



AWLaunch

Software Manual

Version 1.2

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PREFACE

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Preface

Screen Captures

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Screen Captures

This manual includes sample screen captures. Your actual screen can look slightly different from the sample screen due to the receiver you have connected, operating system used and settings you have specified. This is normal and not a cause for concern.

Technical Assistance

If you have a problem and cannot find the information you need in the product documentation, contact your local dealer. Alternatively, request technical support using the ArWest Communications World Wide Web site at: www.arwestcom.com

INTRODUCTION

1.1. General Description

AWLaunch is a MS Windows® based software program designed for configuring and maintaining ArWest UHF and VHF radio systems. AWLaunch is a user-friendly software application that provides complete and powerful tools for radio monitoring and diagnostics. It also provides software image and configuration downloading. The statistics from the monitoring can be viewed in text or graphical format. With the support of ArWest radios' real-time software, AWLaunch architecture makes it possible to maintain all wireless network radio configuration by connecting to only one unit.

1.1.1. Management

AWLaunch is intended to manage the ArWest radio modems, it provides dialog boxes to change and configure all radio options. The following unit's settings are configurable through AWLaunch:

1. Data port parameters (Line parameters);
2. Wireless transfer parameters;
3. Radio parameters (TX/RX etc.)

In addition to the individual option-tuning feature, AWLaunch provides compound options for downloading feature. The downloading process uses X-Modem protocol that both the unit and the PC program are supporting. The manufacturing will provide configuration in shipping packages so every user can configure each unit with default parameters provided by vendor.

AWLaunch works directly with a Command Line Interface (CLI), without a GUI, by entering CLI commands in a *Terminal* window.

Introduction

Setting up AWLaunch
System requirements

1.2. Setting up AWLaunch

1.2.1. System requirements

Check that you have the following required (or recommended) items before installing and using AWLaunch.

- PC-compatible with Intel® Pentium® 100 MHz or faster.
- 10 MB free disk space.
- 32 MB RAM or more (64 MB recommended).
- 32-bit operating system such as MS Windows 2000/XP, or Vista.
- An RS-232C port.

1.2.2. Installing AWLaunch

AWLaunch is available from the ArWest Communications website: www.arwestcom.com. If downloading the program from the website, save the program files into a folder on your hard drive.

1. Navigate to the location of the AWLaunch program and double-click the *AWLaunch.msi* icon (Figure 1-1).

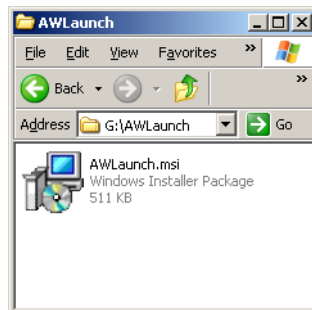


Figure 1-1. Start installation

2. Follow the on-screen installation wizard instructions (Figure 1-2). Click *Next* to continue, *Back* to get back to previous step, or *Cancel* to quit the installation:

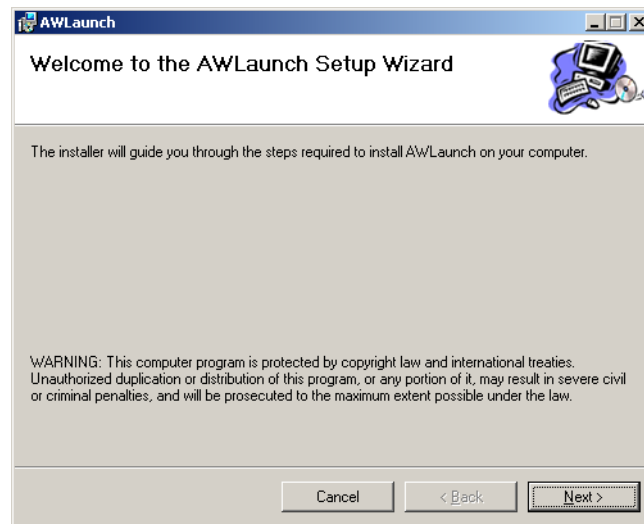


Figure 1-2. AWLaunch setup wizard

3. Keep the default installation location or select a new location (Figure 1-3).

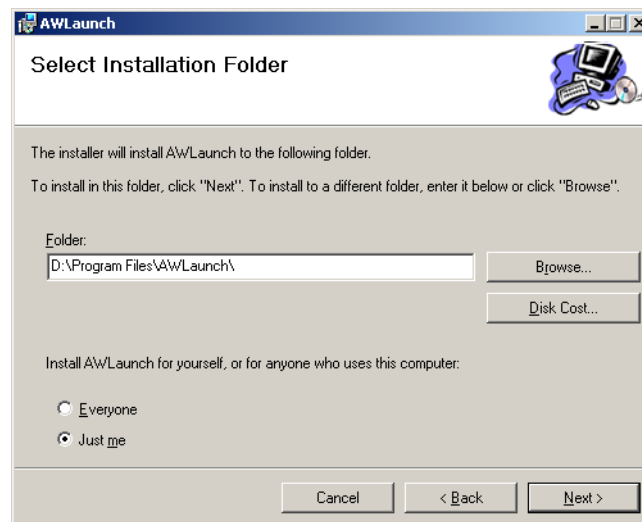


Figure 1-3. Select destination folder

4. Click *Close* to complete the installation and quit wizard. If desired, create a shortcut on the computer's desktop for quick access to AWLaunch.

