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Step Attenuator User Manual - DAT64(L,H)

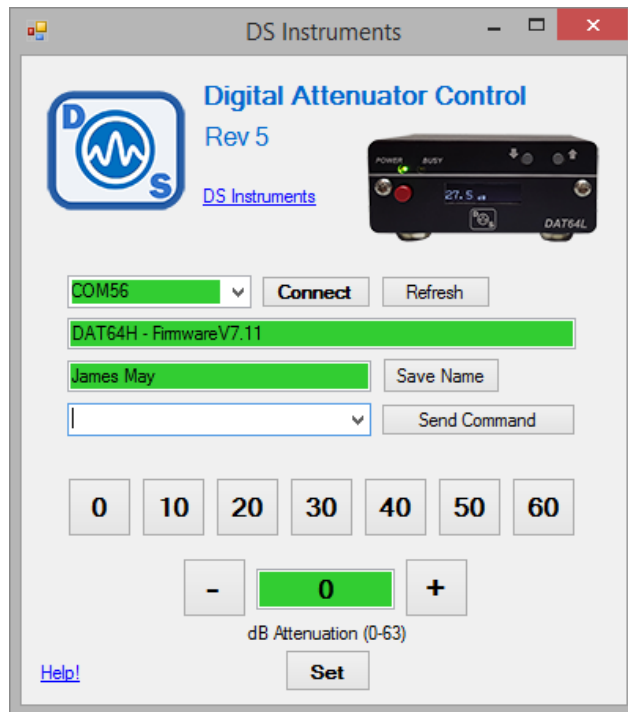


Stand-Alone Attenuator Quick Setup:

- Connect the DAT device to a standard USB port or 5 Volt power source using a standard micro-USB cable. A desktop, laptop computer, smart-phone charger, or USB battery pack will work. Avoid using unpowered USB hubs or excessively long USB extension cables.
- Press the red power button if available on your device. The screen will display the model number and firmware version. The unit will beep and flash an LED indicating boot-up. Display should then show the current attenuation value.
- The unit is now ready, attenuation value can be set using the up and down step buttons.

SCPI/COM/Computer Control Quick Setup:

- Connect the DAT device to a standard computer USB port using a high-quality micro-USB cable.
- Press the red power button if available on your device. The screen will display the model number and firmware version. The unit will beep and flash an LED indicating boot-up. Display should then show the current attenuation value.
- Windows will now install the standard virtual COM port driver. Wait for this to complete. This will take a minute or two ONLY on the initial connection of the device. Upgraded drivers are available on our website for machines with damaged copies of windows that have lost the OEM driver for some reason.
- Download and open the DS Instruments Attenuator Control GUI from the website.
- Select the appropriate COM port from the top select list and press CONNECT to control the unit. If the select box turns green then a connection has been established. The model number and firmware versions will appear in the green info box. If this box is turns red, the wrong COM port was selected or an error has occurred.
- The physical control buttons will be disabled when a COM port connection is established to prevent any accidental bumping of the buttons when under computer control.
- The COM port settings for a direct terminal connection as an alternative to our GUI are: 115200 Baud, 8 data bits, no parity, 1 stop bit, no flow control.



Advanced GUI Options

- “Refresh” reloads the COM list in case devices have changed since the app was launched.
- The “Save Name” allows a unique name to be saved for unit identification.
- “Send Command” allows a user to send a raw SCPI command to the Signal Generator.
- The Attenuator setting can be entered or incremented with the plus and minus buttons.
- Disabling the buzzer and OLED display using the “Send Command” feature will speed up the unit’s execution of commands for scripted control.
- The device’s default attenuation can be saved by sending the “*SAVESTATE” command after the desired attenuation value has been set.

Hardware Notes

- RF Input and RF Output are interchangeable
- Max power input for the DAT64L is **+25dBm**
- Max power input for the DAT64H is **+23dBm**

Troubleshooting

- Missing COM port:
 - Try a new USB cable
 - Try a different USB port
 - Reset the host PC/System
 - Install the alternative drivers from our website
 - Test device on a different system
 - Contact support

- Front buttons have no effect:
 - Send the command “*BUTTONS ON”

Support Notes

- A complete SCPI command list is located on the website:
<https://www.ds instruments.com/documents/>
- A full datasheet is available on the product page:
<https://www.ds instruments.com/store/products/category/digital-attenuators/>
- Tech support email can be reached at support@ds instruments.com