



BULLION DNA READER

USER GUIDE

A step-by-step guide of the authentication process
for bullion coins from the Royal Canadian Mint

THANK YOU FOR ACQUIRING THE ROYAL CANADIAN MINT'S BULLION DNA ANTI- COUNTERFEITING TECHNOLOGY.

Every Gold Maple Leaf bullion coin dated 2014 and later as well as every Silver Maple Leaf bullion coin dated 2015 and later now features a unique anti-counterfeiting security mark. The Mint's digital non-destructive activation (DNA) technology, jointly developed by the Royal Canadian Mint and Signoptic™, captures images encrypted with a string of code, and stores these in the Mint's secure database. By using the proprietary hardware and software that make up the Bullion DNA anti-counterfeiting technology, authorized Bullion DNA dealers can facilitate the authentication of Gold and Silver Maple Leaf bullion coins.

1 BULLION DNA READER

OVERVIEW



ACCESSORIES

The following accessories are included in your DNA kit:

1. Mini USB cable
2. USB key



2 GETTING STARTED

The Bullion DNA anti-counterfeiting technology consists of two components: the Bullion DNA Reader, the proprietary physical device used to take a high-resolution photo of the coin; and the software application that, once installed on your computer, will allow the device to connect to our DNA server to match the coin with its corresponding image in our database.

BEFORE YOU BEGIN

Connect the device to your computer using the USB cable provided. The device will light up to indicate that it is connected and ready for use.

INSTALLING THE APPLICATION

To install the Bullion DNA application, insert the USB key provided into your computer and run the file named **setup.exe**, then follow the on-screen prompts and instructions.

Make sure you are connected to the Internet; during the installation process, you will automatically connect to our DNA server to register your copy of the application. Only distributors and dealers registered as members of the Royal Canadian Mint Bullion DNA Program are able to use the application.

LAUNCHING THE APPLICATION

To launch the Bullion DNA application, click the shortcut icon that will appear on your desktop after the installation is complete.

When launching the application for the first time, you must read and accept the terms and conditions. They will appear in a pop-up window.

Click **I Accept** to proceed and begin authenticating your coins. Clicking the **Do not show again** checkbox will prevent this screen from appearing every time you launch the application. If you click **Close** and do not accept the terms and conditions, the Bullion DNA application will automatically quit.

NOTE

Bullion DNA system requirements:

- Windows 7 or 8
- Internet connection

3 AUTHENTICATION

STEP 1

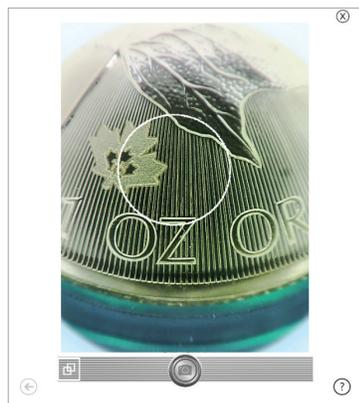
Insert the Gold Maple Leaf or Silver Maple Leaf bullion coin you want to authenticate into the device's tray with the maple leaf design facing up, as shown in the image. To open the tray, push its edge from the same side as the vertical indent on the device. To close the tray, rotate it back in until the tray is flush with the device. There is no audible 'click'; simply push it until it is fully closed.



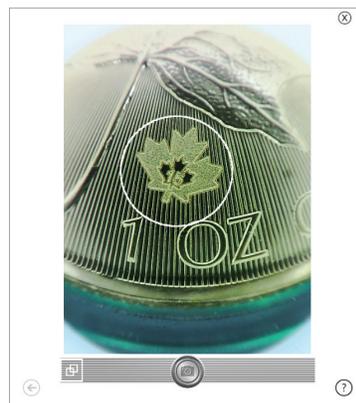
NOTE: The tray is dual-sided and can be removed and flipped depending on whether you wish to authenticate a Gold Maple Leaf or a Silver Maple Leaf. Holding the tray's lever, pull the tray towards you until it slides out completely. Flip the tray and re-insert it, sliding the tray back on the lever.

STEP 2

To begin, follow the onscreen steps by choosing your product and year. Once you make your selection, the camera preview screen will open. Using the dial on the tray, rotate the coin until the overlay on the screen aligns with the maple leaf security mark on the coin.



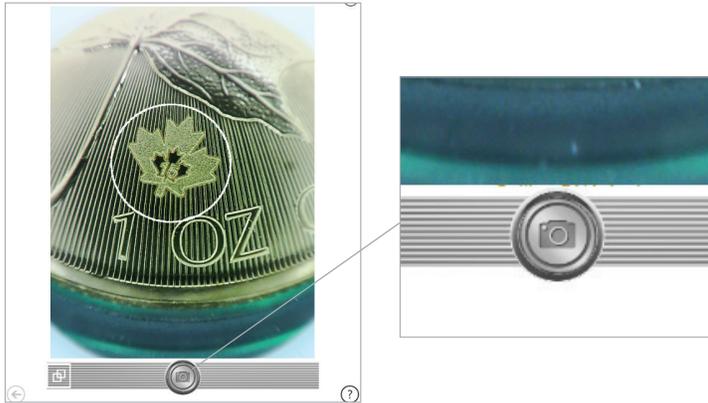
NOT ALIGNED



ALIGNED

STEP 3

Once the maple leaf security mark and overlay circle are aligned, take a high-resolution photo of the coin in the tray by clicking the **Camera** icon at the bottom-centre of the screen.