Introduction

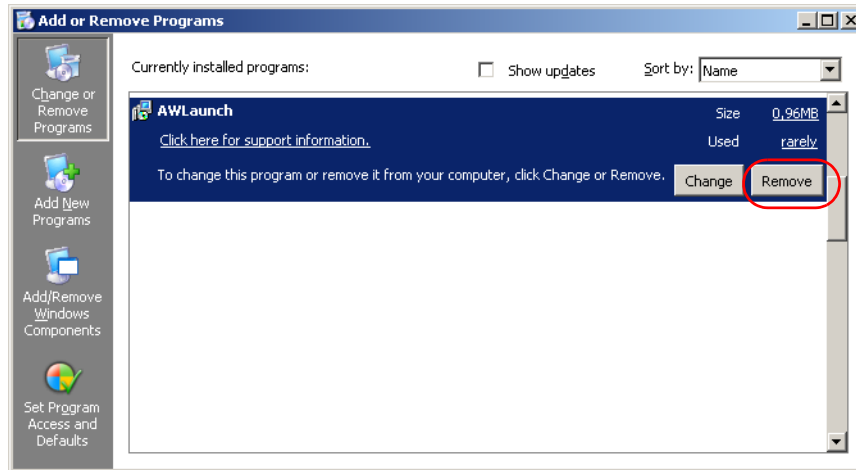
Setting up AWLaunch

Uninstalling AWLaunch

1.2.3. Uninstalling AWLaunch

To uninstall AWLaunch use the *Add and Remove Programs* from the Control Panel.

1. Open the Control Panel, then *Add or Remove Programs* tool. Find *AWLaunch*, and click *Remove*.



2. This will uninstall AWLaunch.

1.3. Starting AWLaunch

To run the software and connect with the AWLaunch perform the following steps:

- Connect the serial port of the computer or USB-to-Serial adapter to the serial port of the modem at the switched off power supply by using of a cable.
- Connect the power supply (if it is necessary) to the modem and switch on it.
- Run the AWLaunch software on PC.

You can start AWLaunch just as you would any software application:

- Double-click on AWLaunch's shortcut on the desktop (if it has been created), or
- Press the *Start* button in the bottom-left corner of your computer's screen and select *ArWest Communications* ► *AWLaunch* from the pull-up menu.

After that the window will appear as shown in Figure 1-4:

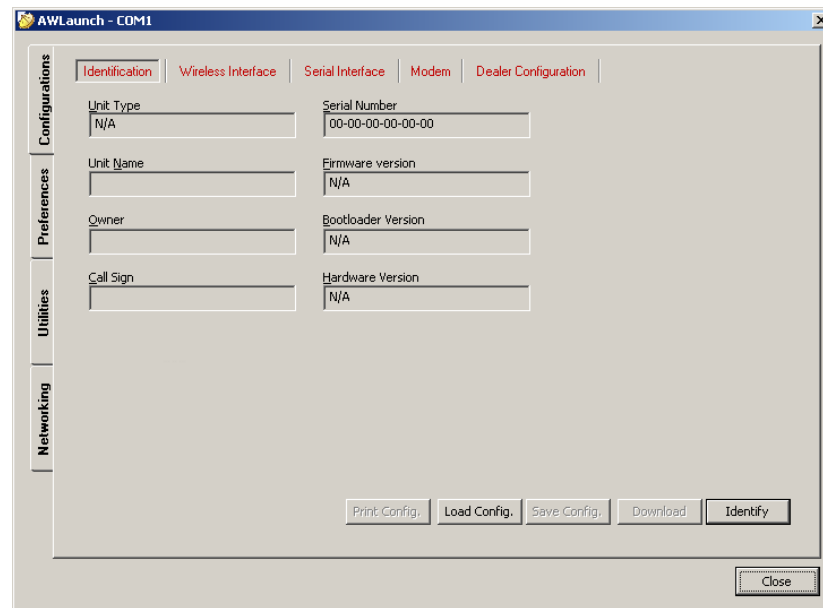


Figure 1-4. Main window

Introduction

Closing AWLaunch

Uninstalling AWLaunch

Open the *Preferences* tab and select the COM port the modem is connected to (Figure 1-5). Click *Identify*.

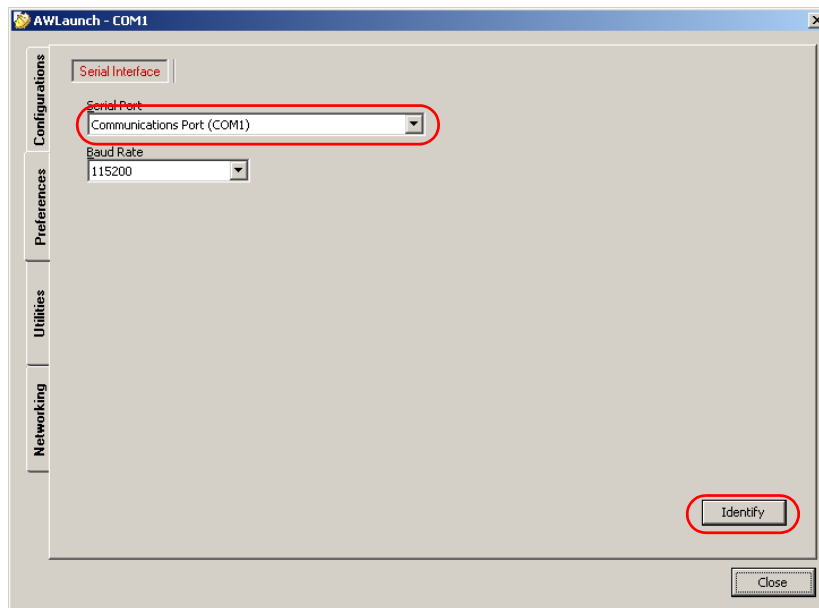


Figure 1-5. Connection

1.4. Closing AWLaunch

To quit AWLaunch, select *Close button*. If the modem has not been disconnected by the time you turn the program off, the connection will be automatically broken before AWLaunch is closed.

Warning: *It is strongly recommended to close the connection with the modem and close AWLaunch prior to switching the receiver OFF and disconnecting the cable.*

CONFIGURATIONS

2.1. Identification

To set up Identification parameters the following steps must be performed:

1. Select *Identification* subtab of *Configurations* tab;
2. Press *Identify* button (note that you may not press *Identify* button if identification process has been complete successfully once);
3. Enter Unit name in *Unit Name* edit box (optional);
4. Enter Owner in *Owner* edit box (optional);
5. If you are not in tend to change the settings from other tabs, press *Download* button to download the new settings into the radio modem.

