

How to connect an External Reader to a Sigma/Sigma Lite reader



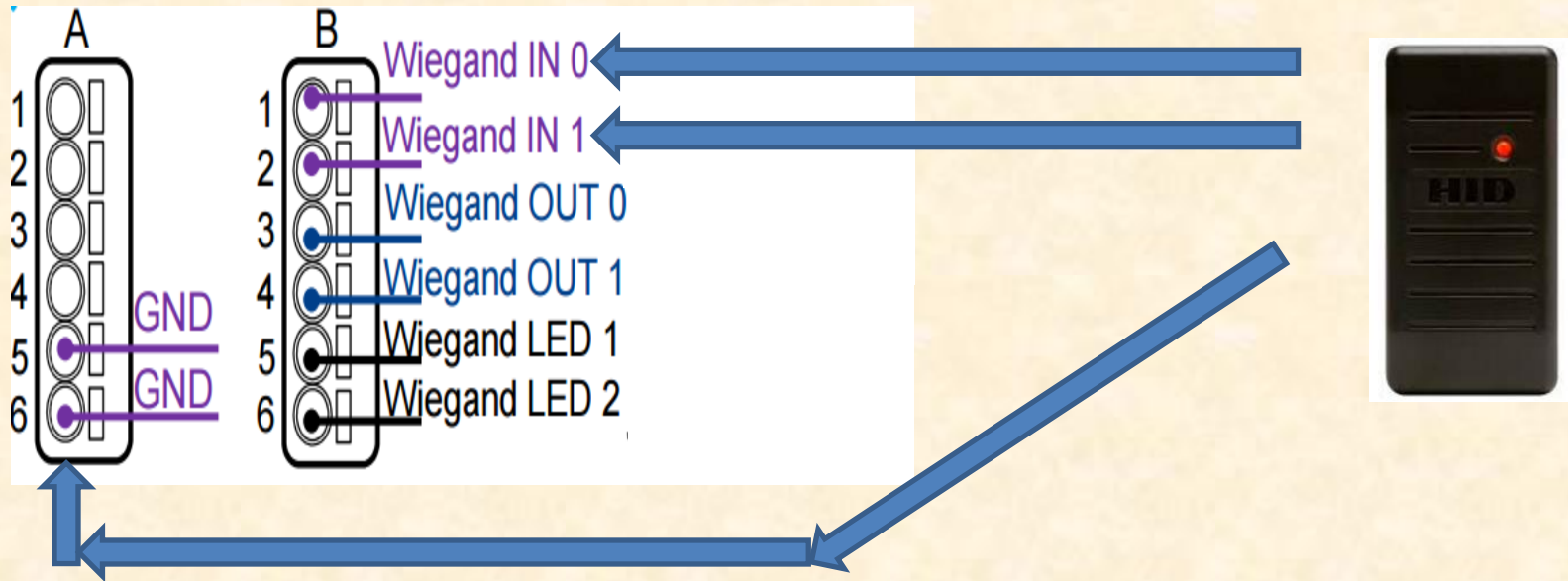
Physical Connection

Physical connection between a Sigma reader

(this is only an example)



