



**CASH SERVICE**

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## INTRODUCTION

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

- [XPEAK\\_COMMAND\\_GET\\_CAPABILITIES](#)
- [XPEAK\\_COMMAND\\_GET\\_STATUS](#)
- [XPEAK\\_COMMAND\\_INITIALIZE](#)
- [XPEAK\\_COMMAND\\_RESET](#)

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

## COMMANDS

## XPEAK\_COMMAND\_ACCEPT\_DEPOSIT (0x70600A2)

**Version:** 0706

### Description:

This operation finishes the deposit process and accepts all the items inserted since the first [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) command and during every [XPEAK\\_COMMAND\\_DEPOSIT](#) commands.

If the device has an Escrow cassette, this command will make the items that remained on the Escrow to be accepted to the corresponding cash units.

A complete Deposit transaction would be:

- [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) (with parameter Operation = [XPEAK\\_COMMAND\\_DEPOSIT](#))
- [XPEAK\\_COMMAND\\_DEPOSIT](#)
- [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) (with parameter Operation = [XPEAK\\_COMMAND\\_DEPOSIT](#))
- [XPEAK\\_COMMAND\\_DEPOSIT](#)
- ... (as many [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) and [XPEAK\\_COMMAND\\_DEPOSIT](#) as required)
- [XPEAK\\_COMMAND\\_ACCEPT\\_DEPOSIT](#) or [XPEAK\\_COMMAND\\_CANCEL\\_DEPOSIT](#)

### Result:

- **int Result**

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

Result	Description
XPEAK_RESULT_ITEMS_JAMMED (0x706009B)	Error due to a jam of one of the items.
XPEAK_RESULT_CASH_UNIT_FULL (0x70600C9)	Not all the items can be deposited because one of the cash units is full. The user will be able to know the cassette that is full by executing the command <a href="#">XPEAK_COMMAND_GET_CASH_UNITS</a>

- **Struct[] Denominations**

Gives information about all the items deposited (number of items per each denomination)

- **String CashUnitId**

Identification name of the cash unit where the notes has been deposited. If the cash unit can not be known, the empty String ("") should be returned.

- **String Currency**

ISO representation of the currency (EUR, USD, etc)

- **double Value**

Value of the denomination as a double

- **int Variant**  
Integer representation of the denomination variant
- **String Category**  
Name of the item category if available, the empty String ("") if not available
- **int Count**  
Number of items of this denomination that have been accepted

## XPEAK\_COMMAND\_CANCEL\_DEPOSIT (0x70600A3)

**Version:** 0706

### Description:

This operation finishes the deposit process returning to the user all the items inserted since the first [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) command and during every [XPEAK\\_COMMAND\\_DEPOSIT](#) commands.

If the device has an Escrow cassette, this command will make the items that remained on the Escrow to be returned to the corresponding cash units.

A complete Deposit transaction would be:

- [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) (with parameter Operation = [XPEAK\\_COMMAND\\_DEPOSIT](#))
- [XPEAK\\_COMMAND\\_DEPOSIT](#)
- [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) (with parameter Operation = [XPEAK\\_COMMAND\\_DEPOSIT](#))
- [XPEAK\\_COMMAND\\_DEPOSIT](#)
- ... (as many [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) and [XPEAK\\_COMMAND\\_DEPOSIT](#) as required)
- [XPEAK\\_COMMAND\\_ACCEPT\\_DEPOSIT](#) or [XPEAK\\_COMMAND\\_CANCEL\\_DEPOSIT](#)

### Parameters:

- **int Timeout**

Time, in milliseconds, during which the device will wait for the user to take the items ejected on the deposit cancellation. If this value is less than zero, the device will wait until it receive the command [XPEAK\\_COMMAND\\_RETRACT](#). If an error is detected, it will be notified with an event and the device will not wait for this timeout

### Result:

- **int Result**

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

Result	Description
XPEAK_RESULT_ITEMS_JAMMED (0x706009B)	Error due to a jam of one of the items.
XPEAK_RESULT_ITEMS_NOT_PRESENT (0x70600C6)	No items previously deposited to be canceled.

### Events:

XPEAK\_RESULT\_ITEMS\_TAKEN (0x70600BC) Since 0706

This event is thrown if and only if the *CancelledItemsTakenSensor* capability of the device is true, when the items that were canceled and ejected to the output bin are taken by the user.

