



GenWatch3®
Software Version 2.23.5
GW_RSP25 Quickstart Guide



Trademarks

Any brand or product names are trademarks or registered trademarks of their respective holders.

The Genesis Group Trademark Information

GenWatch3® is a registered trademark of GenCore Candeo, LTD., a subsidiary of Burks GenCore Co., Inc. D.B.A. The Genesis Group and Phil Burks.

Copyright

Copyright © 2006-2023 Burks GenCore Co., Inc. D.B.A. The Genesis Group and Phil Burks. All rights are reserved. No part of this publication or the associated program may be reproduced, transmitted, transcribed, in whole or in part, in any form or by any means, whether it is mechanical, magnetic, optical, electronic, manual or otherwise, without the prior written consent of Burks GenCore Co., Inc. D.B.A:

The Genesis Group and Phil Burks
5800 Eagles Nest Blvd
Tyler, Texas 75703.

Includes technology licensed from Motorola.

Disclaimer

The GenWatch3 RSP25 Quickstart Guide is printed in the U.S.A. Burks GenCore Co., Inc. D.B.A. The Genesis Group and Phil Burks believe that the information included in this manual is correct; however, Burks GenCore Co., Inc. D.B.A. The Genesis Group and Phil Burks reserves the right to alter, revise and make periodic changes to the manual and its contents. Burks GenCore Co., Inc. D.B.A. The Genesis Group does not assume responsibility to notify any person of such revisions or changes. While we have taken strides to carefully examine our software and documentation and believe that it is reliable, the Genesis Group and Phil Burks assume no responsibility for the use of the manual, or GenWatch3 software, nor for any patent infringements or other rights of third parties who may use the manual or the GenWatch3 software. Burks GenCore Co., Inc. D.B.A. The Genesis Group and Phil Burks make no representations or warranties with respect to the contents or fitness for a particular purpose beyond the cost of the software paid by the end-user.

The software contains valuable trade secrets and proprietary information. Unauthorized use of the manual or software can result in civil damages and criminal prosecution. As an end user, you agree to abide by and heed these statements.

License

Title to the media on which the program is recorded and to the documentation in support of the product is transferred to you, but title to the program, and all subsequent copies of the program, despite the form or media in or on license is not a sale of the original or any subsequent copy. You assume responsibility for the selection of the program to achieve your intended results, and for the installation, use, and results obtained from the program.

Refer to the GenWatch3 Manual Overview for your full license. All license information contained on pages 4-7 (Book 600-2.23.5-AA.1) are to be considered as contained herein.

Support

Customer satisfaction is our number one priority at Genesis. We are here to provide you with the best software possible, and we want to know when you have any questions, concerns or problems with GenWatch3 so that we can make it a better product for everyone.

Refer to the *Troubleshooting & Support* section of the GenWatch3 Manual Shell (Book 600-2.23.5-AA.1) for complete support and contact information.

Document History

Revision	Description	Author
2.0.2	Document created	KIH
2.0.3	Release Revisions	KIH
2.0.3	Topaz Revisions	KIH
2.0.4	Release Revisions	KIH
2.0.5	Release Revisions	TDW
2.0.6	Updated screenshots for F1 Help	REB
2.0.6.6	Changes before release	WRK
2.3	Release Revisions	REB
2.4	Revisions Before Release	WRK
2.5	Revisions Before Release	CWF
2.6	Revisions Before Release	CWF
2.7	Revisions Before Release	JAW
2.8	Revisions Before Release	CWF
2.9	Revisions Before Release	CWF
2.10	Revisions Before Release	CWF
2.11	Conversion to docx	BCY
2.12	Revisions Before Release	ATG
2.13	Revisions Before Release	ATG
2.14	Revisions Before Release	JAW
2.15	Revisions Before Release	REB
2.16	Revisions Before Release	JPS
2.17	Updated RF modem instructions	ATG

Table of Contents

<i>Trademarks</i>	3
<i>The Genesis Group Trademark Information</i>	3
<i>Copyright</i>	3
<i>Disclaimer</i>	3
<i>License</i>	3
<i>Support</i>	3
DOCUMENT HISTORY	4
TABLE OF CONTENTS	5
ABOUT THIS MANUAL	7
GOALS	7
WHO SHOULD READ THIS MANUAL?	7
HOW THIS MANUAL IS ORGANIZED	7
CHAPTER 1 PROGRAMMING THE RF-MODEM	9
PROGRAMMING	9
WINDOWS DRIVERS FOR THE APX RADIO.....	11
CHAPTER 2 CONFIGURING THE GW_RSP25 MODULE	13
WHAT IS GW_RSP25?	13
LOADING THE GW_RSP25 GUI.....	13
ADDING RSP25 CONNECTIONS	14
<i>Connections</i>	14
<i>System Information</i>	14
<i>Channel Settings</i>	14

Goals

This document guides you through the GenWatch3 setup process. After you complete the steps in this document, your GenWatch3 installation will be configured to receive data from a digital transceiver on your Project 25 (P25) compliant system.

