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Celsius XVI II SPECIAL

THE WORLD'S MOST INFLUENTIAL WATCH MAGAZINE



Celsius XVI II

Combining Haute Horlogerie and Mobile Telephony



FORTY YEARS AGO, WHEN THE QUARTZ WATCH APPEARED FOR THE FIRST TIME IN THE MARKETPLACE, PEOPLE THOUGHT THAT THE AGE-OLD ERA OF THE MECHANICAL TIMEKEEPER HAD, ONCE AND FOR ALL, COME TO AN END. YET, THIS DID NOT HAPPEN, QUITE THE CONTRARY. TODAY, MECHANICAL WATCHES ARE ENJOYING A VERITABLE GOLDEN AGE. NEVER HAVE THEY BEEN SO COVETED, SO SOPHISTICATED, SO COMPLEX, SO PRECISE, SO PRESTIGIOUS, AND SO ORIENTED TOWARDS THE FUTURE.

ONE OF THE KEYS OF THIS UNDENIABLE SUCCESS COMES FROM THE “HUMANIZATION” OF TECHNOLOGY OFFERED BY MECHANICAL TIMEKEEPING, SEEN AS MUCH IN ITS MODE OF OPERATION AS IN ITS ARTISANAL APPEARANCE, ITS WARMTH, PERSONALIZATION, AND THE NOBILITY OF ITS MATERIALS. IS IT POSSIBLE FOR THIS HUMAN TOUCH—THIS HUMAN “ADDED-VALUE”—TO BE TRANSPOSED INTO THE WORLD OF THE CELLPHONE?

CELSIUS XVI II TAKES UP THE CHALLENGE TODAY, AN AMBITIOUS YOUNG COMPANY HAS ENVISIONED A TOTALLY MECHANIZED CELLPHONE. IS THIS MERELY A DREAM?

A MECHANICAL UTOPIA?

NO, NOT AT ALL.

THEIR VISION IS FAST BECOMING A REALITY, AND THE FIRST STEP ALONG THIS PATH IS THE CREATION OF THE LEDIX.

THE LeDIX?

Quite simply, the LeDIX is the invention of a new portable object, one that will undoubtedly acquire a cult status as time goes by: an *Haute Horlogerie* cellphone.

Make no mistake, however, this is not a phone that merely borrows the codes of *Haute Horlogerie*, nor a phone that simply transforms itself into a precious luxury object. Rather, it is a phone that combines a daring *Haute Horlogerie* mechanism—complete with a flying tourbillon—and a high performance telephonic platform.

IS LeDIX A CRAZY IDEA?

More exactly, it is an ingenious idea that inaugurates a new era and a prestigious new way of life, while creating growth opportunities for *Haute Horlogerie* retailers around the world.

By combining the best of both worlds, Celsius XVI II gives the cellphone true credibility in the mechanical watchmaking universe. By clothing it in prestigious material worked in the most beautiful and artful manner, by giving it a design that is as sleek and ergonomic as it is contemporary, by infusing it with micro-mechanical expertise, and by offering superlative service, Celsius XVI II bestows a perennial aspect to mobile telephony unknown up to now. At the same time, Celsius XVI II opens new avenues of expression and expansion for *Haute Horlogerie*, as it clears new terrain to create new cultural fields.

BIRTH OF A NEW BRANCH

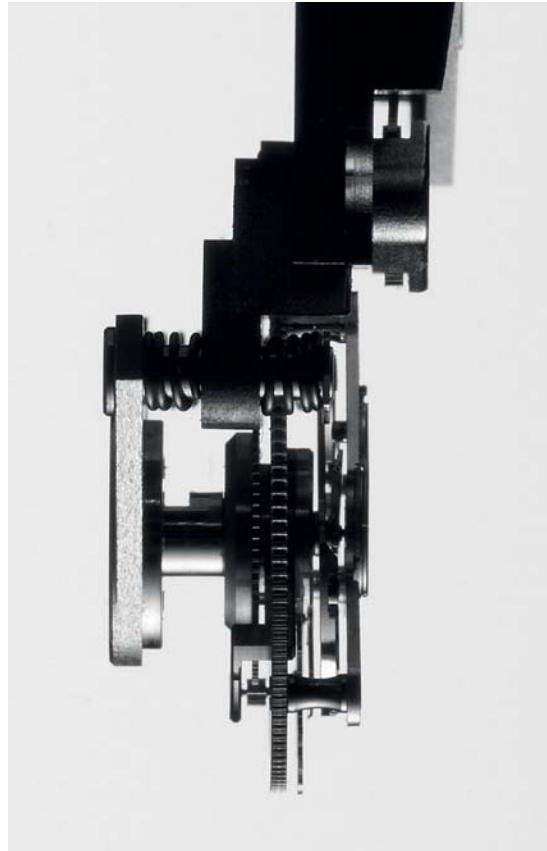
What does combining *Haute Horlogerie* and mobile telephony really mean? Everything, perhaps, except “grafting” a watch onto a portable phone. Fundamentally, it involves completely transforming the universe of the cellphone by introducing the age-old grand principles of mechanical timekeeping.