## XPEAK\_COMMAND\_COUNT (0x706009F)

**Version:** 0706

### Description:

Counts the items inserted and returns them back. Gives information of the items counted by the device only on the current count operation. This command can be executed as many times as needed, always after an [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) with the parameter Operation equals XPEAK\_COMMAND\_COUNT (0x706009F).

If a previous [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) with parameter Operation = XPEAK\_COMMAND\_COUNT (0x706009F) has not been executed, this command will return a Result XPEAK\_RESULT\_SEQUENCE\_ERROR (0x706009A)

### Parameters:

- **int Timeout**  
Time, in milliseconds, during which the device will wait for the user to take the items returned during the counting process (the counted notes as well as the rejected notes). This time starts counting when the count command finishes.
- **boolean SeparateUnfit**  
Indicates if unfit notes should be separated in a different compartment. Check the field 'CanSeparateUnfit' in the [XPEAK\\_COMMAND\\_GET\\_CAPABILITIES](#) command's answer to see if the device is able to separate unfit notes.

### Result:

- **int Result**  
In addition to the common values, this command could return as result:

Result	Description
XPEAK_RESULT_ITEMS_NOT_PRESENT (0x70600C6)	Items not present, so they can not be counted.
XPEAK_RESULT_ITEMS_JAMMED (0x706009B)	Error due to a jam of one of the items.
XPEAK_RESULT_OPERATION_STOPPED (0x70601CC)	Count operation has been stopped by the device. Usually occurs when it has detected a suspicious note, and the device supports stop while counting.

- **Struct[] Denominations**  
Gives information about the counted items (number of items per each denomination)
- **String Currency**  
ISO representation of the currency (EUR, USD, etc)



- **double Value**  
Value of the denomination as a double
- **int Variant**  
Integer representation of the denomination variant
- **String Category**  
Name of the Category (the empty String ("") indicates the category is unknown)
- **int Count**  
Number of items of this denomination that the device counted.
- **boolean ItemsRejected**  
This result indicates if during the count operation, any of the items has been rejected and not counted.

### Events:

XPEAK\_RESULT\_ITEMS\_TAKEN (0x70600BC) Since 0706

This event is thrown if and only if the *ItemsTakenSensor* or *RejectedItemsTakenSensor* capability of the device is true. This event is sent when both notes (counted and rejected) are taken. If *RejectedItemsTakenSensor* capability is false or the result *ItemsRejected* is false, the Service will only wait for the counted notes to be taken.

## XPEAK\_COMMAND\_DEPOSIT (0x70600A1)

**Version:** 0706

### Description:

Accepts the items from the input slot. If the device has more than one input slot, the one specified in the previous [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) as *Position* parameter will be considered.

If the device has a Escrow cassette, the items deposited from the first [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) and until the [XPEAK\\_COMMAND\\_ACCEPT\\_DEPOSIT](#) or [XPEAK\\_COMMAND\\_CANCEL\\_DEPOSIT](#) command, will remain in the Escrow.

If a previous [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) with parameter Operation = XPEAK\_COMMAND\_DEPOSIT has not been executed, this command will return a Result XPEAK\_RESULT\_SEQUENCE\_ERROR (0x706009A)

### Parameters:

- **int Timeout**  
Time, in milliseconds, during which the device will wait for the user to take the rejected notes returned during the deposit process This time starts counting when the deposit command finishes.

### Result:

- **int Result**  
Apart from the common values, this command could return as result:

Result	Description
XPEAK_RESULT_ITEMS_NOT_PRESENT (0x70600C6)	Items not present. No items to deposit.
XPEAK_RESULT_ITEMS_JAMMED (0x706009B)	Error due to a jam of one of the items.
XPEAK_RESULT_CASH_UNIT_FULL (0x70600C9)	Not all the items can be deposited because one of the cash units is full. If the device has an Escrow cassette, this error can be returned when the Escrow is full. Otherwise, the user will be able to know the cassette that is full by executing the command <a href="#">XPEAK_COMMAND_GET_CASH_UNITS</a>

- **Struct[] Denominations**  
Gives information of the items accepted by the device only on the current deposit operation (from the last [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#))
- **String Currency**  
ISO representation of the currency (EUR, USD, etc)
- **double Value**

Value of the denomination as a double

- **int Variant**  
Integer representation of the denomination variant
- **String Category**  
Name of the Category (the empty String ("") indicates the category is unknown)
- **int Count**  
Number of items of this denomination that the device accepted.
- **boolean ItemsRejected**  
This result indicates if during the deposit operation, any of the items has been rejected.