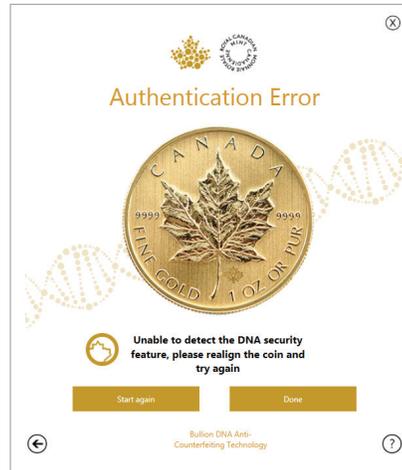
STEP 4

Click the **Authenticate** button to begin the authentication process. This can take up to 10 seconds to complete. During this time you will see the following screen:



STEP 5

Once the authentication process is complete, you will receive one of the following messages:

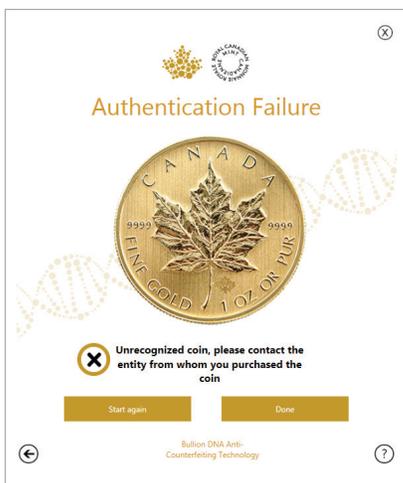


Authentication Success: This screen will tell you that the coin was registered at the Royal Canadian Mint.

Authentication Error: This message does not necessarily mean the coin is not authentic. An error could be caused by a number of factors, including:

- A misalignment of the coin in the tray;
- Problems with your Internet connection;
- An error with the Royal Canadian Mint's DNA server; or
- Possible damage on or near the security mark on the coin.

If you receive this message, check your Internet connection and the alignment of the coin in the device, then click **Start again** to re-attempt the authentication process.



Authentication Failure: If the authentication is unsuccessful after several attempts, please contact the distributor from whom you purchased the coin.

STEP 6

Once authentication is complete, click **Done** to exit the Bullion DNA application, or click **Start again** to authenticate another coin. When finished, unplug the device's USB cable from your computer.

Additional functions:

You can access a **Help page** at any time by clicking on the question mark icon in the lower-right corner of the screen.

You can also **close the application** at any time by clicking on the X in the top-right corner of the screen.

You can also **return to the previous screen** by clicking the back arrow in the lower-left corner of the screen.



4 FREQUENTLY ASKED QUESTIONS

Why did the Mint create the Bullion DNA anti-counterfeiting technology?

For investors, the digital authentication of their Gold and Silver Maple Leaf coins offers an added layer of validation to the buying process by facilitating the authentication of registered Royal Canadian Mint bullion products from a Bullion DNA dealer. From the dealer's perspective, this technology facilitates the authentication of the Mint's bullion products. Finally, for the Mint, this technology serves to demonstrate how our coins are the most secure in the world.

What Mint products can be authenticated using the device?

The Bullion DNA anti-counterfeiting technology makes it easy to facilitate the authentication of Gold Maple Leaf bullion coins dated 2014 and later, and Silver Maple Leaf bullion coins dated 2015 and later. There are future plans to make Platinum Maple Leaf and Palladium Maple Leaf coins DNA enabled.

When I launch the software, I receive a message saying "the DNA verification could not be found." What should I do?

Make sure you have connected the device to your computer using the mini USB cable provided. The device will light up to indicate that it is connected and ready for use.

When I launch the software, I receive a message saying "the Royal Canadian Mint DNA server could not be found." What should I do?

Our DNA server is extremely reliable; however, in the event that the server is down, we recommend waiting a few minutes and then re-launching the Bullion DNA application. Otherwise, check your connection to the Internet to ensure you are online. You might also want to check your firewall settings to make sure your network will allow you to access the DNA server.

How do I align the coin in the device?

After inserting the coin into the tray with the maple leaf side facing up, rotate the dial located on the coin tray until the overlay shown on the camera preview screen overlaps and aligns with the maple leaf security image on the coin.

How long does it take to authenticate a coin?

The authentication process takes up to 10 seconds to complete. However, the actual time might be faster or slower depending on a number of factors, including the speed of your Internet connection.

I have received an authentication error or authentication failure message. Does this mean my coin is counterfeit?

Failure to authenticate does not necessarily mean the coin is not authentic. An unsuccessful authentication message could be caused by a misalignment of the coin in the tray, problems with your Internet connection or an issue with the DNA server. However, if the authentication is unsuccessful after several attempts, please contact the distributor from whom you purchased the coin.

Who should I contact for technical support?

For technical support, please contact the Royal Canadian Mint at bulliondna@mint.ca.