



RCT 1012

Installation and Configuration Guide

Revision 1.0 – Jan 2021

LYNXTechnik AG[®]
Broadcast Television Equipment

This Guide Supports:	
RCT 1012 from Revision	983
APPolo Control System	8.13.0

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1. Introduction

This guide provides information related to RCT 1012 installation and configuration. The RCT 1012 is a compact one slot yellobrik module designed to combine the control of up to 12 yellobrik modules via the ethernet port. It is a one-stop solution for managing and controlling several yellobriks in a comfortable, fast, and efficient manner without requiring an individual connection to each module to set parameters or update the firmware. All connected yellobrik modules are visible on the network remotely.

RCT 1012 automatically discovers the connected yellobrik modules and displays them in the APPolo Control GUI device tree below the controller RCT 1012 code. It allows bulk firmware updates of all the selected yellobrik modules and facilitates the configuration of all the connected yellobriks via the IP network.

RCT 1012 enhances the cable management and equipment installation when mounted on an RFR 1000-1 rack frame. RCT 1012 will provide status information of the primary and redundant power supply via 4 GPI contacts on the RFR 1000-1. For the purpose of demonstration, this quick reference guide will show RCT 1012 installed on an RFR 1000-1.

2. Software requirements

As the RCT 1012 requires network functionality and allows monitoring of multiple yellobrik devices visually on a device tree, this functionality is only supported on LYNX APPolo Control GUI. Therefore, to use RCT 1012, one must install LYNX APPolo Control GUI from the link below:

<https://www.lynx-technik.com/downloads/appolo-control-download/>

RCT 1012 is supported on APPolo Control GUI Version 8.13.0 and later.

3. Quick-Setup Guide

3.1. Supported yellobriks

RCT 1012 allows monitoring and control of up to 12 yellobrik modules. Below is the list of all supported yellobriks. Lynx Technik is continuously adding new modules to the yellobrik portfolio so please check the website regularly for the updated list of supported yellobrik modules.

Yellobrik	Description
CDH 1813	3Gbit SDI to HDMI Converter with 3D Support
CHD 1802-1	3Gbit HDMI to SDI Converter
PMV 1841	3G/HD/SD Quad Split Multiviewer with 4K Monitoring mode
CQS 1441	12Gbit/3Gbit SDI Quad Link Single Link Converter
PVD 1800	SD/HD/3G SDI Frame Synchronizer with optional Fiber I/O
PDM 1284 B	3GBit AES Audio Embedder / De-embedder (75Ohm BNC - unbalanced AES)
PDM 1284 D	3GBit AES Audio Embedder / De-embedder (110 Ohm SubD25 - balanced AES)
PDM 1383	3GBit Analog Audio Embedder / De-embedder - SubD25 - balanced
ORX 1702-1 LC	Analog Sync / Video Fiber Optic Receiver - Fiber LC connectors
ORX 1702-1 SC	Analog Sync / Video Fiber Optic Receiver - Fiber SC connectors
ORX 1702-1 ST	Analog Sync / Video Fiber Optic Receiver - Fiber ST connectors
ORX 1702-1 MM	Analog Sync / Video Fiber Optic Receiver - Multimode - 850 nm - Fiber LC connectors
OTX 1712-2 LC	Analog Sync / Video Fiber Optic Transmitter with passive looped analog input - 10km - 1310nm - Fiber LC connectors
OTX 1712-2 SC	Analog Sync / Video Fiber Optic Transmitter with passive looped analog input - 10km - 1310nm - Fiber SC connectors
OTX 1712-2 ST	Analog Sync / Video Fiber Optic Transmitter with passive looped analog input - 10km - 1310nm - Fiber ST connectors
OTX 1712-2 MM	Analog Sync / Video Fiber Optic Transmitter with passive looped analog input - Multimode - 850 nm - Fiber LC connectors
OSW 1022	2x2 Optical Switch

3.2. Installing Software

RCT 1012 is only supported on APPolo Control System. It is not supported on yelloGUI.