### Events:

XPEAK\_RESULT\_ITEMS\_TAKEN (0x70600BC) Since 0706

This event is thrown, only if the *ItemsRejected* result is true (i.e. if any item has been rejected during the deposit operation) and only if the *RejectedItemsTakenSensor* capability of the device is true, when the rejected items are taken by the user.

 **XPEAK\_COMMAND\_DISABLE\_INSERT** (0x7060019)

**Version:** 0706

**Description:**

Disables the insertion of the items and cancel the current [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) operation

 **Result:**

- `int Result`

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

Result	Description
XPEAK_RESULT_ITEMS_JAMMED (0x706009B)	Error due to a jam of one of the items.
XPEAK_RESULT_ITEMS_INSERTED (0x70600BE)	Items already inserted

 **XPEAK\_COMMAND\_DISPENSE** (0x70600A4)

**Version:** 0706

**Description:**

This command dispenses the required items. If the device has an intermediate stacker and *Present* parameter is *false*, this command takes the items to this stacker waiting for the [XPEAK\\_COMMAND\\_PRESENT](#) command to be executed. Otherwise, the command will take the dispensed items to the output position (if more than one output position it will be determined by the *Position* parameter).

 **Parameters:**

- **boolean Present**  
This parameter is optional and the default value is *true*. If the capability *HasIntermediateStacker* is *false*, and this parameter is *false*, the return code will be XPEAK\_RESULT\_INVALID\_PARAMETER (0x706003A)
- **int Position**  
Indicates the position of the items to go out, based on the teller position who executes the dispense command. Can be one of the following values:
  - XPEAK\_POSITION\_RIGHT (0x70600C7)
  - XPEAK\_POSITION\_LEFT (0x70600C8)
- **int Timeout**  
Time, in milliseconds, during which the device will wait for the user to take the dispensed items. If this value is less than zero, the device will wait until it receive the command [XPEAK\\_COMMAND\\_RETRACT](#). If an error is detected, it will be notified with an event and the device will not wait for this timeout.
- **Struct[] Denominations**  
Mandatory parameter to indicate the number of items to dispense of each denomination.
- **String Currency**  
ISO representation of the currency (EUR, USD, etc)
- **double Value**  
Value of the denomination as a double
- **int Count**  
Number of items of this denomination to dispense

 **Result:**

- **Struct[] Denominations**  
Details of the items dispensed (number or items per each denomination) and the items rejected during the dispense operation.
- **String CashUnitId**  
Identification name of the cash unit where the notes has been dispensed from. If the cash unit can not be known, the empty String ("") should be returned.
- **String Currency**  
ISO representation of the currency (EUR, USD, etc)
- **double Value**  
Value of the denomination as a double
- **int Variant**  
Integer representation of the denomination variant
- **int Count**  
Number of items dispensed of this denomination.
- **int Unfit**  
Number of items rejected during the dispense operation and sent to a XPEAK\_CASH\_TYPE\_UNFIT (0x706013A) cassette or a XPEAK\_CASH\_TYPE\_REJECT (0x70600AA) cassette. See the definitions of the cassettes types in the command [XPEAK\\_COMMAND\\_GET\\_CASH\\_UNITS](#).
- **int Result**  
Apart from the common values, this command could return as result:

Result	Description
XPEAK_RESULT_ITEMS_JAMMED (0x706009B)	Error due to a jam of one of the items.
XPEAK_RESULT_CASH_UNIT_EMPTY (0x70600CA)	Not all the items could be dispensed because one of the cash units is unexpectedly empty
XPEAK_RESULT_CASH_NOT_DISPENSABLE (0x70600CB)	One or more required items are not possible to dispense
XPEAK_RESULT_ITEMS_IN_OUTPUT (0x706013C)	It was not possible to dispense because there were items in the output bin.

## Events:

### XPEAK\_RESULT\_ITEMS\_TAKEN (0x70600BC) Since 0706

This event is thrown when the delivered items are taken by the user from the output tray.