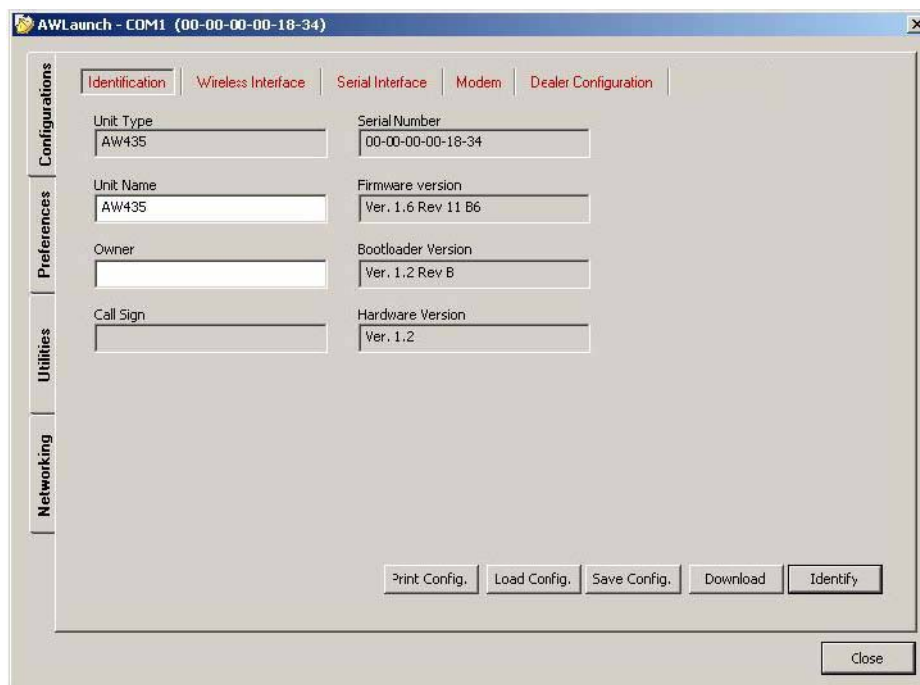


Figure 2-1. Identification

2.2. Wireless Interface

To set up Wireless interface parameters the following steps must be performed:

1. Select *Wireless Interface* subtab of *Configurations* tab;
2. Press *Identify* button (note that you may not press *Identify* button if identification process has been complete successfully once);
3. In *Protocol* sub group select *Base/Remote radio* button to fill the List of Protocols specific for Base or Remote units;
4. Select wireless Protocol from the List;
5. In RF channel sub group you can select one of the following radio buttons:
 - Automatic Scanning;
 - Manual – with this option, the operator can select one of the fixed channels from Channel map. The Frequency Channel can be selected using the *Frequency Channel* combo box;
 - Frequency Hopping.
6. Select Modulation type in *Modulation* combo box;
7. Select RF power in *RF Power* sub group;
8. *Misc* sub group allows you to set up FEC (Forward Error Correction) and Scrambling options.
9. If you are not in tend to change settings from other tabs, press *Download* button to download new settings into the radio modem.

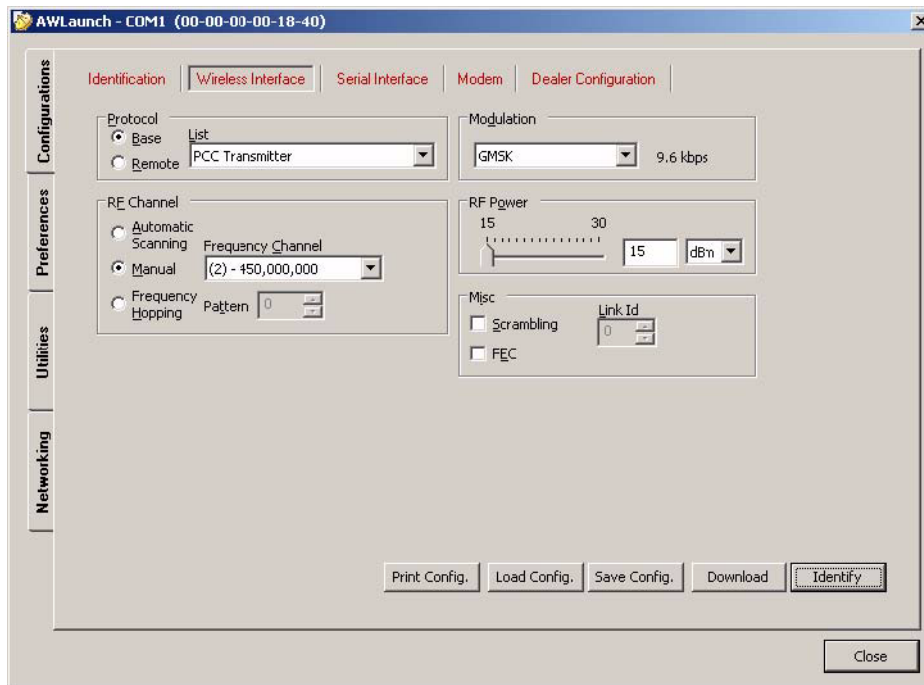


Figure 2-2. Wireless Interface

2.3. Serial Interface

To set up Serial Interface parameters the following steps must be performed:

1. Select *Serial Interface* subtab of *Configurations* tab;
2. Select Maintenance Port Baud Rate (command mode baud rate);
3. Select Data Port Baud Rate (Baud rate in datamode);
4. Select Parity, Byte size from corresponding combo boxes;
5. Select Flow control one of the following variants:
 - None – Flow control is not used;
 - RTS/CTS flow control;
6. If you are not in tend to change any settings from other tabs, press *Download* button to download new settings into the radio modem.

