

# **Amtery Programmable Attenuator**

## **Software Panel Guide**

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## 1. Overview

### 1.1. Scope

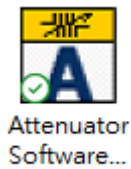
This guide introduces the Amtery USB-programmable attenuator and shows how to control it using the Attenuator Software Panel.

### 1.2. Getting started

- A. System requirement: Attenuator Software Panel supports Microsoft Windows 7/8/10/11.
- B. Installation: Download the Amtery attenuator software from Amtery web site and install it.
- C. Insert Amtery Attenuators with USB interface.

### 1.3. Launch the interactive panel

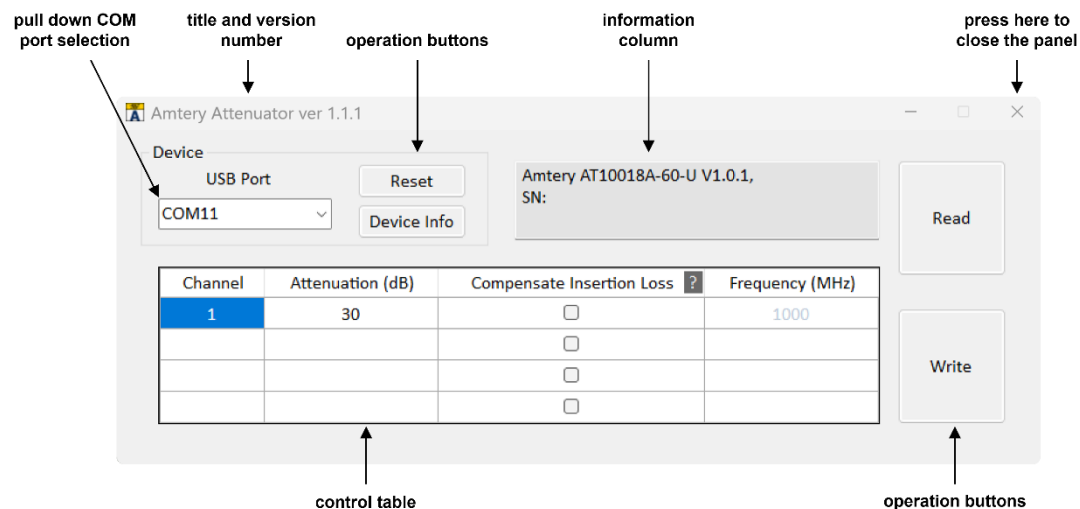
- A. Launch it from desktop. Double click "Attenuator Software Panel".



- B. Launch it from Windows start up program "Amtery Programmable Attenuator" -> "Attenuator Software Panel".

## 2. Panel Introduction

Attenuator Software Panel controls Amtery attenuators with USB interface without programming.



### 2.1. Pull down COM Port

Use the pull-down menu to select the attenuator that is connected to the PC. After selection, the panel connects the device and reads the current setting and information. The current setting is shown in the panel control table below, while the device information is shown in the panel information column.

### 2.2. Panel Close

Press the “X” icon right up the window to close the panel and program.

### 2.3. Information Column

The column in the upper side of the panel displays the information after pressing operation buttons.

### 2.4. Control Table

The control table in the middle bottom of the panel is both for user-input and device-setting display. Enter the desired value in the table, then click ‘Write’. Click ‘Read’, the current device setting will appear here.

The table is divided by four columns: Channel, Attenuation (dB), Frequency (MHz), and Compensation Insertion Loss.

- A. Channel: Read-only column that displays the channel number.
- B. Attenuation (dB): Set desired attenuation and display current attenuation in dB.
- C. Compensate Insertion Loss: Enable/Disable compensate insertion loss mode. Refer section 3 for more detail.
- D. Frequency (MHz): Set and display compensation frequency in MHz.

## 2.5. Operation Buttons

- A. Reset : Reset the device.
- B. Device Info: Read the device information. The device information string is formatted as "Amtery" + "model name" + "firmware version" + "SN".
- C. Read: Read the device status and display it on control table.
- D. Write: Write the desire setting (attenuation value, frequency, and compensation mode) into the device.

### 3. Attenuator Behavior

#### 3.1. Compensation OFF

When the compensation mode is disabled, the required attenuation setting will directly applied. The attenuator's total loss will be "attenuation setting + insertion loss". All attenuation settings must be exact multiples of the minimum step size; any other values will be rounded to the nearest valid multiple."

#### 3.2. Compensation ON

When the compensation mode is enabled, at the specified frequency the attenuator's total loss equals the attenuation setting alone—its insertion loss is fully compensated. Note that you cannot set an attenuation value below the attenuator's inherent insertion loss.