Who Should Read This Manual?

This document is written for an audience of Project 25 (P25) compliant system administrators and persons tasked with maintaining GenWatch3 on a P25 system.

How This Manual Is Organized

This manual is organized as follows:

- **Programming the Digital Transceiver:** How to set up and program a digital transceiver.
- **Configuring the GW_RSP25 Module:** Instructions on setting up a connection to a digital transceiver.

This manual contains the following images, used to indicate that a segment of text requires special attention:



Additional Information: Additional information is used to indicate shortcuts or tips.



Warning: Warnings are used to indicate possible problem areas, such as a risk of data loss, or incorrect/unexpected functionality.

Programming

RF Modems provided by Genesis will be programmed before being shipped. No additional Radio Programming will be necessary.

On radios supplied elsewhere, the following are the programming steps:

1. In the Radio Wide -> Features section of CPS, select “APCO Project 25 Mode” in the RF Modem drop down box.

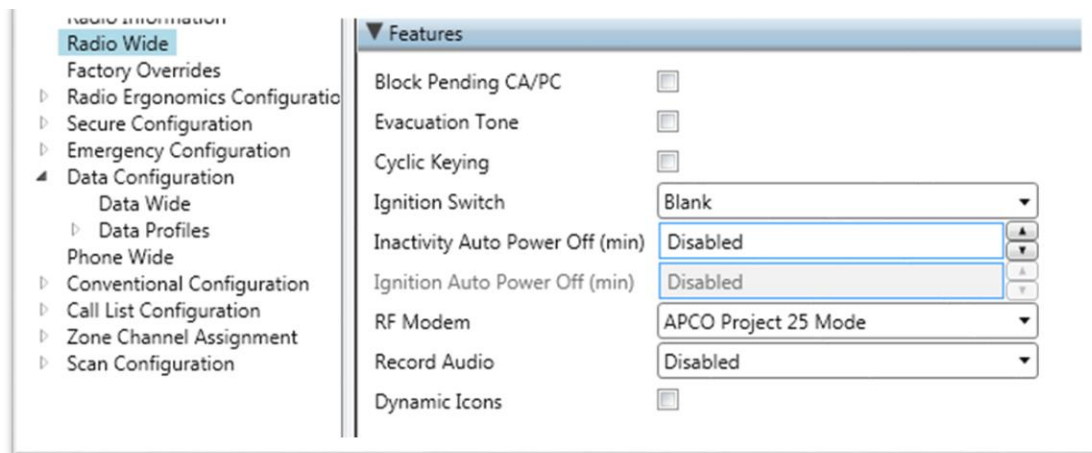


Figure 1.1 – Features

2. The Subscriber IP address of the Radio needs to be noted as it will be used for the IP address entered in the GenWatch3 RSP25 Module. If there is more than one RF modem connected, then the 3rd octet will need to be changed so that this octet will be different between each radio. (Example: 2nd RF modem would need to be 192.168.129.1, and the Peer IP address will automatically change to 192.168.129.2)

General

SNMP Traps ☐

Context Deactivation Alert Tone ☒

ICMP Echo ☒

Serial Link 1 Addresses

Subscriber IP Address 192.168.128.1

Peer IP Address 192.168.128.2

Peer IP Address Assignment Type Dynamic

Figure 1.2 – Subscriber IP Address

3. Verify that there is at least 1 conventional personality in the codeplug. It can simply be the one programmed by default. The frequency itself does not matter as it will not be used when in RF modem mode.

Zone Channel Assignment 1 of 1

Zone Channels

Zone

Zone Name Zone 1

Zone Announcement zoneone

Dynamic Zone Enable ☐

Channels Default 1

Position	Channel Name	Channel Type	Personality	Conventional Freq	Radio Profile Select	Channel Announc
1	Channel 1	Conv	Conv Per 1	OPTION 1	<Last Selected>	channelone

Figure 1.3 – Conventional Personality

4. Verify that there is only 1 Zone, and only 1 channel in the zone. The channel should be conventional. The name does not matter but could be programmed with the IP of the radio and the site it is monitoring. To easily tell if the radio is in the “power up” state or in “RF Modem” mode, the channel name should not be programmed with “RF Modem” because the display will indicate “RF Modem” once GenWatch3 connects to the radio.

Windows Drivers for the APX Radio

If the GenWatch3 Host computer is provided by Genesis, it will have the necessary drivers for the APX Radio installed. The Radio’s USB data cable can simply be plugged into one of the available USB ports on the computer.

However, if the computer is being supplied from elsewhere, current APX CPS software must be installed on the computer to load the drivers before connecting the RF Modem to the PC. After the CPS is installed, the RF modem can be plugged into the USB port and powered on. Check to see that it has been properly identified and shows up in device manager as a network interface. Also, go to Network Sharing Center -> Change Adapter properties and verify that it shows up as an available network adapter. After this is done, CPS may be uninstalled from the computer if desired.