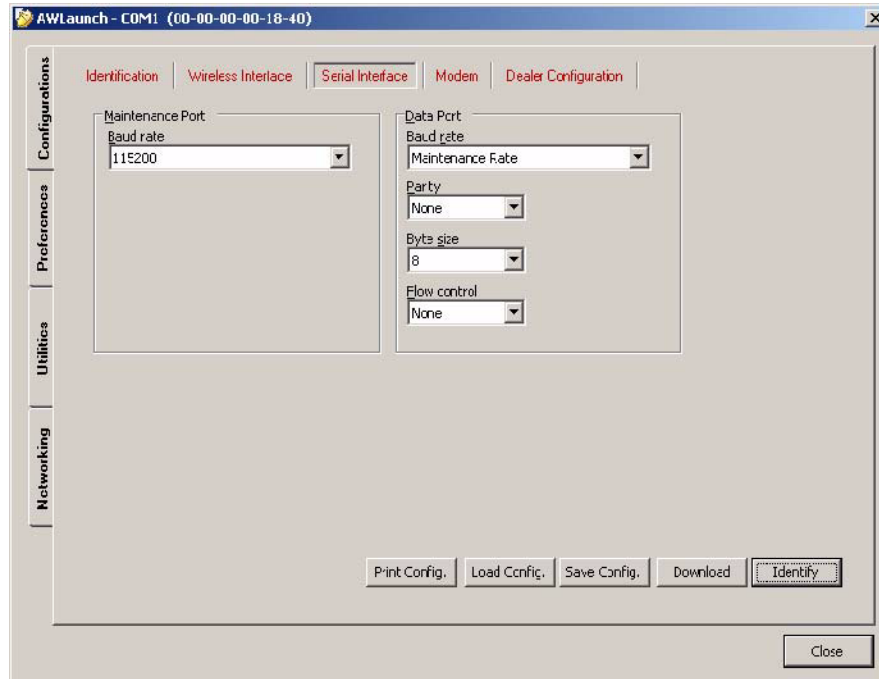


Figure 2-3. Serial Interface

2.4. Modem - Sleep Mode And Alarm

To set up Modem -Sleep Mode and Alarm parameters the following steps must be performed:

1. Select *Modem* subtab of *Configurations* tab;
2. Press *Identify* button (note that you may not press *Identify* button if identification process has been complete successfully once);
3. To enable/disable Sleep Mode, enable/disable the *Sleep Mode* check box accordingly;
4. Select the timeout in *Go to Sleep mode if no activity for::*
5. Select activating ways of sleeping unit from “Activate by” combinations:
 - “Internal Real-Time clock”;
 - “Control line”;
 - “External Sense line”;
6. The First Event Output (TTL1) control allows routing the alarms and the inputs from remote sensors to the first event (TTL) output:
 - “Sensor 1” (the sensor’s input on remote unit, default value);
 - “Sensor 1 and Sensor 2” (logic “and” of the sensors’ inputs on remote unit);
 - “Sensor 1 or Sensor 2” (logic “or” of the sensors’ inputs on remote unit);
7. The Second Event Output (TTL2) control allows routing the alarms and the inputs from remote sensors to the second event (TTL) output:
 - “Sensor 2” (the sensor’s input on remote unit, default value);
 - “SYNC Loss”
 - “BER > Threshold or SYNC Loss”
8. The BER control allows selecting the BER threshold level for second event output in case of selected “BER > Threshold or SYNC Loss”:
 - BER >10 –3 (default value)
 - BER >10 –2

9. If you are not in tend to change the settings from other tabs, press *Download* button to download the new settings into the radio modem.

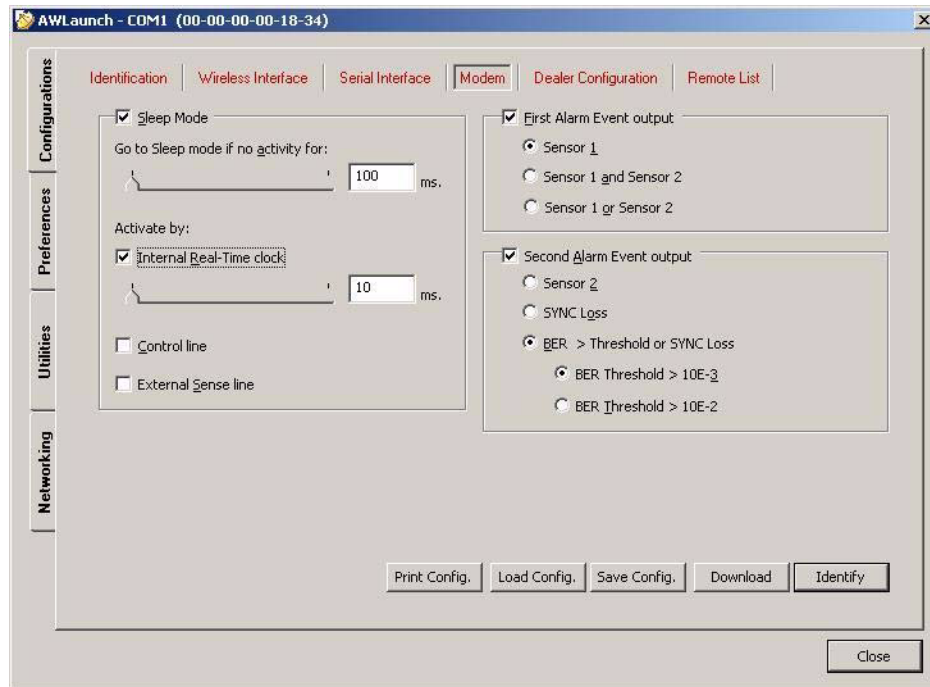


Figure 2-4. Modem - Sleep mode and Alarm parameters

Configurations

Dealer Configuration – Channel Map

2.5. Dealer Configuration – Channel Map

To set up Dealer Configuration – Channel map parameters the following steps must be performed:

1. Select Dealer Configuration sub tab of Configurations tab;
2. Press *Identify* button (note that you may not press *Identify* button if identification process has been complete successfully once);
3. Choose Channel Spacing value in *Channel Spacing* combo box;
4. Select Maximum allowable RF Power;
5. To add a new channel in “Channel map” list box enter its frequency in “Channel map” edit box (note that frequency value must be in Hertz);
6. Click *Add* button to add the new channel into the *Channel map* list box;
7. To remove a channel from the *Channel map* list box, select the corresponding channel in the list and click *Remove* button;
8. To change the frequency of the specified channel, select the corresponding channel in the list;
9. Enter a new frequency for the selected channel in *Channel map* edit box and click *Change* button;
10. If you are not in tend to change the settings from other tabs, press *Download* button to download the new settings into the radio modem.

