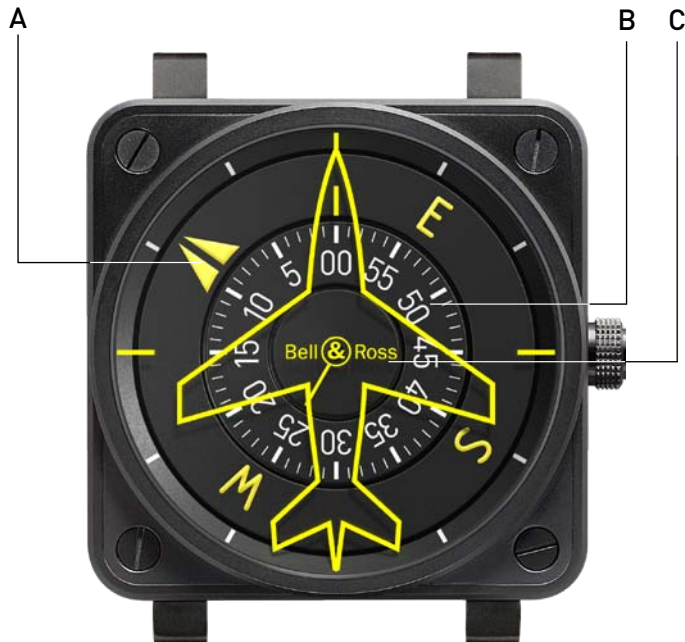
These three new models —BR01 HEADING INDICATOR, BR01 AIRSPEED and BR01 CLIMB— are each available in limited editions of 999 pieces. The first 99 will be offered exclusively in a lavish collector's box containing the six instruments: BR01 HORIZON, ALTIMETER, TURN COORDINATOR, HEADING INDICATOR, AIRSPEED and CLIMB. The box is designed as a control panel where the essential instruments are laid out in T shape for optimum legibility.

An exclusive box that will make its owner feel as though they own a fragment of an aircraft's cockpit, delighting both aviation fans and watch collectors.



BR 01 FLIGHT INSTRUMENTS COLLECTOR'S BOX

# BR01 HEADING INDICATOR LIMITED EDITION OF 999 PIECES



BR 01-92 HEADING INDICATOR – DIAL ELEMENTS

- A. Hour disc
- B. Minute disc
- C. Second disc



REFERENCE INSTRUMENT: HEADING INDICATOR

## DISC-BASED DISPLAY INSPIRED BY THE HEADING INDICATOR

Bell & Ross designers have borrowed the graphic characteristics of the heading indicator to create an original and innovative display of time.

- The dial comprises three independent concentric discs, graduated for the hours and minutes. The seconds are displayed in the center on a disc, which is not graduated, but features a yellow marker. The hour reading is indicated by the yellow triangle, which appears on the outer hours' disc. Minutes are read from the middle disc.
- The WES (West, East and South) indications are also displayed on this disc, as on the original instrument, and the N for North indication has been replaced by a yellow triangle marker for reading the hours.
- To allow the markers to stand out against the background, an airplane – identical to the one found on the original instrument – and yellow index marks are engraved under the glass.
- The anti-glare, matt black carbon finish of the case is inspired by the color of an instrumentation panel, designed to make the dials easier to read by eliminating glare.

## TECHNOLOGICAL FEATS

The BR01 HEADING INDICATOR is highly sophisticated. The technical challenge posed by its design and production required the collaboration of the best watchmaking engineers.

- Since each disc weighs 30 times more than a watch hand, ultra light discs needed to be created in order to not reduce the power reserve nor the accuracy of the watch. Furthermore, each disc needed to be sufficiently resistant so as not to become deformed or risk any friction. This dual challenge has required the development of specific materials and new techniques.
- As they rotate, an adjustment to the nearest micron ensures that the discs are constantly parallel. The accuracy of the assembly requires all the know-how of master watchmakers.