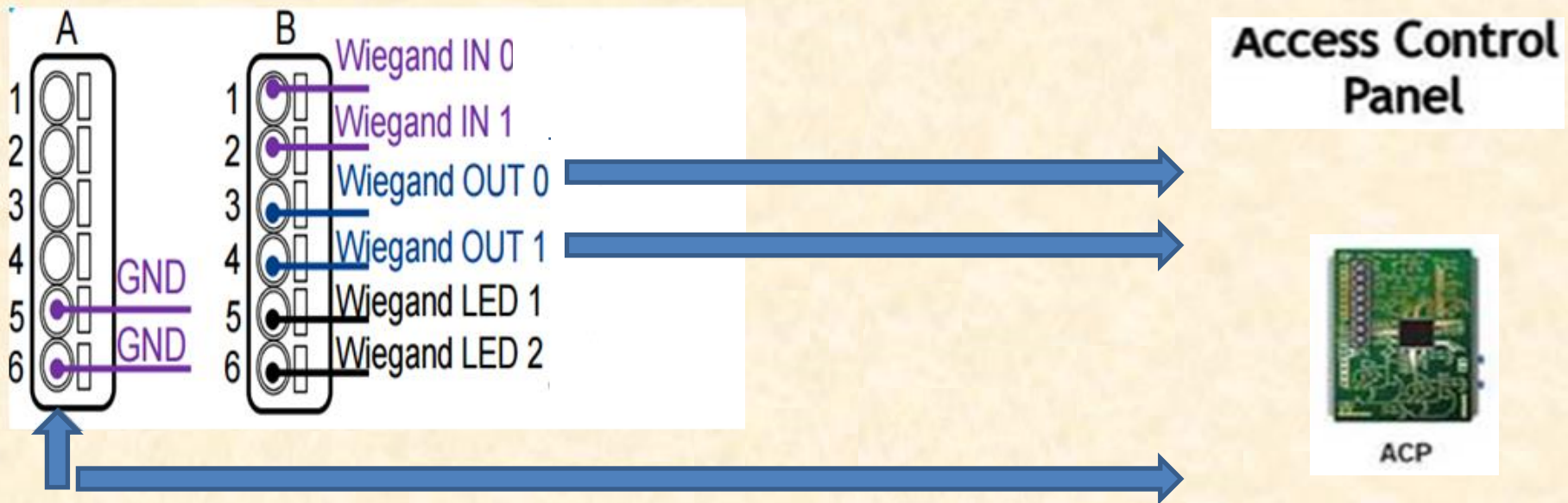
Physical connection between a Sigma and external reader



Take the External reader Wiegand OUT to the Wiegand IN of the Sigma



Physical connection between a Sigma and external reader



From Wiegand OUT from the Sigma to your ACP



Physical connection between a Sigma Lite reader

(this is only an example)



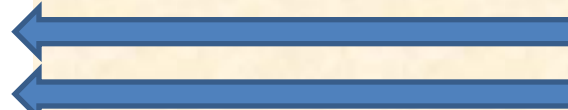
Physical connection between a Sigma Lite and external reader

Connect External Reader to Morpho Terminal



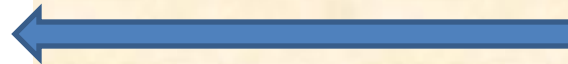
Physical connection between a Sigma Lite and external reader

Wiegand IN & Wiegand OUT		
13	WIEGAND_IN0	Green / Red
15	WIEGAND_IN1	White / Red

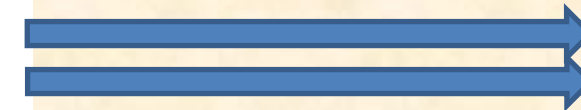


Take the External reader Wiegand OUT to the Wiegand IN of the Sigma Lite

20	WIEGAND_GND	Black / Red
----	-------------	-------------



Wiegand IN & Wiegand OUT		
14	WIEGAND_OUT0	Green
16	WIEGAND_OUT1	White



From Wiegand OUT from the Sigma Lite to your ACP

20	WIEGAND_GND	Black / Red
----	-------------	-------------



ACP

Access Control Panel



SOFTWARE

Configuration

Using Morpho Manager for your external reader

(get software from <http://service.morphotrak.com/software-links.html>)

MorphoManager

Biometric Device Profile

Go to: (1)Biometric Device Profile
Click next to (2)Multi-Factor Mode
(3)Click Custom
(4)Click Wiegand In
Click Finish

1

2

3

4

Click Finish

User Authentication Mode

Create a User Authentication Mode (UAM)

(1) Name it

Click Next

Operator

Key Policy

Biometric Device Profile

Biometric Device

Wiegand Profiles

User Policy


Access Schedules

User Distribution Group

User Authentication Mode

Operator Role


Enter details for this User Authentication Mode

Name: 1  External Wiegand in

Description:

MA 100, MA J, MA 500, and MA VP Mode:

Morpho 3D Face Mode:

 Smartcard encoding will prefer the MA Sigma settings over MA 100, MA J, MA 500, and MA VP mode settings.