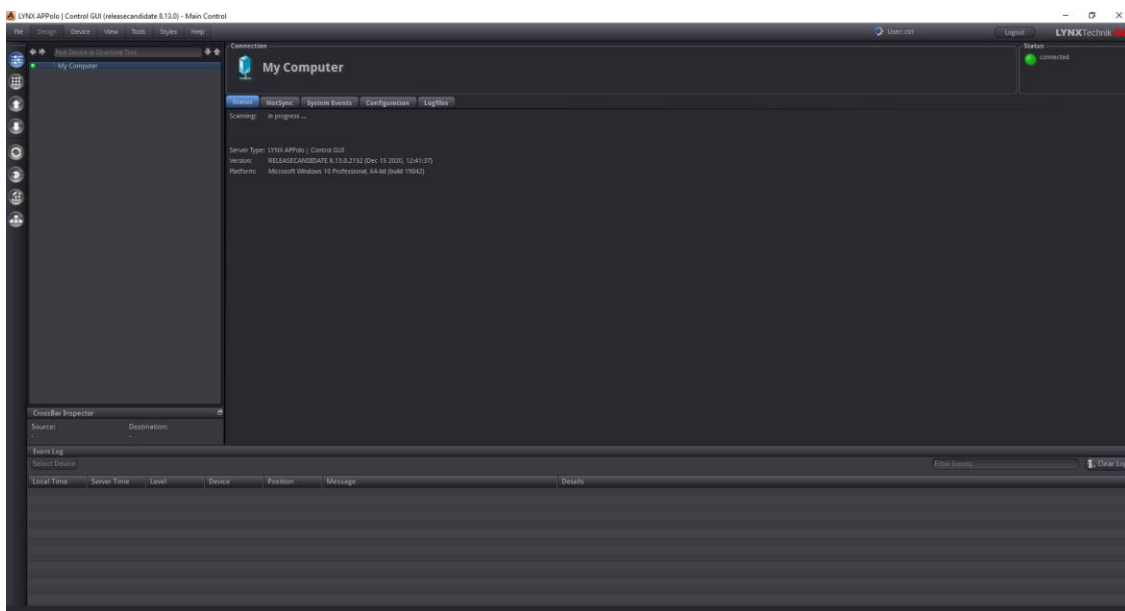
Follow the below steps to install the correct software for RCT 1012:

Step 1: Go to the link below and download the latest APPolo Control GUI

<https://www.lynx-technik.com/downloads/appolo-control-download/>

Step 2: Install the downloaded file on your PC.

Step 3: Start APPolo GUI Control. The following page will be displayed:



3.3. Mounting RCT 1012 on RFR 1000-1

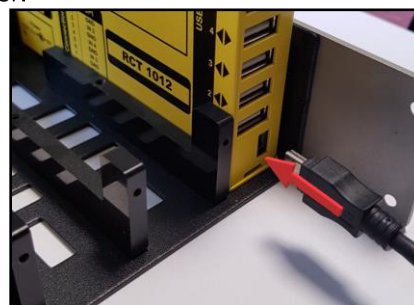
Follow the below steps to mount RCT 1012 on an RFR 1000-1 rack frame.

Step 1: Mount RCT 1012 on RFR 1000-1 and use the security lock to ensure the module is clamped securely into its position.



When mounted on a powered RFR 1000-1, the RCT 1012 will be powered on as well. (Alternatively, the supplied universal plug top PSU may be used.)

Step 2: Connect one end of the Type A – Mini-B USB cable to RCT 1012 and the other end to your computer.



3.4. Configuring RCT 1012 IP address

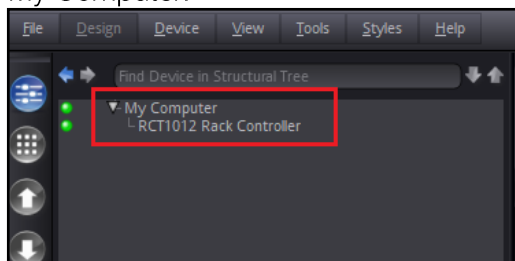
By default, the RCT 1012 IP address is set to DHCP.

Note: The default password for the module is **lynx\$admin**

This password will be required while changing the IP address of the module. When setting up the IP address for the first time, use Type A to Mini B USB cable to connect your PC to RCT 1012 and make changes as highlighted below.