This event will only be thrown if the parameter *Present* is *true* and the *ItemsTakenSensor* capability of the device is true.

 **XPEAK\_COMMAND\_DISPENSE** (0x70600A4)

**Version:** 1501

**Description:**

This command dispenses the required items. If the device has an intermediate stacker and *Present* parameter is *false*, this command takes the items to this stacker waiting for the [XPEAK\\_COMMAND\\_PRESENT](#) command to be executed. Otherwise, the command will take the dispensed items to the output position (if more than one output position it will be determined by the *Position* parameter).

 **Parameters:**

- **boolean Present**  
This parameter is optional and the default value is *true*. If the capability *HasIntermediateStacker* is *false*, and this parameter is *false*, the return code will be XPEAK\_RESULT\_INVALID\_PARAMETER (0x706003A)
- **int Position**  
Indicates the position of the items to go out, based on the teller position who executes the dispense command. Can be one of the following values:
  - XPEAK\_POSITION\_RIGHT (0x70600C7)
  - XPEAK\_POSITION\_LEFT (0x70600C8)
- **int Timeout**  
Time, in milliseconds, during which the device will wait for the user to take the dispensed items. If this value is less than zero, the device will wait until it receive the command [XPEAK\\_COMMAND\\_RETRACT](#). If an error is detected, it will be notified with an event and the device will not wait for this timeout.
- **Struct[] Denominations**  
Mandatory parameter to indicate the number of items to dispense of each denomination.
- **String Currency**  
ISO representation of the currency (EUR, USD, etc)
- **double Value**  
Value of the denomination as a double
- **int Count**  
Number of items of this denomination to dispense

 **Result:**

- **Struct[] Denominations**  
Details of the items dispensed (number or items per each denomination) and the items rejected during the dispense operation.
- **String CashUnitId**  
Identification name of the cash unit where the notes has been dispensed from. If the cash unit can not be known, the empty String ("") should be returned.
- **String Currency**  
ISO representation of the currency (EUR, USD, etc)
- **double Value**  
Value of the denomination as a double
- **int Variant**  
Integer representation of the denomination variant
- **int Count**  
Number of items dispensed of this denomination.
- **int Unfit**  
Number of items rejected during the dispense operation and sent to a XPEAK\_CASH\_TYPE\_UNFIT (0x706013A) cassette or a XPEAK\_CASH\_TYPE\_REJECT (0x70600AA) cassette. See the definitions of the cassettes types in the command [XPEAK\\_COMMAND\\_GET\\_CASH\\_UNITS](#).
- **int Result**  
Apart from the common values, this command could return as result:

Result	Description
XPEAK_RESULT_ITEMS_JAMMED (0x706009B)	Error due to a jam of one of the items.
XPEAK_RESULT_CASH_UNIT_EMPTY (0x70600CA)	Not all the items could be dispensed because one of the cash units is unexpectedly empty
XPEAK_RESULT_CASH_NOT_DISPENSABLE (0x70600CB)	One or more required items are not possible to dispense
XPEAK_RESULT_ITEMS_IN_OUTPUT (0x706013C)	It was not possible to dispense because there were items in the output bin.
XPEAK_RESULT_TOO_MANY_NOTES (0x15010000)	The total number of notes requested is greater than the maximum number of notes that can be dispensed at once. Check MaxOutBills in <a href="#">XPEAK_COMMAND_GET_CAPABILITIES</a>

 **Events:**

**XPEAK\_RESULT\_ITEMS\_TAKEN** (0x70600BC) Since 0706

This event is thrown when the delivered items are taken by the user from the output tray.

This event will only be thrown if the parameter *Present* is *true* and the *ItemsTakenSensor*



capability of the device is true.

 **XPEAK\_COMMAND\_EMPTY** (0x70600D7)

**Version:** 0706

**Description:**

This command empties the cash units indicated in the command [XPEAK\\_COMMAND\\_START\\_EMPTY](#).

If the Service needs the user takes the ejected notes to continue emptying, the command will finish and the value of the field *IsEmptyFinished* will be *false*. Once the ejected items have been taken, another execution of this command will continue the Empty process. If all the items have been emptied, the command will finish with the *IsEmptyFinished* field with the value *true*.