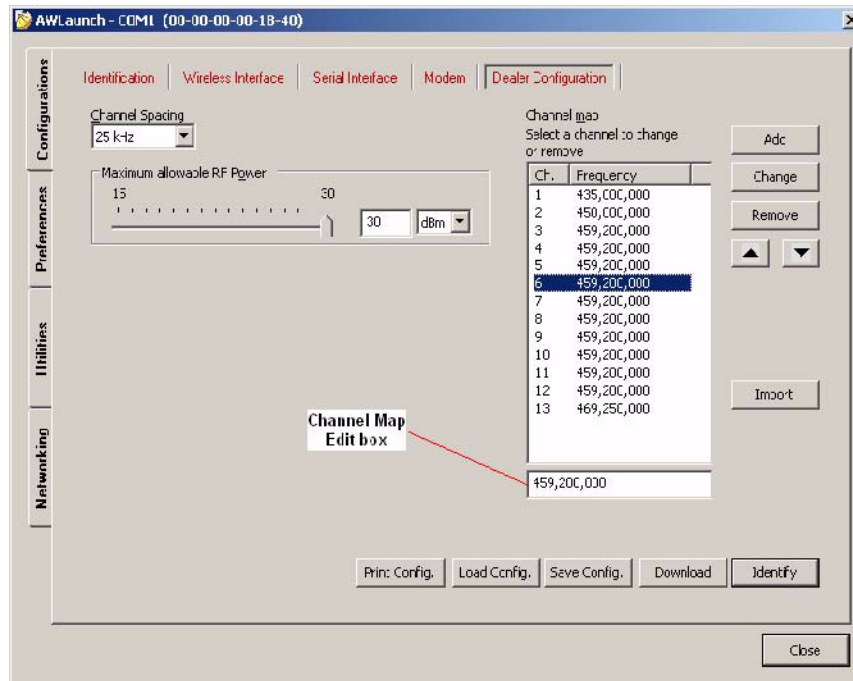


Figure 2-5. Dealer Configuration - Channel Map parameters

PREFERENCES

3.1. Serial Interface - Connection

To set up Serial Interface - Connection parameters with radio modem the following steps must be performed:

1. Select Serial Interface subtab of *Preferences* tab;
2. In *Serial Port* combo box select Communication Port, which is connected to the radio modem;
3. In *Baud Rate* combo box select the Baud Rate of the Communication Port (optional, automatic Baud Rate detection is supported);
4. Press *Identify* button to identify and upload all settings from the radio modem.

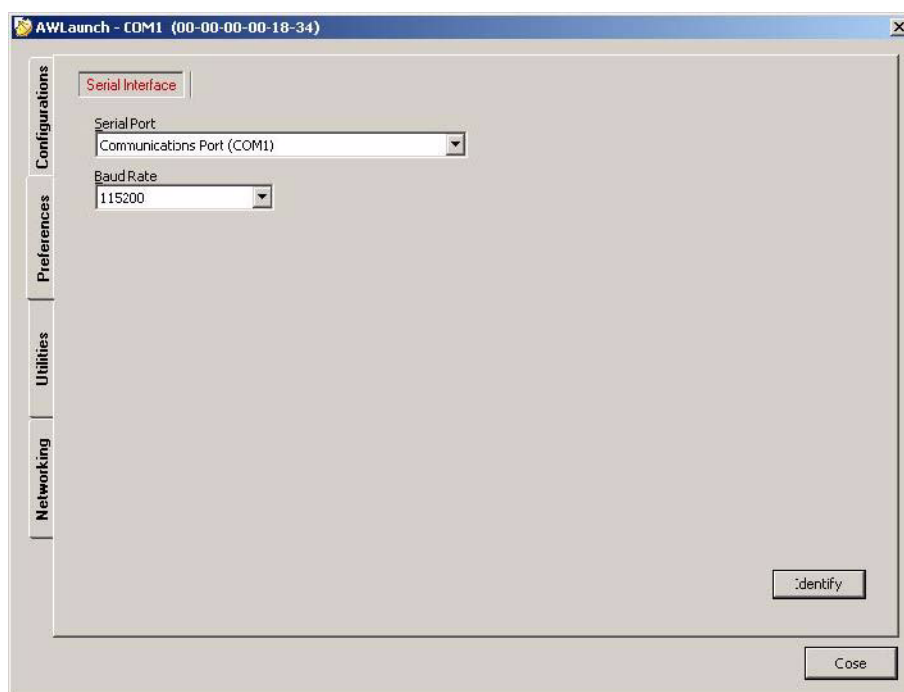


Figure 3-1. Serial Interface

Preferences

Serial Interface - Connection

UTILITIES

4.1. Download firmware ver. 1.6 and 1.8

To upgrade the firmware of radio modem the following steps must be performed:

1. Select *Download Firmware* subtab of Utilities tab;
2. Press *Identify* button (note that you may not press *Identify* button if identification process has been complete successfully once);
3. Press *Browse* button and select the firmware file which you want to download;
4. Press *Download* button (the downloading process may take a few minutes).