# BR01 AIRSPEED LIMITED EDITION OF 999 PIECES



BR 01-92 AIRSPEED – DIAL ELEMENTS

- A. Hour hand
- B. Minute hand
- C. Second hand



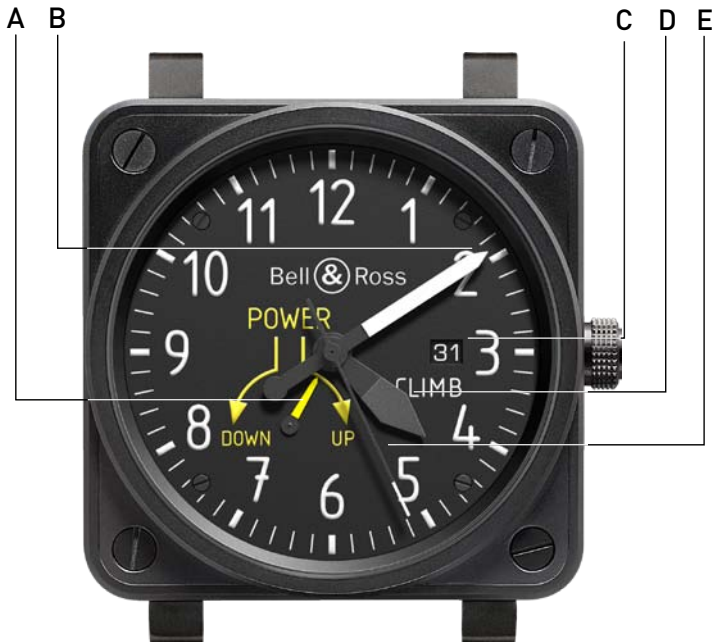
REFERENCE INSTRUMENT: AIRSPEED

## DESIGN THAT ENHANCES LEGIBILITY

Bell & Ross designers have borrowed the graphic characteristics of the anemometer, or airspeed, to create an original and extremely legible display of time.

- To enhance legibility, the hour, minute and second graduations have been separated to promote the minutes on the main dial – as in the original instrument –, while the hours are displayed in the center.
- The three colors that indicate levels of criticality in the original instrument – green, white and yellow – also appear on the watch dial and indicate the zones by quarters of an hour.
- The hands and index marks are covered in a white photo luminescent coating, contrasting with the black of the dial, echoing the legibility principles of professional aeronautical instruments.
- The anti-glare, matt black carbon finish of the case is inspired by the color of an instrumentation panel, designed to make the dials easier to read by eliminating glare.

# BR01-97 CLIMB LIMITED EDITION OF 999 PIECES



BR 01-97 CLIMB – DIAL ELEMENTS

REFERENCE INSTRUMENT: CLIMB

- A. Power reserve indicator
- B. Minute hand
- C. Date
- D. Hour phantom hand
- E. Second hand

## A GRAPHIC STYLE INSPIRED BY THE VARIOMETER OR CLIMB

Bell & Ross designers have borrowed the graphic characteristics of the climb to create an original and innovative display of time.

- The frame reflects the style of the original instrument. Instead of the variometer, a power reserve indicator allows the user to measure remaining power, which is vital for the smooth functioning of the movement. This indicator is yellow, contrasting with the black of the dial and the other time information. The date is also displayed in a window at 3 o'clock.
- The typeface of the graduation is reminiscent of CLIMB. Since it only has one white hand, the hour hand has been darkened to render the best imitation of the original instrument.
- The hands and the digits are covered in a white photo luminescent coating, contrasting with the black of the dial, and echoing the legibility principles of professional aviation instruments.
- The anti-glare, matt black carbon finish of the case is inspired by the color of an instrumentation panel, designed to make the dials easier to read by eliminating glare.

# TECHNICAL CHARACTERISTICS



## BR01-92 HEADING INDICATOR

**Movement:** ETA 2892 mechanical automatic.

**Functions:** hours, minutes, seconds.

**Case:** 46mm diameter. Black PVD\* steel finish. Screw-in crown.

**Dial:** three independent concentric discs, graduated for the hours and minutes. The seconds are marked out in the center on a disc, which is not graduated, featuring a yellow marker. The hour reading is indicated by the yellow triangle, which appears on the outer hours' disc. Minutes are read from the middle disc. Markers: a plane and yellow index marks are engraved under the glass.

