

# DataPort AES Key Programmer Users Guide

CRU-DataPort's new Advanced Encryption Standard (AES) Key Programmer is a cost effective way to create and manage Security Keys without relying on outside vendors. The standalone key programmer (no computer required) generates random multi-bit codes that meet FIPS 140-2 requirements. The random number generation used in the programmer meets the random number tests per NIST Special Publication 800-22 and DIEHARD.



**AES Key Programmer**

## Package Contents

- 1 – DataPort AES Programmer
- 1 – Protective Rubber Boot
- 1 – 2-Pack of Pre-charged NiMH Rechargeable AA Batteries
- 1 – 5V AC Power Adapter
- 1 – Users Guide

## Production Operation

The DataPort AES Programmer ships with 2 pre-charged NiMH rechargeable AA batteries. To install the batteries remove the rubber boot and slide off the battery cover. Verify polarity, and then insert the AA batteries. Slide the battery cover on and replace the rubber boot.

Power on the AES Key Programmer, with the power switch located on the top of the unit. All LEDs will flash on and the Power LED (see figure 1) will flash green while the AES Key Programmer performs a self check. When complete, the green LED will stay on.

**Note:** Blank keys are one (1) time programmable and are write protected after the programming cycle.

## Create Master Key and Copying Keys

1. Plug a blank key into the Master port and up to 4 additional keys in Key 1 port through Key 4 port. The green Program LED will flash when the AES Key Programmer recognizes the keys.
2. Press the Create Master button to create a single Master key or up to 4 additional keys. The green LED will flash while the AES Key Programmer installs the encryption code on the keys.
3. When the green LED stops flashing the keys are programmed and ready for use.

If the red LED flashes, the key is already coded or a bad key and the programming will abort.

**WARNING:** Do not remove keys during programming. Removing a key during programming will damage the encryption code and render the key unusable.

## Copying Keys

1. Place the key to be copied in the Master Port. Place new blank keys in the additional key ports. The green Program LED will flash as the keys are recognized.
2. Press the Copy button and the green Power On LED will flash as the Master key is read and the blank keys are programmed. The programmer will copy the encryption code to Key 1 port and then sequentially to Key 4 port.
3. When the green Program LEDs stop flashing the keys are programmed and ready for removal and use.

If the red LED flashes the keys are already coded or a bad key and the programming will abort. If the Master key is blank then after the test the copying will abort.

## Installing/Removing batteries

With the rubber boot removed, hold the programmer so the battery bay door is under both thumbs, arrow pointed outward. With slight downward pressure, slide the door away from you to expose the battery cavity.

## LED Functionality

The power LED is a bi-color LED, which flashes green when the unit powers on and will stay green while the AES Key Programmer is on. The amber LED lights up when the battery power is low. When the amber LED flashes the battery power is very low, no additional keys should be created or copied.

The Fault LED on (see figure 1) will turn red when the programmer detects an error during initialization. Please contact CRU-DataPort technical support for more details.

Power/Battery Life LED      Fault LED



Figure 1: LED Layout

## Programmer Operating Modes

The AES Key Programmer will operate in 3 different modes.

1. Battery only mode use 2 AA batteries
2. AC Adapter and Batteries, including while batteries are charged
3. AC adapter only

## Recharging the AES Key Programmer.

The AES Key Programmer is powered by 2 NiMH rechargeable batteries. Plug the supplied AC adapter into the power outlet; connect it to the AES Key Programmer. When the AES Key Programmer is properly connected and charging the amber LED on the back will light up. When the unit is charged the LED will begin flashing.

Use only the supplied charger. The use of other chargers can damage the batteries, or create the potential for fire, explosion or other hazards. Do not tamper with the batteries. Physical damage can result in the battery leaking. The clear liquid is corrosive and toxic; it may cause burns or injury. Keep out of reach of small children. For more details contact CRU-DataPort.

## Trouble Shooting

For trouble shooting information and technical support contact CRU-DataPort via email at: [support@CRU-DataPort.com](mailto:support@CRU-DataPort.com) to submit a support request through our website at: [www.CRU-DataPort.com](http://www.CRU-DataPort.com)

## Limited Product Warranty

CRU-DataPort (CRU) warrants the DataPort AES Programmer to be free of significant defects in material and workmanship for a period of three (3) years from the original date of purchase. CRU's warranty is nontransferable and is limited to the original purchaser.

## Limitation of Liability

The warranties set forth in this agreement replace all other warranties. CRU expressly disclaims all other warranties, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose and non-infringement of third-party rights with respect to the documentation and hardware. No CRU dealer, agent or employee is authorized to make any modification, extension, or addition to this warranty. In no event will CRU or its suppliers be liable for any costs of procurement of substitute products or services, lost profits, loss of information or data, computer malfunction, or any other special, indirect, consequential, or incidental damages arising in any way out of the sale of, use of, or inability to use any CRU product or service, even if CRU has been advised of the possibility of such damages. In no case shall CRU's liability exceed the actual money paid for the products at issue. CRU reserves the right to make modifications and additions to this product without notice or taking on additional liability.

To register your product please go to [www.CRU-DataPort.com](http://www.CRU-DataPort.com)

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