



FINGERPRINT SERVICE

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INTRODUCTION

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

- [XPEAK_COMMAND_GET_CAPABILITIES](#)
- [XPEAK_COMMAND_GET_STATUS](#)

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

COMMANDS

 **XPEAK_COMMAND_DISABLE_INSERT** (0x7060019)

Version: 1202

Description:

Disables the insertion of the finger in the reader.

 **Result:**

- **int Result**

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

Result	Description
XPEAK_RESULT_MEDIA_INSERTED (0x7060060)	A finger was already inserted

XPEAK_COMMAND_ENABLE_INSERT (0x7060018)

Version: 1202

Description:

Enables the insertion of the finger. This command will also read the fingerprint when the finger is detected, although the read data will not be returned until the command [XPEAK_COMMAND_READ](#) is received.

Parameters:

- **int Timeout**
The insertion of the finger will be enabled during this time (in milliseconds) or until the finger is inserted. If this value is less than zero, the device will be enabled until the command [XPEAK_COMMAND_DISABLE_INSERT](#) is executed or until the finger is inserted.

If there is any error, it will be notified by an event.

Result:

- **int Result**
This command will return one of the common values.

Events:

[XPEAK_RESULT_MEDIA_INSERTED](#) (0x7060060) Since 1202

This event is thrown in the moment that a finger is detected in the reader device.

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:

- `int[] ImageFormat`

Image formats supported by the fingerprint reader. Possible values are:

- XPEAK_GRAPHIC_FORMAT_NONE (0x706017B)
- XPEAK_GRAPHIC_FORMAT_GIF (0x706008C)
- XPEAK_GRAPHIC_FORMAT_BMP (0x706008D)
- XPEAK_GRAPHIC_FORMAT_JPG (0x706008E)
- XPEAK_GRAPHIC_FORMAT_TIF (0x706008F)
- XPEAK_GRAPHIC_FORMAT_PCX (0x7060090)
- XPEAK_GRAPHIC_FORMAT_PNG (0x7060091)
- XPEAK_GRAPHIC_FORMAT_RAW (0x7060176)
- XPEAK_GRAPHIC_FORMAT_WSQ (0x12020002)

XPEAK_COMMAND_GET_CAPABILITIES (0x7060017)

Version: 1202

Description:

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

Result:

- `int[] ImageFormat`

Image formats supported by the fingerprint reader. Possible values are:

- XPEAK_GRAPHIC_FORMAT_NONE (0x706017B)
- XPEAK_GRAPHIC_FORMAT_GIF (0x706008C)
- XPEAK_GRAPHIC_FORMAT_BMP (0x706008D)
- XPEAK_GRAPHIC_FORMAT_JPG (0x706008E)
- XPEAK_GRAPHIC_FORMAT_TIF (0x706008F)
- XPEAK_GRAPHIC_FORMAT_PCX (0x7060090)
- XPEAK_GRAPHIC_FORMAT_PNG (0x7060091)
- XPEAK_GRAPHIC_FORMAT_RAW (0x7060176)
- XPEAK_GRAPHIC_FORMAT_WSQ (0x12020002)

 **XPEAK_COMMAND_GET_STATUS** (0x7060051)

Version: 1202

Description:

This command allows to get different status of the device.

 **Result:**

- **int[] Statuses**

Apart from the general statuses, possible values are:

Status	Description
XPEAK_STATUS_MEDIA_PRESENT (0x706005E)	There is a media present in the device.
XPEAK_STATUS_MEDIA_NOT_PRESENT (0x706005F)	There is not a media present in the device. an error in any of them.

Besides this statuses, the command can return any of the ones specified in the generic command [XPEAK_COMMAND_GET_STATUS](#)

 **XPEAK_COMMAND_READ** (0x7060106)**Version:** 1202**Description:**

This command reads the fingerprint.

 **Parameters:**

- **int ImageFormat**

This parameter defines the format of the scanned fingerprint image data. This format should be one of the list indicated in the *ImageFormats* capability, see command [XPEAK_COMMAND_GET_CAPABILITIES](#). The possible values are:

- XPEAK_GRAPHIC_FORMAT_NONE (0x706017B)
- XPEAK_GRAPHIC_FORMAT_GIF (0x706008C)
- XPEAK_GRAPHIC_FORMAT_BMP (0x706008D)
- XPEAK_GRAPHIC_FORMAT_JPG (0x706008E)
- XPEAK_GRAPHIC_FORMAT_TIF (0x706008F)
- XPEAK_GRAPHIC_FORMAT_PCX (0x7060090)
- XPEAK_GRAPHIC_FORMAT_PNG (0x7060091)
- XPEAK_GRAPHIC_FORMAT_RAW (0x7060176)
- XPEAK_GRAPHIC_FORMAT_WSQ (0x12020002)

Please note that if the value of this parameter is XPEAK_GRAPHIC_FORMAT_NONE, no image data will be returned by this command.

 **Result:**

- **int Result**

Apart from the common values, this command can return the following results:

Result	Description
XPEAK_RESULT_MEDIA_NOT_PRESENT (0x706005C)	There is no finger present in the reader.

- **Unicode NFIQ**

Nist Fingerprint Image Quality of the scanned image.

- **Base64 Fingerprint**

This field contains the image data of the fingerprint.