**Glass:** sapphire crystal with anti-glare coating.

**Water-resistance:** 100 meters.

**Straps:** rubber and heavy-duty synthetic fabric.

## BR01-92 AIRSPEED

**Movement:** ETA 2892 mechanical automatic.

**Functions:** hours, minutes, seconds.

**Case:** 46mm diameter. Black PVD\* steel finish. Screw-in crown.

**Dial:** Black. The hour, minute and second graduations have been separated, with the minutes in white on the main dial, and the hours in the center in yellow. Seconds are read on the outer raised dial. The three colors of the original instrument – green, white and yellow – are used on the raised dial and indicate quarters of an hour. The index marks and hands have a photo-luminescent coating for nighttime reading.

**Glass:** sapphire crystal with anti-glare coating.

**Water-resistance:** 100 meters.

**Straps:** rubber and heavy-duty synthetic fabric.

## BR01-97 CLIMB

**Movement:** ETA 2897 mechanical automatic.

**Functions:** hours, minutes, seconds. Date.

**Case:** 46mm diameter. Black PVD\* steel finish. Screw-in crown.

**Dial:** black. Date window at 3 o'clock. Yellow power reserve indicator at 9 o'clock. Hands, index markings and date window covered in a photo-luminescent coating.

**Glass:** sapphire crystal with anti-glare coating.

**Water-resistance:** 100 meters.

**Straps:** rubber and heavy-duty synthetic fabric.

\*PVD: Physical Vapor Deposition

# APPENDIX 1



BR 01 HEADING INDICATOR – TOP VIEW



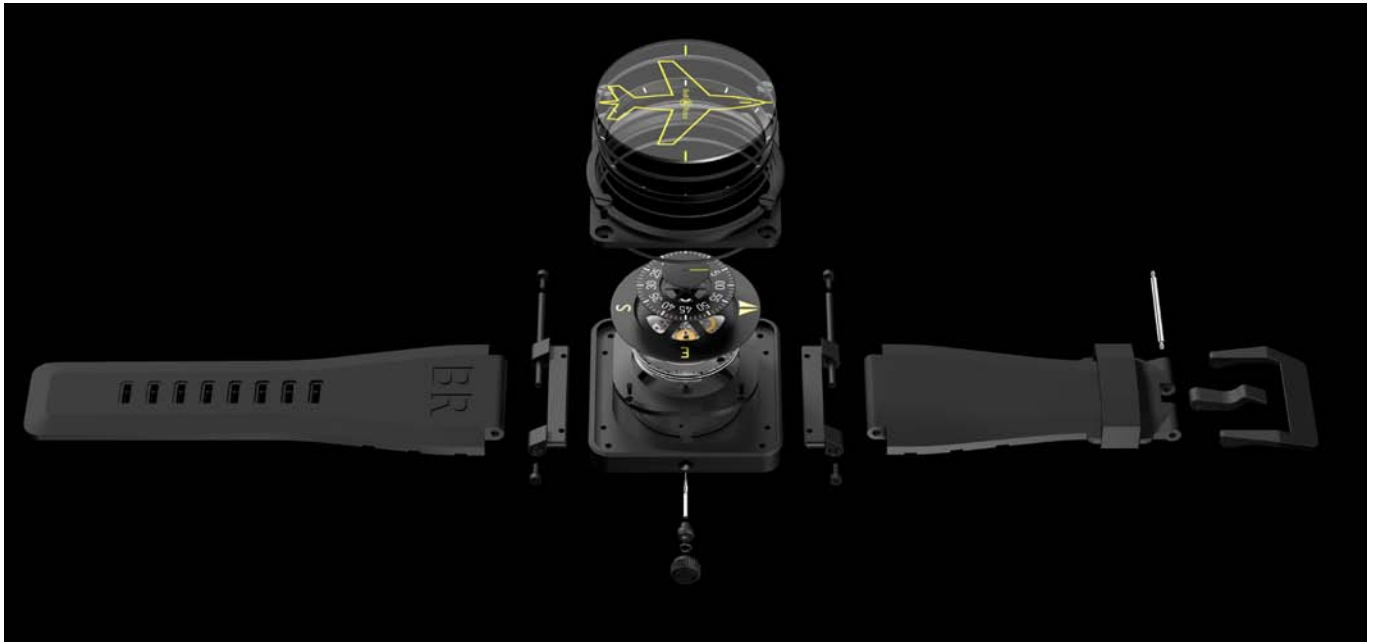
BR 01 AIRSPEED – TOP VIEW



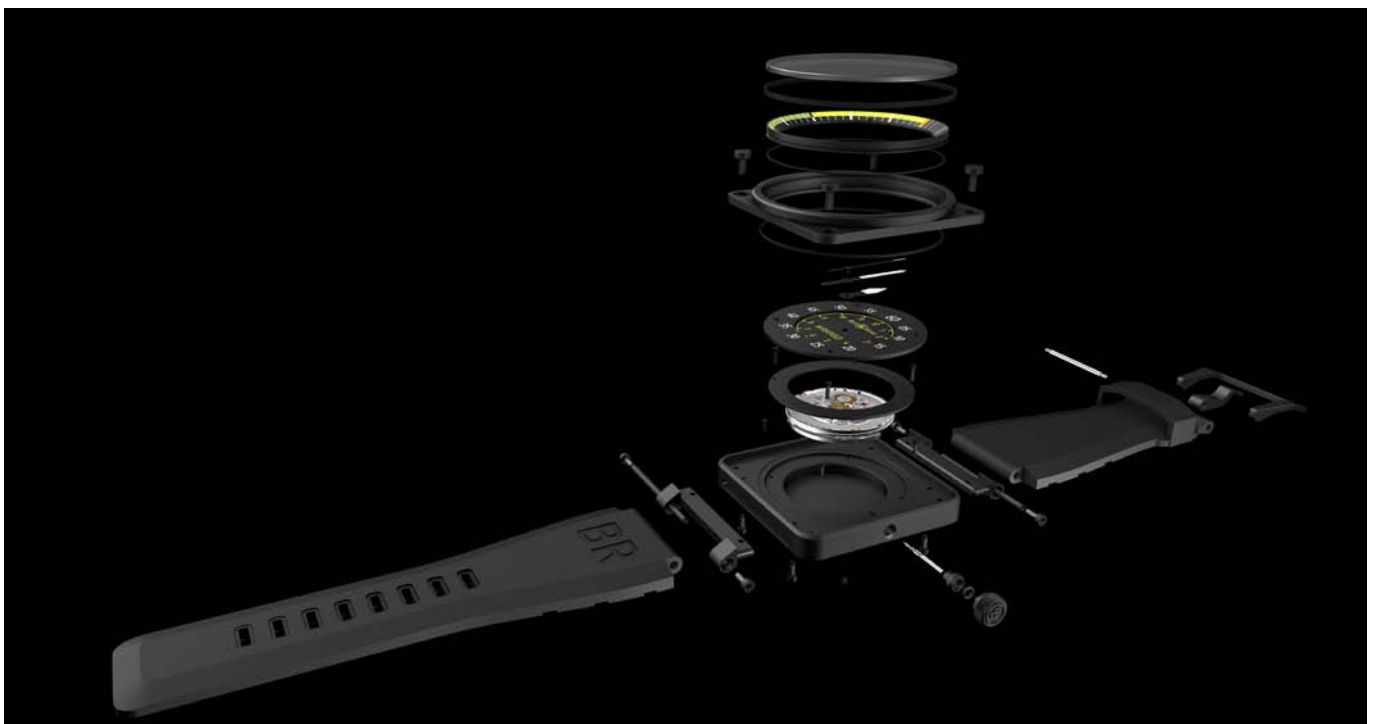
BR 01 CLIMB – TOP VIEW



# APPENDIX 2



BR 01 HEADING INDICATOR – CGI DETAILS



BR 01 AIRSPEED – CGI DETAILS