



GS U510 — Synergy of the Best Global Practices

In July 2013, GS Group international investment and industry holding company released a new product under the General Satellite brand, the digital TV set-top box GS U510. The receiver was fully developed at the holding company R&D department and is being launched at the innovation cluster Technopolis GS facilities.

The Russian DTH platform Tricolor TV extensively uses the GS U510. As of 2014, over 800 thousand set-top boxes were sold, which makes GS U510 one of the most popular products on the local set-top boxes market.

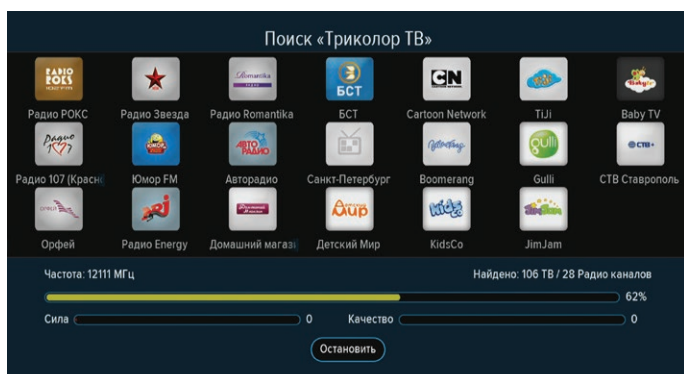
GS U510 represents:

► New operating system

The new software platform, Stingray in combination with advanced hardware for performance speed and dynamic development of additional operator services.

► Intuitive interface

The thoroughly designed graphical interface of the receiver is similar to the user interface of a smartphone and performs at a familiar level for subscribers with global market analogues. GS U510 has simple and colorful games and animated screensavers.



Search and control functions in the set-top box GS U510 menu

► Intuitive control

Comprehensible implemented functionality for any user age and skill. The variety of pre-installed settings ensures easy and simple control that allows user to start enjoying TV viewing in just a few minutes after connecting the device.

► Full HD format and multi-channel audio

Improved quality of received channels in standard definition up to Full HD by using new algorithms of signal processing. It's fully compatible with HD-TVs as a result from image shrinkage. Additionally transmitted digital multi-channel audio by the operator makes for a pleasurable audio experience.

► Personalization

Customizable user profiles with genre lists and other settings provide usability for the whole family. With the number of channels offered to the audiences today amounting to the hundreds, relevant feature like profile and genre lists management that provides for simple navigation when service packages development and extension become more enticing for subscribers.

INNOVATIVE PRODUCT GS U510

A cryptographic co-processor, the GS Lanthanum that is the first Russian-made cryptographic processor for consumer electronics, represents one of the GS U510 key elements. It was developed within international cooperation amongst R&D centers that was unique for Russia. GS Group was a key manufacturer and integrator of all the development and multistage business processes.



Vyacheslav Kuklov, Deputy Technology Officer at Tricolor TV:

"The GS U510 receiver addresses the problem of broadcast piracy hacking that's relevant for Pay-TV operators. The new cryptographic co-processor ensures for effective operator protection against piracy on the global analogues level. During an attempt to gain illegal access off-the-shelf solutions of the set-top box will promptly stop hacking and disarm pirates."

SYNERGY OF THE HOLDING COMPANY HI-TECH BUSINESS COMPETENCES

GS U510 — A product that combines the holding company achievements from many years of experience in many industries such as the development of electronics of any complexity and its mass production, software development, in-house technological manufacturing solutions, wealth of knowledge and the ability to meet the needs of broadcasters and viewers.



Andrew Bezrukov, Director for Strategic Marketing, GS Group:

"More than 20 years of experience in telecommunications, the awareness of operators and consumers demands and the capacity to realize in-house development allow GS Group to produce high quality products for the market demand. The GS U510 digital receiver is a real example of modern Russian enterprise's ability to produce competitive high-tech consumer electronics that conform to international standards."

FOCUS ON THE GLOBAL MARKET

Equipment under the General Satellite brand occupies more than 2% share of the subscription set-top boxes global market. GS Group products and technological solutions are applied to Russian satellite projects, Tricolor TV and NTV-Plus as well as international broadcasting projects — One TV Cambodia amongst other projects in South-East Asia.

The product is of top technological international analogue quality and meets current receiver market trends that were identified within the analysis conducted by the Discovery Research Group agency.

Satellite set-top boxes market current trends, according to Discovery Research Group (February 2014):

- ▶ Increased demand for set-top boxes that support HD-format;
- ▶ Reduced size of set-top boxes;
- ▶ Increased demand for hybrid devices that have an internal hard drive for recording broadcasts and provide for additional services than just television, like radio and Internet.

User feedback on the Thorsat company web site:

• Anatoly:

Excellent receiver!

Advantages: High speed, fancy menu, sharp, living and fine image

Disadvantages: None exist

Comments: This is my first set-top box, and I liked the way it works — it is fast and has a fine sharp image! No errors occur and no hang-ups. I'm glad to have purchased this exact model.

Internet shop HD01.RU

It has a fancy and user-friendly menu. The receiver allows for duplicating the broadcast channel on a second TV if desired. It's also possible to browse photos from your USB drive using the Gallery application. The set-top box supports the connection of multiple antennas that tune to different satellites. According to our observations, the access card in the receiver is activated rather quickly, in 5-20 minutes, which is very encouraging.