 **Parameters:**

- **int Timeout**  
Time, in milliseconds, during which the device will wait for the user to take the delivered items. If this value is less than zero, the device will wait until it receive the command [XPEAK\\_COMMAND\\_RETRACT](#). If an error is detected, it will be notified with an event and the device will not wait for this timeout.

 **Result:**

- **boolean IsEmptyFinished**  
Indicates if it is necessary the execution of this command again to continue ejecting notes or not. If the value of this field is *false*, more executions of this command are needed to continue emptying the requested cash units.
- **Struct[] Denominations**  
Details of the delivered items during the execution of this command (number of items per each denomination)
- **String CashUnitId**  
Identification name of the cash unit where the notes has been taken from. If the cash unit can not be known, the empty String ("") should be returned.
- **String Currency**  
ISO representation of the currency (EUR, USD, etc)
- **double Value**  
Value of the denomination as a double
- **int Variant**  
Integer representation of the denomination variant

- **String Category**

Category of the delivered denomination ("3", "4a", "4b", etc). The empty String ("") indicates that the category is unknown.

- **int Items**

Number of items delivered of this denomination.

- **int Result**

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

Result	Description
XPEAK_RESULT_ITEMS_JAMMED (0x706009B)	Error due to a jam of one of the items.
XPEAK_RESULT_ITEMS_IN_OUTPUT (0x706013C)	It was not possible to dispense because there were items in the output bin.

### Events:

#### XPEAK\_RESULT\_ITEMS\_TAKEN (0x70600BC) Since 0706

This event is thrown if and only if the *ItemsTakenSensor* capability of the device is true, when the delivered items are taken by the user from the output tray.

## XPEAK\_COMMAND\_ENABLE\_INSERT (0x7060018)

**Version:** 0706

### Description:

Enables the insertion of the items. This command should be always executed before a [XPEAK\\_COMMAND\\_DEPOSIT](#), [XPEAK\\_COMMAND\\_COUNT](#), [XPEAK\\_COMMAND\\_FACE](#) or [XPEAK\\_COMMAND\\_SEPARATE\\_DENOMINATIONS](#).

A complete Deposit transaction would be:

- [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) (with parameter Operation = [XPEAK\\_COMMAND\\_DEPOSIT](#) (0x70600A1))
- [XPEAK\\_COMMAND\\_DEPOSIT](#)
- [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) (with parameter Operation = [XPEAK\\_COMMAND\\_DEPOSIT](#) (0x70600A1))
- [XPEAK\\_COMMAND\\_DEPOSIT](#)
- ...
- [XPEAK\\_COMMAND\\_ACCEPT\\_DEPOSIT](#) or [XPEAK\\_COMMAND\\_CANCEL\\_DEPOSIT](#)

The same way, a complete Count transaction would be:

- [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) (with parameter Operation = [XPEAK\\_COMMAND\\_COUNT](#) (0x706009F))
- [XPEAK\\_COMMAND\\_COUNT](#)
- [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) (with parameter Operation = [XPEAK\\_COMMAND\\_COUNT](#) (0x706009F))
- [XPEAK\\_COMMAND\\_COUNT](#)
- ...
- [XPEAK\\_COMMAND\\_END\\_COUNT](#)

### Parameters:

- **int Timeout**  
The insertion of items will be enabled during this time (in milliseconds) or until the items are 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 items are inserted.
- **int Position**  
Indicates the position of the teller that is executing the count or deposit operation in order to enable the suitable shutter or switch on the proper indicator if existing. Can be one of the following values:
  - [XPEAK\\_POSITION\\_RIGHT](#) (0x70600C7)
  - [XPEAK\\_POSITION\\_LEFT](#) (0x70600C8)
- **int Operation**  
Indicates the operation that is going to be executed. Can be one of the following values:

Operation	Description
XPEAK_COMMAND_DEPOSIT (0x70600A1)	A deposit operation ( <a href="#">XPEAK_COMMAND_DEPOSIT</a> ) will be performed
XPEAK_COMMAND_COUNT (0x706009F)	A count operation ( <a href="#">XPEAK_COMMAND_COUNT</a> ) will be performed
XPEAK_COMMAND_FACE (0x706016F)	A count operation ( <a href="#">XPEAK_COMMAND_FACE</a> ) will be performed
XPEAK_COMMAND_SEPARATE_DENOMINATION S (0x7060170)	A count operation ( <a href="#">XPEAK_COMMAND_SEPARATE_DENOMINATION S</a> ) will be performed

- **String Currency**

Optional parameter that indicates the currency of the items to be accepted (in case the device support this discernment)

 **Result:**

- **int Result**

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

Result	Description
XPEAK_RESULT_ITEMS_JAMMED (0x706009B)	Error due to a jam of one of the items.