Celsius XVI II embodies the progressive and gradual integration of two opposite worlds. In doing so, it is necessary to surmount many obstacles since these two different reservoirs of knowledge are sometimes subject to contradictory rules. An *Haute Horlogerie* watch is contained in the space of a few cubic centimetres comprising an impressive number of mechanical parts interacting in a rigorously orchestrated manner. The cellphone is also in a small space with a very complex assortment of electronic parts.

Applying the principles of electronics to the rules and principles of mechanics is not a trivial matter. For example, changing the position of a speaker by a few millimetres might cause major problems elsewhere. In general, integrating a large number of moving metal parts onto a telephonic platform poses considerable challenges.

Overcoming these challenges required three years of research and development with teams of interdisciplinary specialists. The result is the first creation of Celsius XVI II: the LeDIX. This veritable telephone pocket watch—or, depending on your point of view, this *Haute Horlogerie* cellphone—is a totally new and innovative nomadic *Objet d’Art*, unheard of up to the present time.





LeDIX, THE HAUTE HORLOGERIE SIDE

Appearing, at first glance, to be a futuristic pocket watch, the LeDIX is housed in a complex clamshell case composed of an upper section, housing the tourbillon movement, and the robust lower portion comprising the phone.

With a structure reminiscent of the ergonomic body of an F1 race car, the case of the LeDIX is CNC-cut in grade 5 titanium, which is satin-finished or treated with black PVD, and embellished with precious inserts of solid ebony wood or carbon fibre. Since it is so different from a traditional watch, the available space in the LeDIX gave watchmakers the flexibility to radically rethink the architecture of an *Haute Horlogerie* movement so that it could be placed vertically in a totally original manner.

Under the unusually shaped sapphire crystal is the large flying tourbillon mounted on four shock-absorbers. The tourbillon is also placed 36-mm off-centre, a first in the world of watchmaking. Above the tourbillon and also visible are the main gear trains mounted on their jewels and supported by overhead rhodium-plated elongated bridges. At the top, the hours and minutes are

displayed by two steel hands coated with SuperLuminova on a plain large satin-brushed black gold dial, decorated with three-dimensional time markers. The 608 component parts of the LeDIX are mostly hand finished, beveled, polished and satin-finished in the purest artisanal traditions of *Haute Horlogerie*.

In the LeDIX, the use of the tourbillon is fully justified since this mobile escapement was originally invented by Abraham-Louis Breguet to compensate for the effects of gravity on movements in pocket watches carried in a vertical position, which is the case for the LeDIX.

On the dial is a rather intriguing term: "Remontage Papillon" (butterfly winding). When the LeDIX is opened, like the wings of a butterfly, a soft sound is heard. It originates from the patented winding system of the mechanical movement. For the first time in watchmaking, the winding is neither manual nor automatic. Rather, in the LeDIX, each time the cover is opened, the "Remontage Papillon" system is activated via a click hinge with conical pinions and a barrel disengageable by a slipping spring, giving three hours of supplementary power reserve, of the total of 120 hours.

On the inside face of the cover, the other side of the flying tourbillon is visible, protected by a sapphire crystal, while the delicate ticking can be heard by the user. But this functional fusion between the mechanical timekeeper and the phone does not stop with this ingenious type of winding.

On the back of the lower section of the LeDIX, various functions connected to the phone have been enhanced with subtle mechanization. For example, the ejection of the battery from its compartment has been totally mechanized. A drawer, finely decorated with the *Clous de Paris* pattern, rises up and partially ejects the battery so that it can be easily removed and replaced. Once the battery has been removed, the Sim card is accessible. As another example, the main connector is protected from dust by a cover that is screwed and unscrewed mechanically thanks to a small roller. On the side of the lower case, made in machined titanium, the buttons for adjusting the phone's volume have been designed in a very watchmaking style, inspired both functionally and aesthetically by the push-pieces in traditional chronographs. Last but not least, the closing of the phone's top cover is cushioned by micro ball bearings mounted on springs.

Throughout the entire piece, the superlative finishing involves excellent polishing, satin-finishes, mechanical engravings, and exclusive felt-polished screws featuring the X VI II symbol. Even the camera lens and flash unit are protected by sapphire crystals. (In all, the LeDIX has seven sapphire crystals, some of which have curvatures and dimensions well above watchmaking standards.)





LeDIX, THE PHONE SIDE

On the phone side, the engineers of the LeDIX, concerned about the long life of their product, opted for robustness, reliability, simplicity of use, and user-friendly essential functions. They endowed the LeDIX with a high performance SAGEM Wireless platform, one of the most reliable on the market, which was specifically developed and tested on wireless networks around the world. The technical specifications of the SAGEM Wireless platform meet very high standards, more selective than traditional GSM norms. The LeDIX is also equipped with a very user-friendly interface that is deliberately limited to essential functions.

Five main icons on the sapphire crystal-protected screen let the user easily choose the essential functions of: calling, messaging, calendar, address book, and camera whose lens and flash are also under a protective and scratch-resistant sapphire crystal. Other functions, such as email or Internet access are available in sub-menus.