(2)Template location >download to device(**only used if User record is stored on device**)

(3)Allow start by Wiegand In > check

(4)Require Template Match >check

Click Finish

The screenshot shows a configuration page for user authentication. On the left is a navigation menu with the following items: Operator, Key Policy, Biometric Device Profile (highlighted), Biometric Device, Wiegand Profiles, User Policy, Access Schedules, User Distribution Group, User Authentication Mode (highlighted with a yellow arrow), Operator Role, Notifications, and Clients.

The main content area is titled "Enter MA Sigma, MA Sigma Lite, MA Sigma Lite+, MorphoWave Mode details for this User Authentication". It features a dropdown menu for "MA Sigma, MA Sigma Lite, MA Sigma Lite+, MorphoWave Mode" set to "Enabled". Below this is a section for "MA Sigma, MA Sigma Lite, MA Sigma Lite+, MorphoWave Settings" containing several options:

- Download Identifier To Device:
- Encode To Smartcard Mode: None
- Template Location: Downloaded To Device (indicated by a yellow arrow and the number 2)
- Pin Location: None
- Allow Start By Biometric:
- Allow Start By Contactless Card:
- Allow Start By Keyboard:
- Allow Start By Wiegand In: (indicated by a yellow arrow and the number 3)
- Require Pin:
- Require Template Match: (indicated by a yellow arrow and the number 4)

At the bottom center, there is a red button labeled "Click Finish".

User Policy

Create a User Profile

(1) Name it

(2) Use the Wiegand profile that is associated with your ACP

(3) User Authentication Mode set to your UAM that you created earlier

Click Finish if User record stored on Device if not Click Next

The screenshot shows the 'Adding User Policy' configuration page. On the left is a sidebar with 'Items' including Operator, Key Policy, Biometric Device Profile, Biometric Device, Wiegand Profiles, User Policy (highlighted), Access Schedules, User Distribution Group, and User Authentication Mode. The main area is titled 'Adding User Policy' and contains the following fields:

- Name: 1 → External Wiegand in
- Description: (empty text box)
- Access Mode: All Biometric Devices and Clients
- Access Schedule: 24 hours, 7 days a week
- Extended User Details: Display extended user details
- Wiegand Profile: Standard 26 bit ← 2
- User Authentication Mode: External Wiegand in
- Show Photo Capture Page:


Yellow arrows and numbers indicate the steps: '1' points to the Name field, '2' points to the Wiegand Profile dropdown, and '3' points to the User Authentication Mode dropdown.

Click Finish

Set Finger Biometric Enrollment Minimum Fingers to None (only used if User record is NOT stored on device example if template stored on card)

Click Finish

Enter the details for finger biometric options

Finger Biometric Enrollment Minimum Fingers:	<input type="text" value="None"/>	
Preferred Finger One:	<input type="text" value="Left Index Finger"/>	
Preferred Finger Two:	<input type="text" value="Right Index Finger"/>	
Preferred Duress Finger:	<input type="text" value="Left Middle Finger"/>	
Vein / Print Mode:	<input type="text" value="Universal Fast"/>	
Show Finger Biometric Capture Page:	<input checked="" type="checkbox"/> (User Authentication Mode requires templates)	



It is recommended the mode set in User Policy for enrollment should be the same mode or a more restrictive mode than the mode set in Biometric Device Profile. Using a less restrictive mode in User Policy than in Biometric Device Profile is likely to increase the False Rejection Rate (FRR) of biometric devices.

Click Finish

User Management


The following is only a example

User Management

Home Administration **User Management** MSO Identification MorphoWave Identification

Adding User

Enter details for this User

User Policy:	<input type="text" value="External Wiegand in"/>		Assign User you created
First Name:	<input type="text" value="John"/>		
Middle Name:	<input type="text"/>		
Last Name:	<input type="text" value="Smith"/>		
Date of Birth:	<input type="text"/>	Use M/d/yyyy eg. 3/24/1986.	