 **Events:**

**XPEAK\_RESULT\_ITEMS\_INSERTED** (0x70600BE) Since 0706

This event is thrown when the items to be deposited or counted are detected in the input tray of the device. If the device has a shutter, it will be automatically closed.

 **XPEAK\_COMMAND\_END\_COUNT** (0x70600A0)

**Version:** 0706

**Description:**

This operation finishes the count process and gives information of all the items counted since the last [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) command. If a previous [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) with parameter Operation = XPEAK\_COMMAND\_COUNT (0x706009F) has not been executed, this command will return a Result XPEAK\_RESULT\_SEQUENCE\_ERROR (0x706009A)

A complete Count transaction would be:

- [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) (with parameter Operation = XPEAK\_COMMAND\_COUNT (0x706009F))
- [XPEAK\\_COMMAND\\_COUNT](#)
- [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) (with parameter Operation = XPEAK\_COMMAND\_COUNT (0x706009F))
- [XPEAK\\_COMMAND\\_COUNT](#)
- ...
- [XPEAK\\_COMMAND\\_END\\_COUNT](#)

 **Result:**

- **Struct[] Denominations**  
Gives information about all the counted items since the first [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) was executed.
- **String Currency**  
ISO representation of the currency (EUR, USD, etc)
- **double Value**  
Value of the denomination as a double
- **int Variant**  
Integer representation of the denomination variant
- **int Category**  
Number of the item category, if available (0 if not available)
- **int Count**  
Number of items of this denomination that the device counted.

 **XPEAK\_COMMAND\_END\_EMPTY** (0x7060145)

**Version:** 0706

**Description:**

This command ends the Empty transaction. This transaction has to be previously started through the command [XPEAK\\_COMMAND\\_START\\_EMPTY](#).

 **Result:**

- **Struct[] Denominations**

Details of the items emptied during the full Empty transaction.

This result will be the sum of all items emptied during the execution of the [XPEAK\\_COMMAND\\_EMPTY](#) commands, since the execution of the command [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#).

- **String CashUnitId**

Identification name of the cash unit where the notes has been taken from. If the cash unit can not be known, the empty String ("") should be returned.

- **String Currency**

ISO representation of the currency (EUR, USD, etc)

- **double Value**

Value of the denomination as a double

- **int Variant**

Integer representation of the denomination variant

- **String Category**

Category of the delivered denomination ("3", "4a", "4b", etc). The empty String ("") indicates that the category is unknown.

- **int Items**

Number of items delivered of this denomination.

 **XPEAK\_COMMAND\_END\_FACE** (0x7060171)

**Version:** 0706

**Description:**

This operation finishes the facing process. If a previous [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) with parameter Operation = XPEAK\_COMMAND\_FACE (0x706016F) has not been executed, this command will return a Result XPEAK\_RESULT\_SEQUENCE\_ERROR (0x706009A)

A complete Face transaction would be:

- [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) (with parameter Operation = XPEAK\_COMMAND\_FACE (0x706016F)  
)
- [XPEAK\\_COMMAND\\_FACE](#)
- [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) (with parameter Operation = XPEAK\_COMMAND\_FACE (0x706016F)  
)
- [XPEAK\\_COMMAND\\_FACE](#)
- ...
- [XPEAK\\_COMMAND\\_END\\_FACE](#)



 **XPEAK\_COMMAND\_END\_MANUAL\_MAINTENANCE** (0x70600D9)

**Version:** 0706

**Description:**

Finishes the manual maintenance that started with [XPEAK\\_COMMAND\\_START\\_MANUAL\\_MAINTENANCE](#) . After this command, the command [XPEAK\\_COMMAND\\_SET\\_CASH\\_UNITS](#) should be used to establish the new configuration or counters.