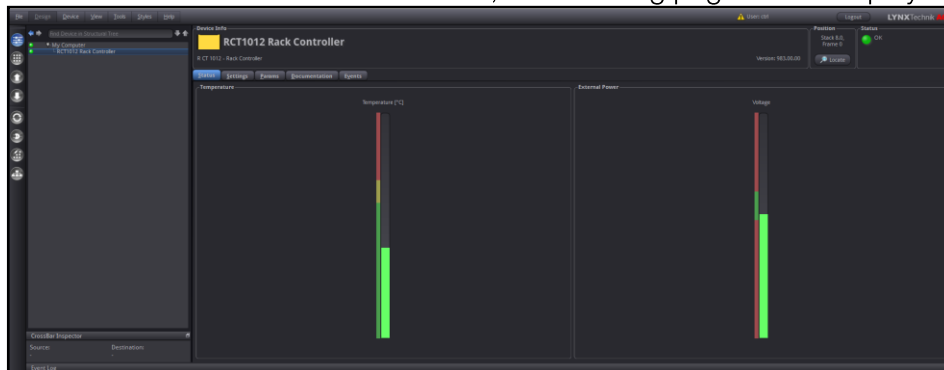
Follow the below process to make changes to the RCT 1012 IP address.

Step 1: On the APPolo Control GUI, the RCT 1012 will be shown on the device tree under “My Computer.”

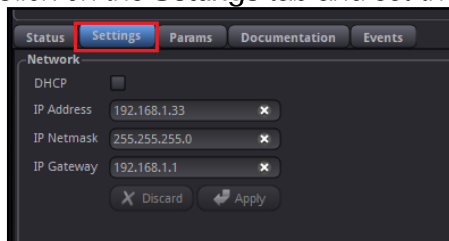


Note: If the RCT 1012 does not appear on the APPolo Control GUI as indicated above, check your USB connection and verify if the device is detected in the PC device panel. If the USB connection is made correctly and the device is still not detected, restart APPolo Control GUI.

Step 4: Click on the **RCT1012 Rack Controller**, the following page will be displayed:



Step 5: Click on the **Settings** tab and set the IP address, IP Netmask, and IP Gateway.



IP addresses shown above are for demonstration purposes only.

Step 6: Click **Apply** and a dialog box will appear asking for the password.
Enter **lynx\$admin**

Note: 1) All three fields: IP address, Netmask, and Gateway must be entered. In case of wrong IP addresses or missing information, no changes will be made.

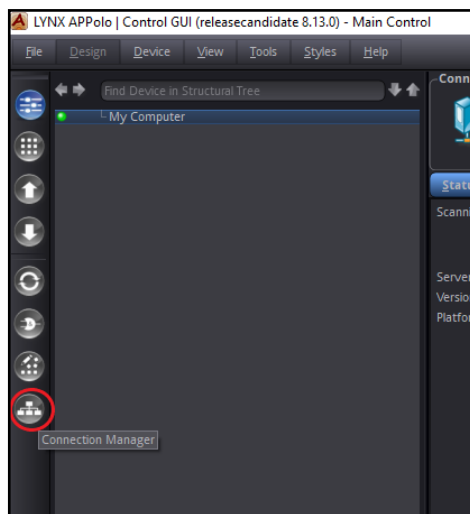
2) When the mini-USB type B on RCT 1012 is connected to a PC, it will disable all other connections, including USB Type A's and network connectivity.

3.5. Network connections

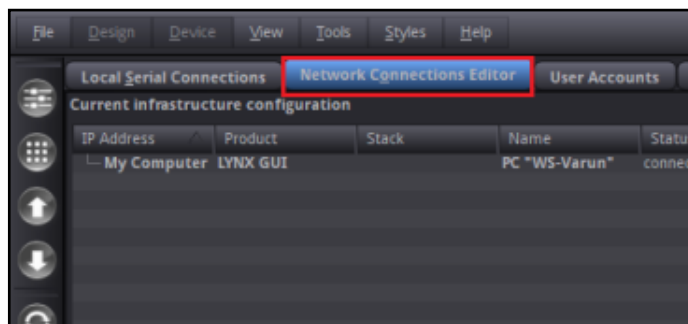
Note: Ensure that the mini-B USB cable is not connected to RCT 1012 and to the PC as it will disable the network connections.

If the network configuration / IP settings on RCT 1012 are completed, follow the below steps to add RCT 1012 to the device tree.