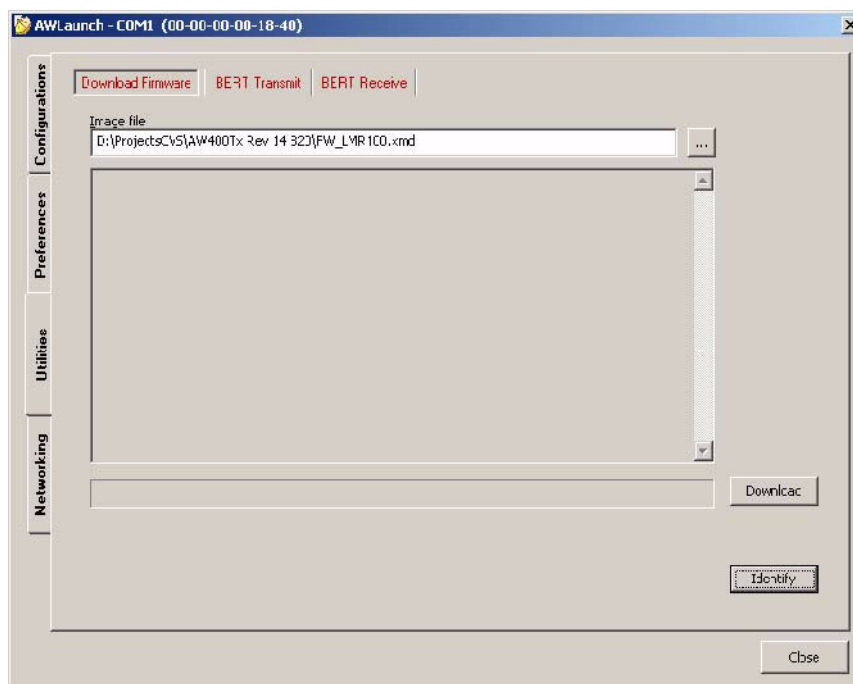


Figure 4-1. Download Firmware

Utilities

Download Firmware ver. 2.0

4.2. Download Firmware ver. 2.0

1. Select *Utilities* tab, click Download Firmware (see Figure 4-2 on page 22);
2. Click *Identify* button;
3. Click “...” button in *Image File* edit box then browse *Startup.xmd* then click *Download*;
4. After Image successfully upgraded message click OK;
5. Click “...” button in *Image File* edit box then browse *Whole.xmd* then click *Download*;
6. After Image successfully upgraded message click OK.

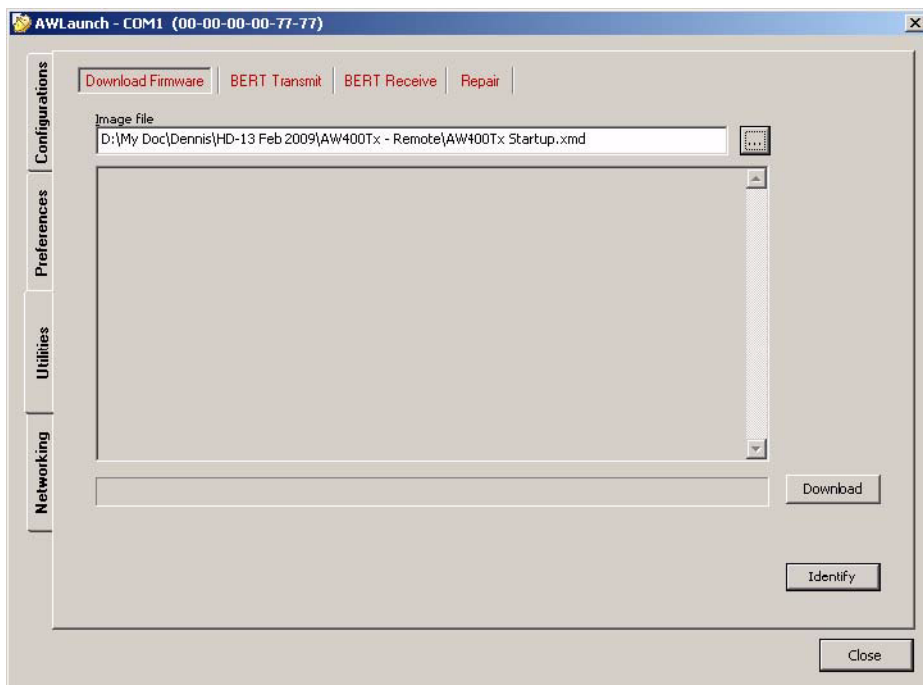


Figure 4-2. Download Firmware - Base and Remote Stations

4.3. BERT Transmit

To Run BERT Transmit the following steps must be performed:

1. Select *BERT Transmit* subtab of Utilities tab;
2. Press *Identify* button (note that you may not press *Identify* button if identification process has been complete successfully once);
3. Select *RF Power*, *Protocol*, *Modulation* and channel in corresponding controls;
4. In Transmission Rate sub group select one of the following radio buttons:
 - Duty cycle – Operator can define transmission rate by selecting duty cycle (in %);
 - Intervals – Operator can define transmission rate by selecting interval (in ms) between BERT frames;
5. In *Automation* sub group select Running time which defines duration of BERT Transmit (in s) (note that BERT Transmit can be stopped manually);
6. Check *Statistic file* check box and browse file where you want to store statistical data (optional);
7. Press *Start* button to start BERT Transmit (note *Start* button becomes *Stop*);
8. To stop BERT Transmit press *Stop* button.

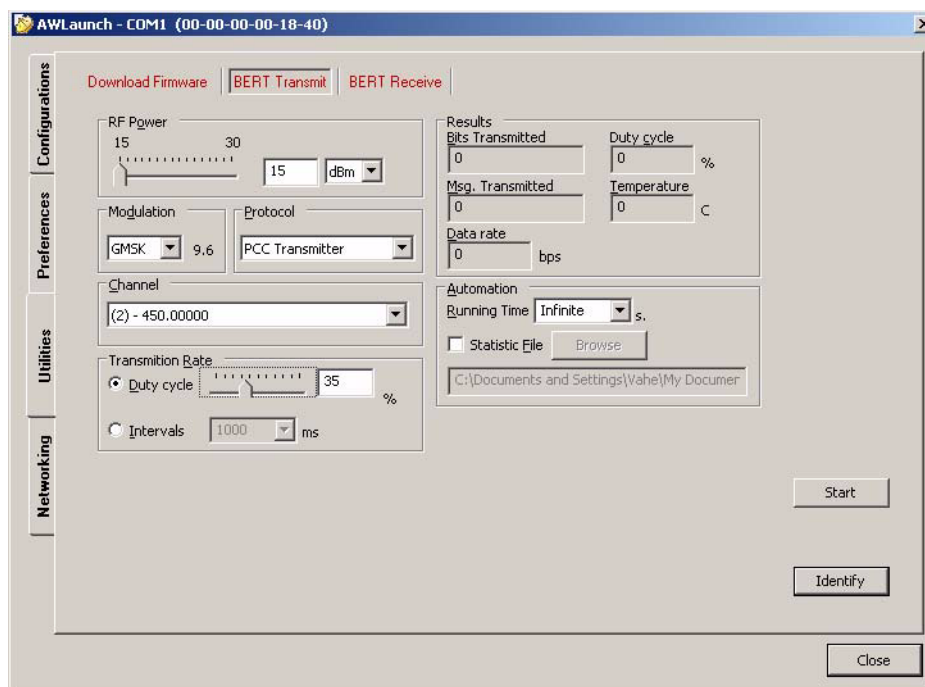


Figure 4-3. BERT Transmit

4.4. BERT Receive

To Run BERT Receive the following steps must be performed:

1. Select *BERT Receive* subtab of Utilities tab;
2. Press *Identify* button (note that you may not press *Identify* button if identification process has been complete successfully once);
3. Select channel and protocol in corresponding combo boxes;
4. In *Automation* sub group select Running time which defines duration of BERT Receive (in s)
(Note that BERT Receive can be stopped manually);
5. Check *Statistic file* check box and browse file where you want to store statistical data (optional);
6. Press *Start* button to start BERT Receive (note *Start* button becomes *Stop*);
7. To stop BERT Receive press *Stop* button.

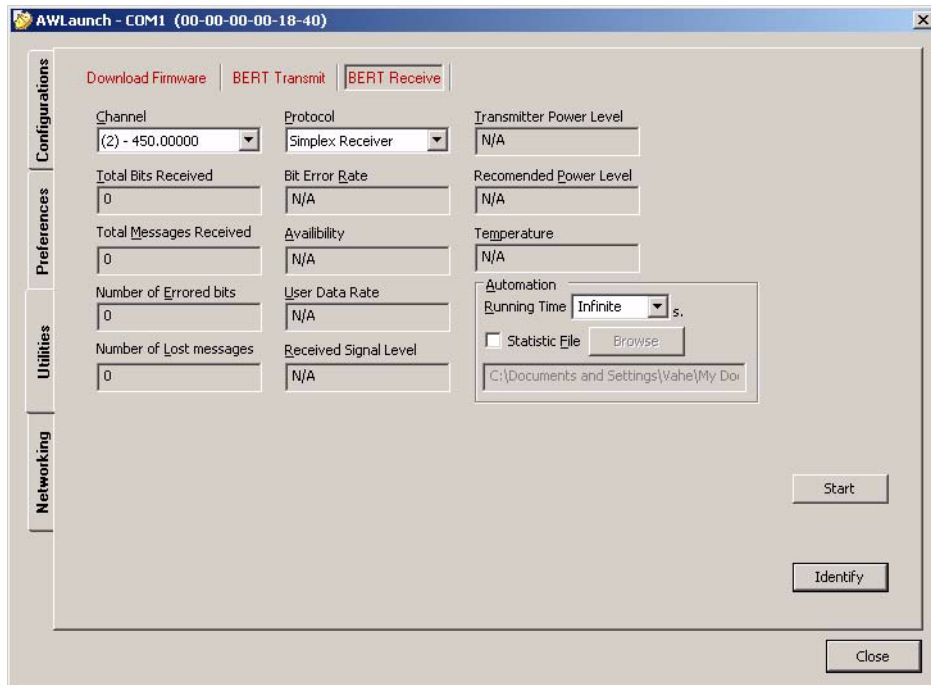


Figure 4-4. BERT Receive

4.5. Repair (for firmware version 2.0 only)

To repair the software of radio modem the following steps must be performed:

1. Set *Connection* parameters (refer to “Serial Interface - Connection” on page 19);
2. Select *Repair* tab of Utilities tab;
3. Turn off the radio modem;
4. Press *Startup* button to browse startup.xmd file;
5. Press *Whole* button to browse whole.xmd file;
6. Press *Config* button to browse combined configuration file;
7. Press *Repair* button;
8. Turn on the radio modem (Repairing process may take a few minutes).

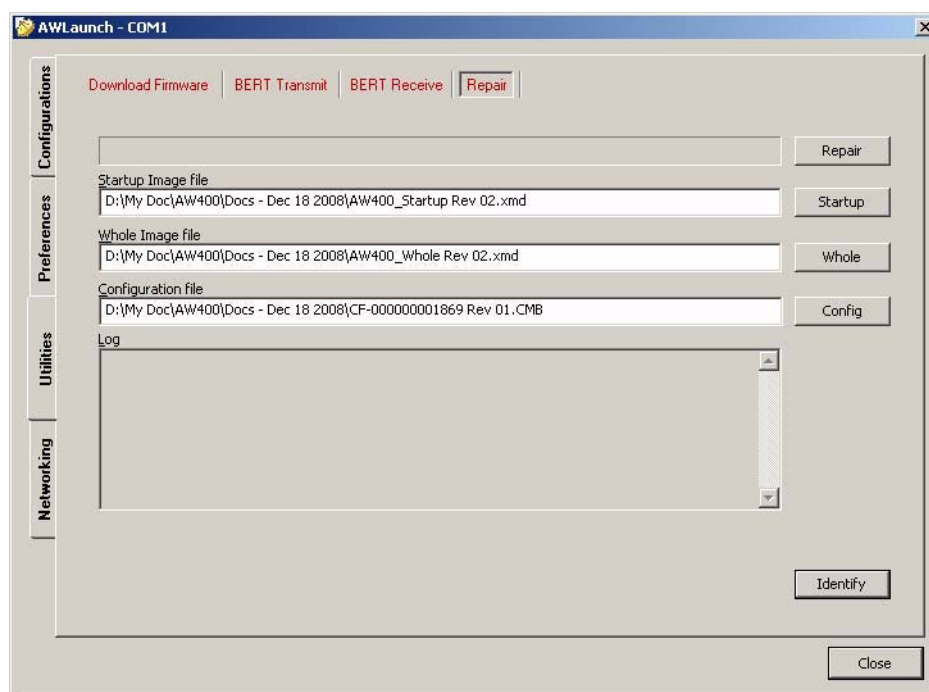


Figure 4-5. Repair

Utilities

Repair (for firmware version 2.0 only)

NETWORKING¹

This document specifies configurations of Half Duplex Base and Remote stations.