Chapter 2

Configuring the GW_RSP25 Module

What is GW_RSP25?

The GW_RSP25 graphical user interface (GUI) shows the current configuration of each of your GW_RSP25 connections. A connection is a P25 packet source, i.e. a digital transceiver connected to your PC.

The number of connections you can create within the GW_RSP25 module is limited by your license. Please contact GenWatch3 Support with questions regarding licensing for additional connections.

Loading the GW_RSP25 GUI

Launch the GUI for the GW_RSP25 module by following the steps below:

1. Launch the GW_LaunchPad (explained in Chapter 3 of the *GenWatch3 Core Manual*).
2. Locate the GW_RSP25 module icon in the Modules list. The GW_RSP25 module uses this icon:



3. Double-click the GW_RSP25 icon: This will load the GW_RSP25 GUI.

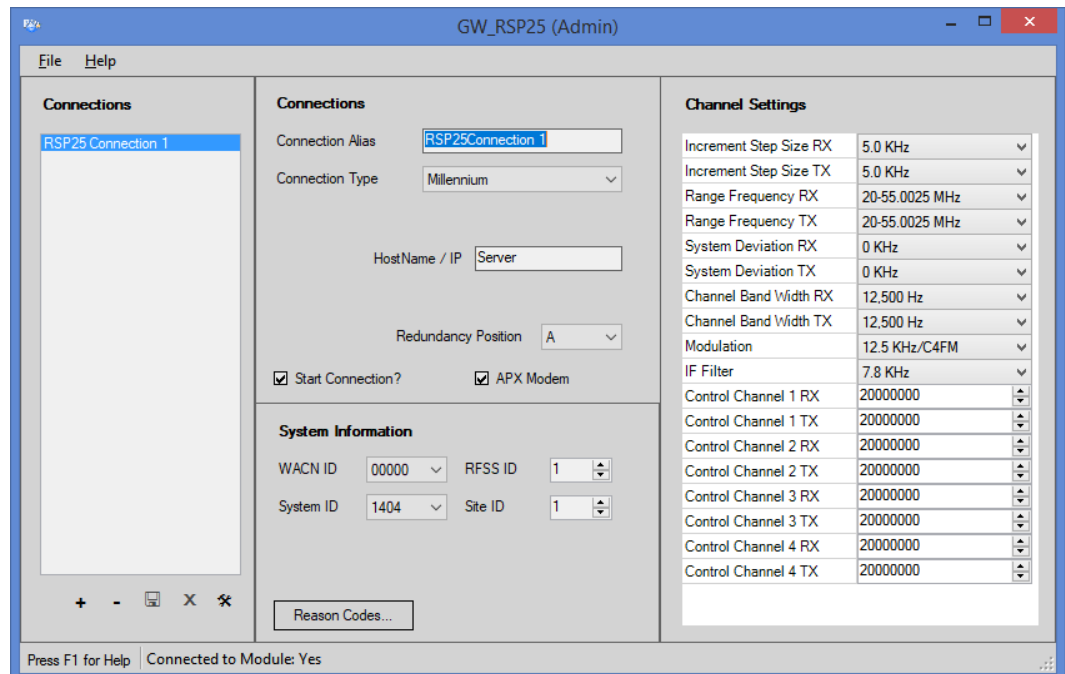


Figure 2.1 – GW_RSP25 GUI

Adding RSP25 Connections

When the GenWatch3 application is installed, no connections exist. You must create a connection to receive control channel data. To create a new connection, follow the steps below:

1. Click the **Add** button. This will place the GW_RSP25 GUI in Add mode and allow you to enter connection settings.
2. Change the properties in the *Connections* and *System Information* sections.
3. Click **Update** to save changes.

Connections

In this section, provide an alias for the connection and set the connection type for this connection to **Serial**, **Millennium** or **TCP/IP**. Enter the appropriate values in the input fields that are enabled. The **Start Connection?** checkbox determines if the connection will be active. Detailed information on the connection settings can be found in the GenWatch3 *GW_RSP25 Module Book*.

System Information

In this section, provide specific information about your system. Select the **WACN ID** and **System ID** for your system. Your selection options are from the license file. If you do not see the correct WACN or System ID, contact GenWatch3 Support for a new license file. Next, enter an **RFSS ID** and **Site ID**. The RFSS and Site IDs must match the site for which the transceiver is programmed. If the RFSS or Site ID is incorrect all packets generated by this connection will be corrupt. Detailed information on the system settings can be found in the GenWatch3 *GW_RSP25 Module Book*.

Channel Settings

This section allows you to view and edit the channel settings for the current connection. The channel settings are used to calculate the frequencies for P25 systems. Thus, if frequencies are not being decoded on a connection, you may need to edit the channel settings. The values must be entered in Hz. As most control channels are shown in MHz, you may need to multiply the MHz control channel value by 1,000,000. Detailed information on the channel settings can be found in the GenWatch3 *GW_RSP25 Module Book*.



When entered, each base frequency must be exactly nine digits.