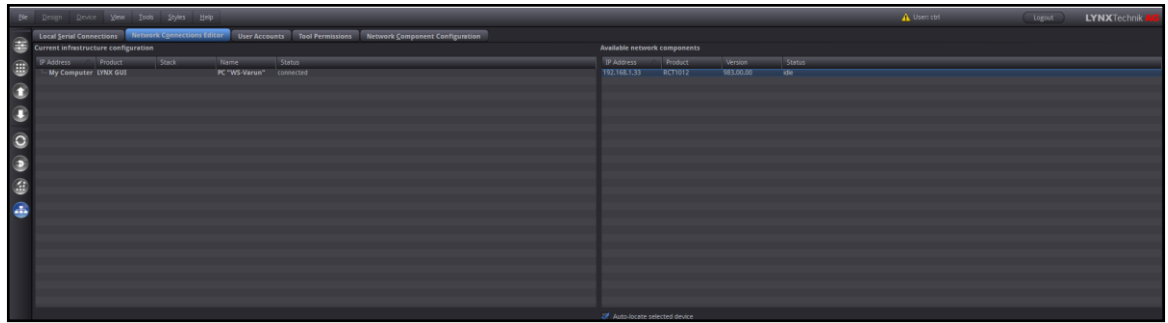
Step 1: On the APPolo Control GUI, click on **Connection Manager** as indicated below:



Step 2: Click on the **Network Connection Editor** tab as indicated below:

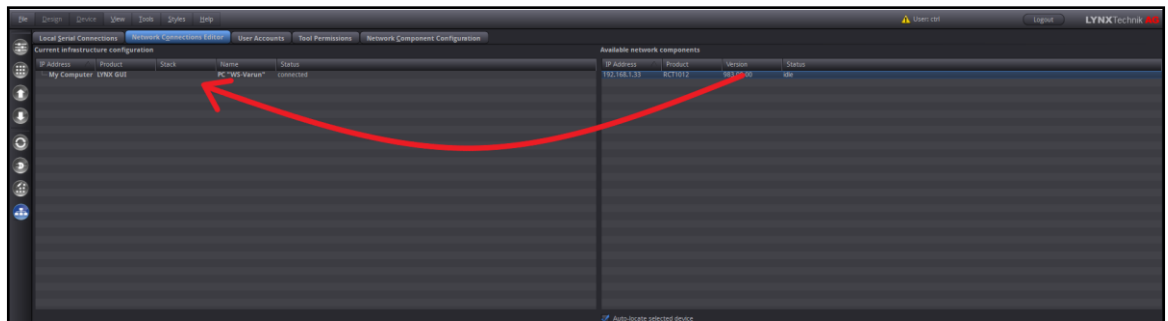


The following page is displayed:

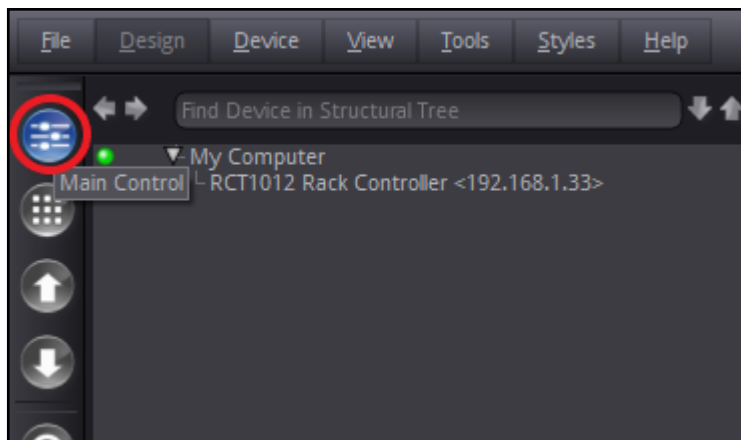


The new RCT 1012 will appear on the “Available network components” list.

Step 3: Drag and drop the RCT 1012 inside **My Computer** list as shown below:



Step 4: Click on the **Main Control** button as indicated below:



The RCT 1012 Rack controller will be shown as above.