5.1. Base Station Configuration

Select *Configurations* tab, click *Wireless Interface* (see Figure 5-1 on page 27)

- Click *Identify* button;
- Click *Base* in *Protocol* group then choose *Hal Duplex Base* from *List* combo box;
- Click *Manual* in *RF Channel* group then select first channel from *Frequency Channel* combo box;
- Select *DQPSK* from *Modulation* combo box;
- Click *Download* button to save configuration.

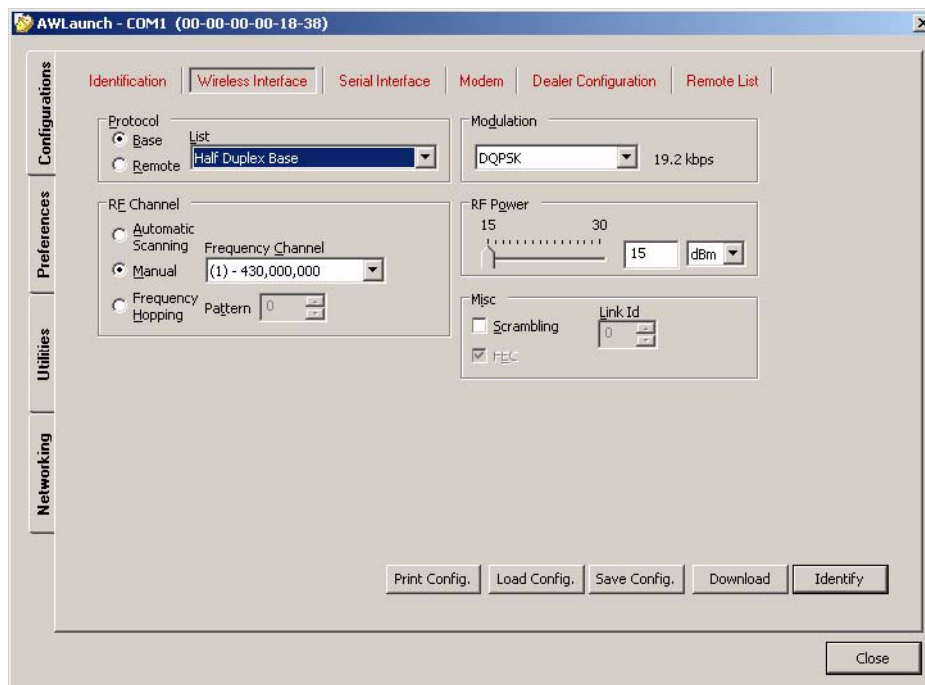


Figure 5-1. Wireless Interface – Half Duplex Base

1. For firmware version 1.8 and 2.0 only

5.2. Remote Station Configuration

- Select Configurations tab, click Wireless Interface (see Figure 5-2 on page 28);
- Click Identify button;
- Click Remote in Protocol group then choose Hal Duplex Remote from List combo box;
- Click Manual in RF Channel group then select first channel from Frequency Channel combo box;
- Select DQPSK from Modulation combo box;
- Click *Download* button to save configuration.

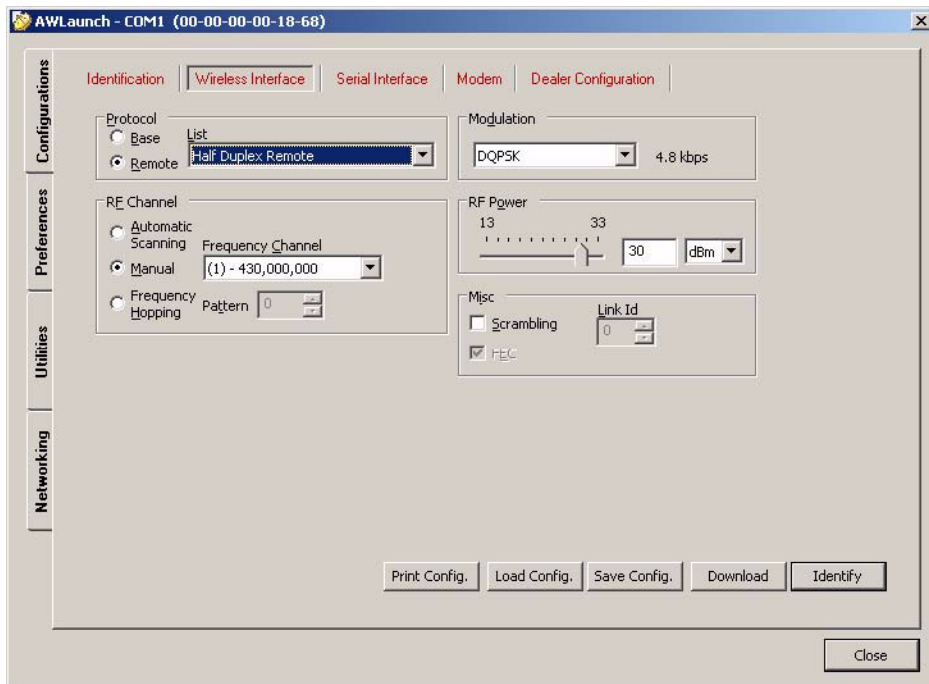


Figure 5-2. Wireless Interface – Half Duplex Remote

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for _____

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I can find the information I want.	1	2	3	4	5
The information in the manual is accurate.	1	2	3	4	5
I can easily understand the instructions.	1	2	3	4	5
The manual contains enough examples.	1	2	3	4	5
The examples are appropriate and helpful.	1	2	3	4	5
The layout and format are attractive and useful.	1	2	3	4	5
The illustrations are clear and helpful.	1	2	3	4	5
The manual is:	too long just right too short				

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