



ID SERVICE

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INTRODUCTION

This documentation details the specific set of commands for electronid ID devices. These, along with *common commands* conform the complete set of commands available for ID devices. Sometimes, certain *common commands* can be overwritten within a specific service, because they change their behavior. In the case of **Id Service**, following commands are overwritten:

- [XPEAK_COMMAND_GET_CAPABILITIES](#)

All commands described here meet the *xpeak* specification [General Message Format](#)

COMMANDS

 **XPEAK_COMMAND_CHANGE_PIN** (0x1207001D)

Version: 1207

Description:

Changes the card PIN for a new one.

 **Parameters:**

- **int PinID**
PIN identification number. This field can be obtained through [XPEAK_COMMAND_GET_PINS](#) command.
- **String OldPin**
String with the old PIN code. If null, PIN code will be requested through the device keyboard.
- **String NewPin**
String with the new PIN code. If null, PIN code will be requested through the device keyboard.

 **Result:**

- **int TriesLeft**
Tries Left. Whenever a wrong old PIN is inserted this counter decreases. If a correct old PIN is inserted the counter resets to it's initial value. If the counter reaches zero, card blocks.

XPEAK_COMMAND_END_SESSION (0x12070031)

Version: 1207

Description:

Ends the current session. Must be executed when a session is started through the command [XPEAK_COMMAND_START_SESSION](#). Once the session is closed, no operations can be done with the ID until a new [XPEAK_COMMAND_START_SESSION](#) command is executed.

Parameters:

- **int Timeout**
During this time (in milliseconds) the device will be waiting for the card to be taken. If this value is less than zero, the device will be waiting until a new `startSession` is executed or until the card is taken. If there is any error, it will be notified by an event.

Result:

See Common Results

Events:

XPEAK_RESULT_MEDIA_TAKEN (0x7060062) Since 1207

This event is thrown in the moment that a card is detected in the reader device. The shutter, if any, will be automatically closed.

 **XPEAK_COMMAND_GET_ADDRESS** (0x12070022)

Version: 1207

Description:

Returns the address information of the ID. Each field is identified by a specific name. Depending on the ID type, fields names could be different.

 **Result:**

- **Struct[] Address**

A list of address data fields returned by the ID device. The fields of this structure are:

- **String Name**

Logical identifier of the field.

- **String Value**

String value of the address field.

 **XPEAK_COMMAND_GET_CAPABILITIES** (0x7060017)

Version: 0706

Description:

Returns the device capabilities. Depending on them, the application behavior should be different and should be adapted to the peripheral characteristics.

 **Result:**

- **Struct[] SigningMechanisms**
Array of digital signature supported mechanisms.
- **String HashAlgorithm**
The hashing algorithm.
- **String EncryptionAlgorithm**
The encryption algorithm.

 **XPEAK_COMMAND_GET_CERTIFICATES** (0x12070020)

Version: 1207

Description:

This command obtains the public certificates of the card.

 **Result:**

- **Struct[] Certificates**
Array of public Certificates available on the card.
- **Base64 Certificate**
Byte array with the certificate.
- **String CertificateId**
Id to identify the certificate.

 **XPEAK_COMMAND_GET_IDENTIFICATION** (0x1207001B)

Version: 1207

Description:

Returns the identification data of the ID. Each field is identified by a specific name. Depending on the ID type, fields names could be different.

 **Result:**

- **Struct[] Identification**
A list of identification fields returned by the ID device. The fields of this structure are:
 - **String Name**
Logical identifier of the field.
 - **String Value**
String value of the identification field.

 **XPEAK_COMMAND_GET_PICTURES** (0x12070023)

Version: 1207

Description:

Returns the pictures of the ID. Each picture is identified by its name. Depending on the ID type, picture names could be different.

 **Result:**

- **Struct[] Pictures**

A list of pictures identified by their name, returned by the ID device. The fields of this structure are:

- **String Name**

Logical identifier of the picture.

- **Base64 Value**

Content of the picture.

XPEAK_COMMAND_GET_PINS (0x1207001F)

Version: 1207

Description:

Obtains a list of card's available PINs.

Result:

- **Struct[] Pins**
Array of PINs available in the card.
- **int PinId**
PIN identification number. This field is used to select the PIN in the [XPEAK_COMMAND_VERIFY_PIN](#)
- **int TriesLeft**
Tries Left. Whenever a [XPEAK_COMMAND_VERIFY_PIN](#) is executed with a wrong PIN this counter decreases. If the command is executed with a correct PIN the counter resets. If the counter reaches zero, card blocks.

 **XPEAK_COMMAND_SIGN** (0x12070021)

Version: 1207

Description:

Signs a Hash received as parameter with the private key of the card. This command must be executed after the [XPEAK_COMMAND_VERIFY_PIN](#) command.

 **Parameters:**

- **Base64 Hash**
The Hash to be signed.
- **String HashAlgorithm**
The hashing algorithm.
- **String EncryptionAlgorithm**
The encryption algorithm.

 **Result:**

- **Base64 SignedHash**
The Signed Hash.

XPEAK_COMMAND_START_SESSION (0x12070030)

Version: 1207

Description:

Starts a new session and enables the insertion of the ID card. If the device has an input shutter, this will be automatically open on the execution of this command. The session ends when a [XPEAK_COMMAND_END_SESSION](#) command is received or when the timeout expires before a card is inserted in the reader. Depending on the ID, and for security reasons, the session can also be ended if the card is removed from the reader during the session. All operations with the ID must be done into a started session.

Parameters:

- **int Timeout**

The insertion of the ID card will be enabled during this time (in milliseconds) or until the card is inserted. If this value is less than zero, the device will be enabled until the command [XPEAK_COMMAND_END_SESSION](#) is executed or until the card is inserted. If there is any error, it will be notified by an event.

Result:

- **int Result**

Apart from the common values, this command could return as result:

Result	Description
XPEAK_RESULT_MEDIA_INSERTED (0x7060060)	There was a card already inside the reader. No events will be sent.
XPEAK_RESULT_SHUTTER_ERROR (0x7060061)	There is an error in the shutter and the insertion of the card can not be enabled. No events will be sent.

Events:

XPEAK_RESULT_SESSION_ENDED (0x1207000E) Since 1207

This event is thrown in the command [XPEAK_COMMAND_END_SESSION](#) is executed before the card is inserted.

XPEAK_RESULT_MEDIA_INSERTED (0x7060060) Since 1207

This event is thrown in the moment that a card is detected in the reader device. The shutter, if any, will be automatically closed.

XPEAK_RESULT_MEDIA_JAMMED (0x706005D) Since 1207

This event indicates that the card was jammed inside the reader. The shutter, if any and possible, will be automatically closed.

XPEAK_COMMAND_VERIFY_PIN (0x1207001E)

Version: 1207

Description:

Verifies the PIN. This command should be executed before accessing any private information in the card. Depending on the ID this command may not be necessary because sometimes the PIN is requested at the time of accessing private information.

Parameters:

- **int PinID**
PIN identification number. This field can be obtained through [XPEAK_COMMAND_GET_PINS](#) command.
- **String Pin**
String with the PIN code. If null, PIN code will be requested through the device keyboard.

Result:

- **int TriesLeft**
Tries Left. Whenever a wrong PIN is inserted this counter decreases. If a correct PIN is inserted the counter resets to its initial value. If the counter reaches zero, card blocks.