3.6. yellobrik connections

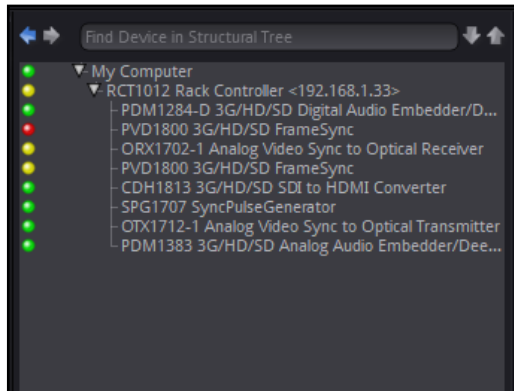
To connect supported yellobrik devices, follow the below process:

Step 1: Use a Type A – Mini-B USB cable to connect RCT 1012 (Type A port) and supported yellobrik (mini-B port) as shown below:

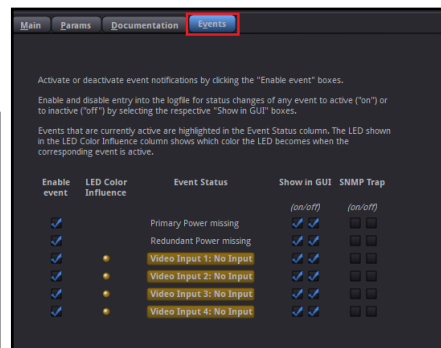
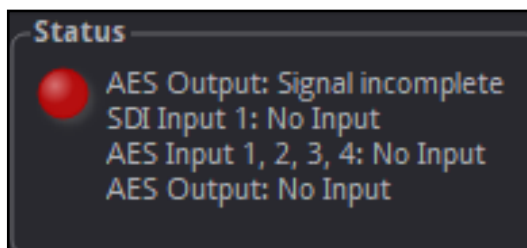


A maximum of 12 yellobriks can be connected to RCT 1012.

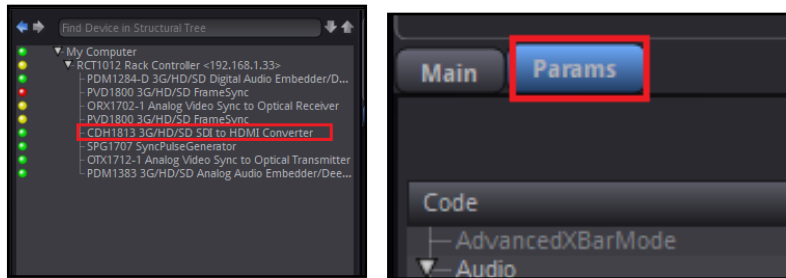
All yellobrik devices connected to RCT 1012 will be displayed in the device tree of APPolo Control GUI and will look similar to the picture shown below:



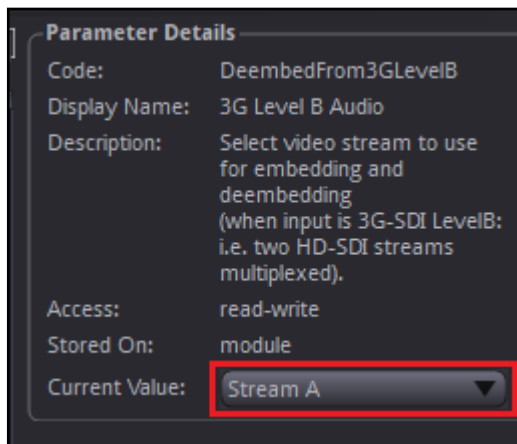
The LED color indicates the status of the module, and more information is provided in the **Status** box on the right-hand side, and the **Events** tab in APPolo Control GUI as shown below:



Step 2: To update/alter parameters of a yellobrik, click on the corresponding yellobrik and select the parameter tab from the main window as shown below:



Step 3: Select the parameter that requires change, and alter its value in the **Parameter Details** container on the right-hand side of the window as shown below:



Note: All USB connections automatically appear on the device tree, but the network devices must be manually added to the list.

