UDR2 Digirule 2U Firmware Updater User Manual

18 December 2020

Introduction

UDR2 is a utility used to install firmware updates on the Digirule 2U. Versions are available for Linux, Mac OS and Windows.

Getting Started

Before running the utility, you need to download from the Digirule 2U website the hex file for the firmware you want to install.

Example firmware file: `dr2u.firmware.22sep2020.hex`

You also need to know the name of the USB device on your computer to which the Digirule 2U is connected.

Linux

`ls /dev/tty*`

Example device name: `/dev/ttyUSB0`

Mac

`ls /dev/tty.*`

Example device name: `/dev/tty.usbserial-DM038QQY`

Windows

`mode` , or use Device Manager

Example device name: `COM3`

Running the Utility

The general syntax to invoke the utility is:

`udr2 [options] <file device`

The utility supports the following command-line options:

Option	Function
`--program`	program and verify (default)
`--verify`	verify only (do not update)

Invoking the utility is slightly different depending on which operating system you use. All of these example assume that the utility resides in the current working directory.

Linux

```
pi@rpi0:~ $ ./udr2 < dr2u.firmware.22sep2020.hex /dev/ttyUSB0
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Loading hex file... OK
Opening port... OK
Erasing flash... OK
Writing flash............................... OK
Verifying flash................................ OK
Restarting Digirule... OK
Closing port... OK
```

Mac

```
User@imac:~ $ ./udr2 < dr2u.firmware.22sep2020.hex /dev/tty.usbserial-DM038QQY
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Loading hex file... OK
Opening port... OK
Erasing flash... OK
Writing flash............................... OK
Verifying flash................................ OK
Restarting Digirule... OK
Closing port... OK
```

Windows

```
C:\> udr2 < dr2u.firmware.22sep2020.hex COM3
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Loading hex file... OK
Opening port... OK
Erasing flash... OK
Writing flash............................... OK
Verifying flash................................ OK
Restarting Digirule... OK
Closing port... OK
```

> Tip: If the port device name is `COM10` or greater, it must be specified as `\\.\COMnn`