

RT-TS-STB-RR



A complete test environment for the most efficient and economical way of reliable functional testing of digital receivers (STB). Controllable switchers allow for the application to simulate test scenarios on each STB within the test environment.

To whom is it intended?

Having been developed to respond to the challenge of testing of numerous units at the same time, "round robin" is an ideal solution for operators of **digital TV signals** and **STB service centres**.

Introduction of new services, new head-end equipment, changes in broadcast signal, and new software updates by software producers, force operators to periodically test their devices in order to determine whether they respond to changes in configuration. A large number of STB, of different models and/or different manufacturers, arrive daily at service stations due to malfunctioning.



TV Operators

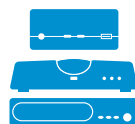


STB service centers

How it improves your productivity?



Reduces human interference



Independent of different manufacturers and types of STB



Increases throughput of tested devices



Cost effective solution



Easily integrates 3rd party testing equipment

How does it work?

In overall, the testing scenario is as follows: IR commands are sent to each of the 24 devices using the STB emulator RC RT-IR016U. After all the tested devices have been brought at the desired state, the application performs "roll-call" of each successive unit. These include changes of input on switchers and, depending on the requirements of the test, recording of output video and audio content. The scenario follows with the application performing processing and analysis of the recorded files using predefined algorithms. The analysis is a comparison of the recorded content with the reference content, and its results decide on the correctness of the unit's behavior.

The system has two options:

- Testing against a golden reference
- Testing against a referent unit ("golden device")



What am I buying?

Delivered system consists of two 19 "racks with:

- Workstation (PC) + monitor, keyboard, mouse
- RT-Executor application
- 2 RT-AV100 devices for audio and video content recording
- 2 RT-IR016U + 26 RC emulator
- 2 HDMI switcher - 16 ports each
- 2 CVBS I analog audio switchers - 12 ports each
- 2 S/PDIF switchers (optical and coaxial) - 16 ports each
- LAN switch
- Test suite

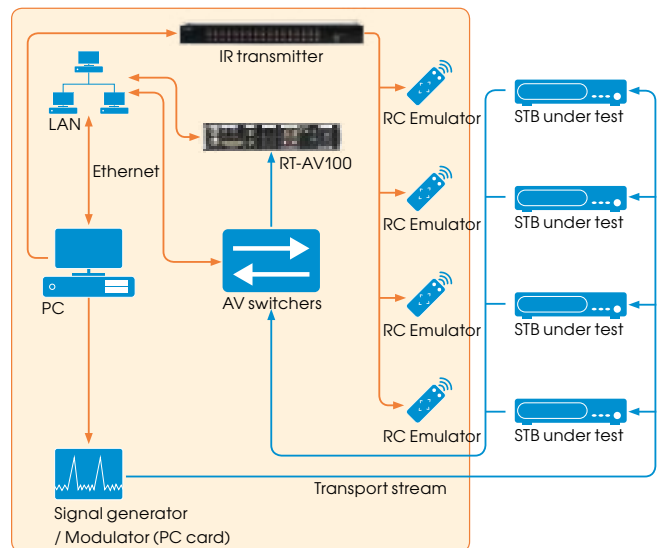
* The described system tests 24 STB units. System size can vary, and is scalable to meet needs of client

** The system comes fully assembled (completed cabling)

Use cases

- Acceptance testing
- Units returned by users to TV operator

How to build the environment?



What is tested?

Since it was developed to respond to the challenge of testing of larger number of STB units, this system finds its main purpose in:

- Acceptance testing – testing of new STB units for the customer base
- Functional testing – testing/diagnostic of returned used units, for repair, or from users who terminated their subscriber contracts.

Basically, this means that it can test all functionalities of a STB (GUI, RC, video and audio decoding...), as well as perform measurements of some characteristic values (such as **zapping time** and **boot time**).

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