As simple to use as it is technologically advanced (*), the LeDIX has been designed as a phone for personal use. Its technology has thus been designed with the comfort, security, and safety of its user in mind. In this regard, the antenna has been placed the

- (*)
- Telephone 2.75 G GSM-GPRS-EDGE: Tri-band 900/1800/1900MHz
 - AM-OLED Screen: 2.2" QVGA, 320x240, 262k colours
 - Photo / Video: 3.2Mpix camera, auto-focus, flash, digital zoom
 - Music: MP3, AAC, AAC+, music player, stereo, 3D sound
 - Video streaming, video capture and playback, progressive download
 - Bluetooth 1.2 Profile: AADP, AVRCP
 - MMS, Java application, 2GB internal memory
 - Browser open source, WAP2.0
 - Battery: Li-Ion 770mAh, >3.5h talk time, 240h in standby mode
 - Multi-language interface: Including French, English, Chinese, Russian, Spanish, Arabic, etc.

farthest distance possible from the ear (more than 150mm). For the greatest protection of user information, a simple and secure data transfer system has been developed, guaranteeing the deletion of all data and their transfer in total confidentiality towards another device.

THE LeDIX UNIVERSE

Like all luxury products worthy of the name, the LeDIX comes with accessories and services that meet the requirements of the most discerning and demanding customers. Packaged in a presentation box with "mysterious" mechanical drawers made of the most noble of materials, the LeDIX is delivered with a series of accessories that are as functional as they are exceptional. The leather cover, case, wrist strap, and original holster are hand-sewn by leather specialists, and are convenient for transporting the LeDIX.

The battery is charged using an elegant "docking station" made in wood, leather, and satin-polished metal that allows charging and telephoning at the same time. A mechanical spring system integrated into the docking station lets the phone be connected or disconnected easily. Finally, an original hands-free kit in satin-polished metal and wood or carbon fibre was specially designed for Celsius X VI II. Ingeniously developed to avoid tangled wires, it is like an elegant "tie clip" endowed with a ring for organizing the wires.

The LeDIX also comes with outstanding service. In the event that after-sales service is required, Celsius X VI II offers its clients a courtesy phone. While this loaner phone does not have an integrated mechanical watch, it is nonetheless specially designed and developed by the Celsius X VI II teams in the same spirit of exclusivity and dedicated use. This phone is therefore not for sale but is at the exclusive disposition of LeDIX phone owners. As above, a secure system lets the data be transferred securely from one phone to another, guaranteeing both the absolute protection of the user's private information and the ease of use. There is no need for users to adapt to the loaner phone's operation. Everything is identical to their own LeDIX.



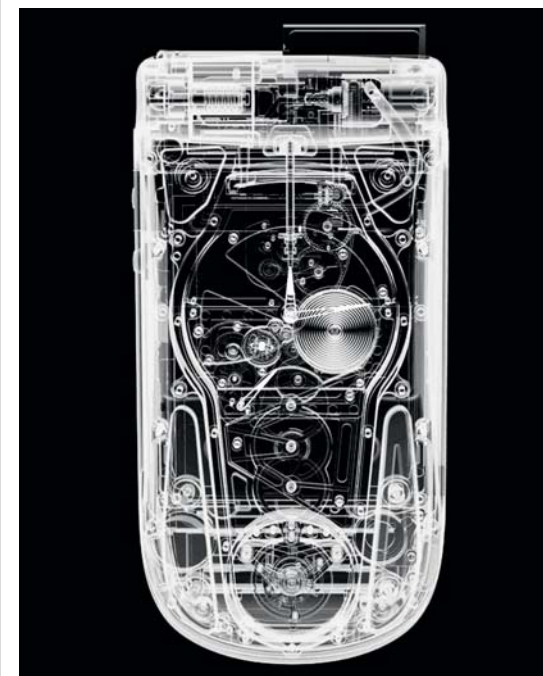
THE LeDIX AND AFTER

As expected, the very high quality of the Celsius X VI II *Haute Horlogerie* phones is guaranteed by production processes that draw from the best of both worlds. The watchmaking and micro-mechanical components are designed, produced, finished, and for the most part, decorated by hand in Switzerland or France by a network of highly skilled watchmakers and artisans.

The phone platform and the electronic cards are made and assembled in France, in a high security unit specialized in strategic products. All Celsius X VI II products must undergo advanced testing for reliability and durability similar to those in the aeronautics industry, which are equivalent to six months of intensive and continuous usage.

As advanced as it is, however, the LeDIX is only the beginning, and brilliantly inaugurates the innovative Celsius X VI II adventure. Future products are already under study and some are undergoing validation. They are pushing back the frontiers that separate mechanics from the phone, while new functions are being fused in totally unusual, even spectacular, ways.

Officially recognized and supported by the French government as "an innovative young enterprise," Celsius X VI II will gradually impose its vision of "humanized" technology, while offering the domain of *Haute Horlogerie* opportunities for new growth.



Micromechanical art
of timeless Communication



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