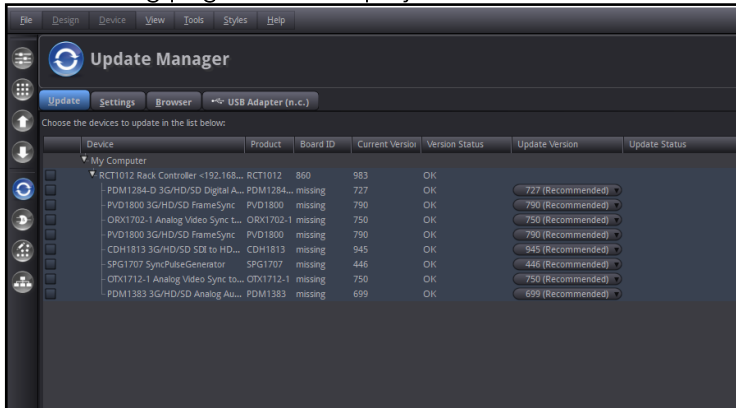
3.7. Firmware Update

To perform a firmware update of all the yellobrik devices connected to an RCT 1012, follow the below process:

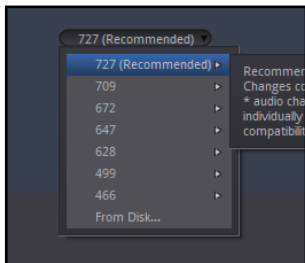
Step 1: Click on the Update Manager button as highlighted in the picture below:



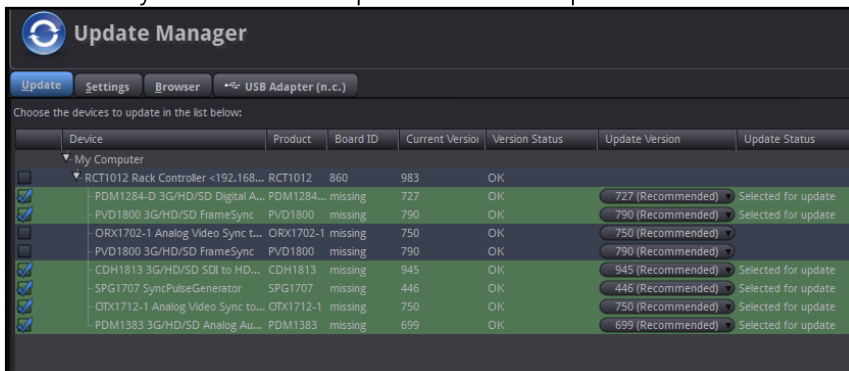
The following page will be displayed:



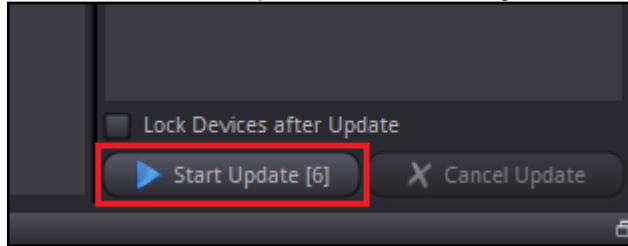
Step 2: Select the firmware version from the drop-down list:



Step 3: Select the yellobriks that require a firmware update:

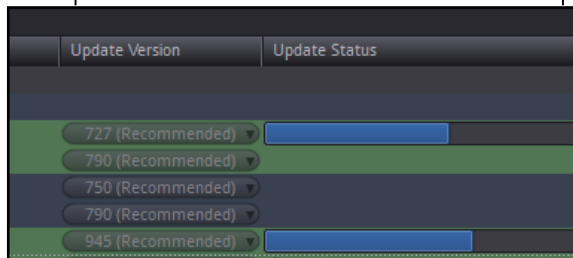







Step 4: Click on the **Start Update** button to begin firmware upgrade of the devices:



A warning dialog box stating that the devices will be unusable during the update will be displayed. Click ok to proceed.

The Update Status column will indicate the update process as shown below:



Update Version	Update Status
727 (Recommended)	
790 (Recommended)	
750 (Recommended)	
790 (Recommended)	
945 (Recommended)	

Technical Support

If you have any questions or require support, please contact your local distributor for further assistance.

Technical support is also available from our website:

<http://support.lynx-technik.com/>

Please do not return products to LYNX without an RMA. Please contact your authorized dealer or reseller for more details.

More detailed product information and product updates may be available on our website:

www.lynx-technik.com

Contact Information

Please contact your local distributor; this is your local and fastest method for obtaining support and sales information.

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