PRODUCT GUIDE
The Relay Explorer - RXplore
Contents

1. Description .................................................................................................................................................................................. 3
2. Site creation and handling .......................................................................................................................................................... 3
3. Connection to ABB device ......................................................................................................................................................... 3
4. Change relay settings ............................................................................................................................................................... 4
5. Read and share fault information ............................................................................................................................................. 4
6. Read and view events ............................................................................................................................................................... 4
7. ABB Ability™ Condition Monitoring for SwitchGear - SWICOM support ........................................................................... 5
8. History view ............................................................................................................................................................................. 5
9. Demo mode ............................................................................................................................................................................. 5
10. System requirements .............................................................................................................................................................. 6
11. Download .............................................................................................................................................................................. 6
12. Document revision history ..................................................................................................................................................... 7

Disclaimer

The information in this document is subject to change without notice and should not be construed as a commitment by ABB. ABB assumes no responsibility for any errors that may appear in this document.

© Copyright 2020 ABB.

All rights reserved.

Trademarks

ABB and Relion are registered trademarks of the ABB Group. All other brand or product names mentioned in this document may be trademarks or registered trademarks of their respective holders.
1. Description

The Relay Explorer - RXplore is a mobile application to securely connect, visualize and perform limited operations to ABB Protection and Control relays and ABB Monitoring and Diagnostic devices. For operation, RXplore connects to either the site wireless network (WLAN) that has ABB devices on same network or with the ABB Cloud to fetch operative data to execute the functionalities offered by RXplore.

Figure 1. The Relay Explorer-RXplore

RXplore is never connected with site Wi-Fi and outside network at the same time, thus ensuring that the site network is never exposed to outside network. RXplore mobile app connects to the site Wi-Fi and is then bound to the same network, even if the network itself has no ABB Cloud connection. All the network request from RXplore to relay go via the Wi-Fi network. For relay, it does not matter eventually who is requesting/pushing data i.e. if it is traditional hard-wired connection or RXplore communicating with it over wireless LAN.

Most of the screen shots and functionalities described in the document are applicable to ABB Protection and Control relays. Supported M&D device is covered in a separate chapter in this document.

2. Site creation and handling

For RXplore, a site is a network location with ABB devices connected to it. After connecting RXplore to the Wi-Fi router which in turn is connected to ABB devices, a new site can be created by providing a name and IP range to scan the network to identify ABB devices. A site created once is reusable and the IP range can be modified based on need.

Multiple sites can be created in RXplore thus ensuring clean segregation of sites.

Figure 2. Adding a site to RXplore

3. Connection to ABB device

RXplore allows scanning a range of IP addresses to identify supported ABB devices. Alternately, RXplore also allows connecting directly to just one device.

User credentials can be provided when the site is created. Supported ABB device asks for re authentication if the provided credentials do not pass authentication.

RXplore lists the supported ABB devices after network has been scanned on the provided IP range.

Info tab in RXplore provides more information of selected site or device.

After successful connection, ABB device(s) are shown in RXplore main view. Devices not supported by RXplore are notified on screen.
4. Change relay settings

Once connected to the relay, RXplore allows the possibility to modify the editable parameters (settings) and write the modified values to the relay. Conversely, it is possible to read modified parameter value(s) from the relay. RXplore presents the functions sorted in alphabetical order. Additionally, RXplore takes care of validations on entering a new setting value. The modifications done to the parameters can be reviewed before committing them to the relay. Change relay settings functionality can be accessed by tapping Actions tab after selecting the relay to work with.

5. Read and share fault information

Once connected to the relay, RXplore allows the possibility to read fault information from the relay and share it over email to someone else for further analysis. Fault information collected by RXplore consists of Fault records and Disturbance records from the relay. After reading fault information, it can be easily shared in zipped format from the History view tab. It is also possible to simultaneously read and share fault information for all the connected devices. Read fault information functionality can be accessed by tapping Actions tab after selecting the relay to work with.

6. Read and view events

Once connected to the relay, RXplore allows the possibility to read and view events from the relay. Events are presented as a list in separate tab called Events. Tapping an event shows more information about the event. In built search in events view makes it easy to find the event of interest.
7. **ABB Ability™ Condition Monitoring for SwitchGear - SWICOM support**

SWICOM is a monitoring and diagnostic unit which provides mechanical and electrical health status of a lineup. It acquires data communicating with IEC 61850 based protection relays and via sensor bus of additional e.g. temperature sensors and converts the data to diagnostic information.

RXplore connects with SWICOM device similar to how RXplore connects with the relays within the scanned IP range. RXplore can also connect directly with SWICOM by providing the IP address of SWICOM device.

Once connected with the SWICOM device, besides presenting status and information of SWICOM device, RXplore shows the bays that are monitored by SWICOM along with KPI, Measurement and Parameters information of each monitored bay.

8. **History view**

Actions executed on RXplore are listed in History tab. It also presents the status of the requested actions. Sharing fault information is possible after moving to History tab.

9. **Demo mode**

RXplore supports a demo mode to quickly get an overview of features and functionalities in the app without the need to connect with real devices.
10. System requirements

a. Supported operating systems
   • iOS version 12.0 and above
   • Android version 7.0 and above

b. Communication
   • Wi-Fi
   • Data over mobile network

11. Download

RXplore app is available for download from Google Play (Android) and App Store (iOS).
12. Document revision history

<table>
<thead>
<tr>
<th>Document revision / Date</th>
<th>Product version</th>
<th>History</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 14th, 2020</td>
<td>RXplore 1.0</td>
<td>First release</td>
</tr>
</tbody>
</table>