User Management

Click Finish if User record is NOT stored on Device or Click Next

Adding User

Wiegand Values

User ID



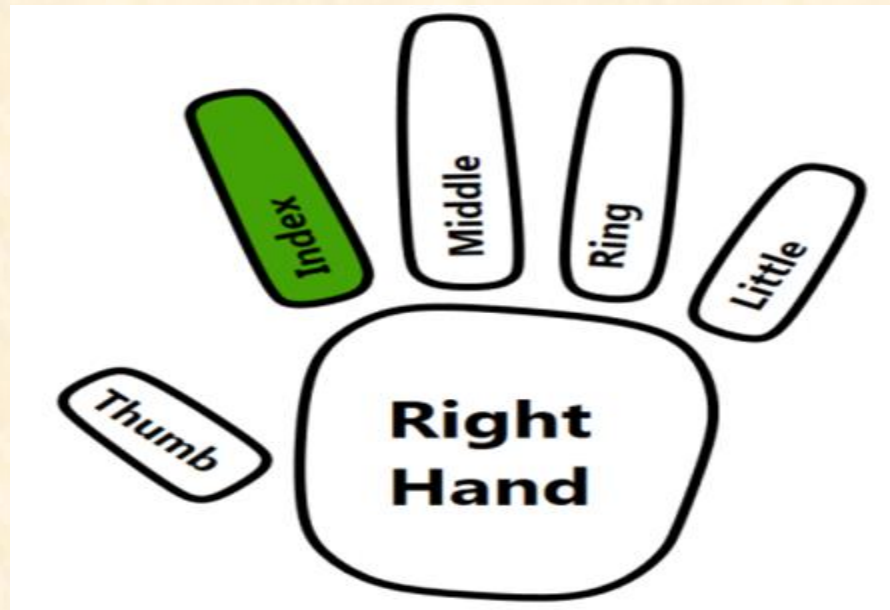
The User ID will be sent to your Access Control Panel, associated with your Card number for example.
(if using ACP)

Click Finish

User Management

*if User record stored on Device

- Capture your fingerprints (two fingers mandatory) Use a MSO 300, MSO1300, MSO VP or a Sigma Reader (Once fingerprint data captured click Finish)



Click Finish

Alternative method

(Alternative method) Configuration Using Morpho Tool Box

The screenshot shows the configuration window for the Morpho Tool Box. At the top, the 'Terminal Type' is set to 'MA Sigma Family'. Below this, the 'Connection information' section is highlighted with a white border. It contains the following fields and options:

- Terminal Type:** MA Sigma Family (dropdown menu)
- Connection information:**
 - Protocol:** TCP / IP, Serial
 - Address type:** IP4, IP6, Host Name
 - Address:** [Empty text field]
 - Port:** 11010
 - Timeout:** 30 Seconds [5-30]
 - Use SSL / TLS:**
 - Terminal CA certificate path:** [Empty text field]
 - Client certificate path:** [Empty text field]
 - Client certificate password:** [Empty text field]
- Connection:**

If you don't have the Morpho Tool box get it here <http://service.morphotrak.com/software-links.html>

Morpho Tool Box 3.4.5
use with Sigma and Morpho Products
Morpho Tool box 3.4.5 (new)

Follow the numbers to activate the external reader with Morpho Tool box

- (1) Quick configuration
- (2) Controller Quick Configuration
- (3) User Control Configuration
- (4) Check External Port Trigger
- (5) Write

The screenshot shows the Morpho Tool box software interface. The top navigation bar includes tabs for 'Authorized IP Address', 'Communication Configuration', 'Contactless Card Configuration', and 'Controller Quick Configuration'. The 'Controller Quick Configuration' tab is selected. Below it, there are sub-tabs for 'Wiegand', 'User Control Configuration', and 'Controller Feedback'. The 'User Control Configuration' sub-tab is active. On the left side, there is a vertical toolbar with icons for various functions. The main area is titled 'UCC Settings' and contains 'Read' and 'Write' buttons. Below these buttons is a table with columns for trigger types and 'Threat Level 1'. The 'External port trigger' row is highlighted with a yellow arrow pointing to its checkbox, which is checked. A yellow arrow labeled '1' points to the 'User Control Configuration' sub-tab. A yellow arrow labeled '2' points to the 'Controller Quick Configuration' tab. A yellow arrow labeled '3' points to the 'User Control Configuration' sub-tab. A yellow arrow labeled '4' points to the 'External port trigger' checkbox. A yellow arrow labeled '5' points to the 'Write' button.

		Threat Level 1
Finger biometric trigger	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Contactless card trigger	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Keyboard trigger	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
External port trigger	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Website

- Please visit our website, Service.morphotrak.com for software, firmware, videos and PDF's.