 **XPEAK\_COMMAND\_END\_SEPARATE\_DENOMINATIONS** (0x7060172)

**Version:** 0706

**Description:**

This operation finishes the separating process. If a previous [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) with parameter Operation = XPEAK\_COMMAND\_SEPARATE\_DENOMINATIONS (0x7060170) has not been executed, this command will return a Result XPEAK\_RESULT\_SEQUENCE\_ERROR (0x706009A)

A complete SeparateDenominations transaction would be:

- [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) (with parameter Operation = XPEAK\_COMMAND\_SEPARATE\_DENOMINATIONS (0x7060170))
- [XPEAK\\_COMMAND\\_SEPARATE\\_DENOMINATIONS](#)
- [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) (with parameter Operation = XPEAK\_COMMAND\_SEPARATE\_DENOMINATIONS (0x7060170))
- [XPEAK\\_COMMAND\\_SEPARATE\\_DENOMINATIONS](#)
- ...
- [XPEAK\\_COMMAND\\_END\\_SEPARATE\\_DENOMINATIONS](#)

 **Result:**

- **Struct[] Denominations**  
Gives information about all the counted items since the first [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) was executed.
- **String Currency**  
ISO representation of the currency (EUR, USD, etc)
- **double Value**  
Value of the denomination as a double
- **int Variant**  
Integer representation of the denomination variant
- **int Category**  
Number of the item category, if available (0 if not available)
- **int Count**  
Number of items of this denomination that the device counted.

## XPEAK\_COMMAND\_FACE (0x706016F)

**Version:** 0706

### Description:

Counts the items inserted and returns them back with the same facing as the first note inserted. Gives information of the items counted by the device up to the current face operation. This command can be executed as many times as needed, always after an [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) with the parameter Operation equals XPEAK\_COMMAND\_FACE (0x706016F). If a previous [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) with parameter Operation = XPEAK\_COMMAND\_FACE (0x706016F) has not been executed, this command will return the Result XPEAK\_RESULT\_SEQUENCE\_ERROR (0x706009A).

### Parameters:

- **int Timeout**  
Time, in milliseconds, during which the device will wait for the user to take the items returned during the counting process (the counted notes as well as the rejected notes). This time starts counting when the count command finishes.

### Result:

- **int Result**  
In addition to the common values, this command could return as result:

Result	Description
XPEAK_RESULT_ITEMS_NOT_PRESENT (0x70600C6)	Items not present, so they can not be counted.
XPEAK_RESULT_ITEMS_JAMMED (0x706009B)	Error due to a jam of one of the items.

- **Struct[] Denominations**  
Gives information about the counted items (number of items per each denomination)
- **String Currency**  
ISO representation of the currency (EUR, USD, etc)
- **double Value**  
Value of the denomination as a double
- **int Variant**  
Integer representation of the denomination variant
- **String Category**  
Name of the Category (the empty String ("") indicates the category is unknown)

- **int Count**

Number of items of this denomination that the device counted.

- **boolean ItemsRejected**

This result indicates if during the count operation, any of the items has been rejected and not counted.

## Events:

### XPEAK\_RESULT\_ITEMS\_TAKEN (0x70600BC) Since 0706

This event is thrown if and only if the *ItemsTakenSensor* or *RejectedItemsTakenSensor* capability of the device is true. This event is sent when both notes (counted and rejected) are taken. If *RejectedItemsTakenSensor* capability is false or the result *ItemsRejected* is false, the Service will only wait for the counted notes to be taken.

 **XPEAK\_COMMAND\_GET\_ALARM** (0x70600DA)

**Version:** 0706

**Description:**

Gets the alarm status. This command can only be executed if the device has the alarm capability (*HasAlarm* on [XPEAK\\_COMMAND\\_GET\\_CAPABILITIES](#))

 **Result:**

- **boolean Active**  
*true* if it is activated, *false* if it is not.

 **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[] ConfigurableCategoriesDestinations**  
Contains the categories which destination can be configured (if any), and the possible destinations that can be configured for each of them.
- **String Category**  
Name of the banknotes Category that can be configured by the application (usually "2", "3" or "4b" if any)
- **String[] Destinations**  
Destinations in which the previous Category can be configured for. Each destination will be represented by a String that will correspond with the *id* field of the corresponding cash unit. If one of the possible destinations is not any of the cash units that can be obtained with the command [XPEAK\\_COMMAND\\_GET\\_CASH\\_UNITS](#), but the output try, the String that will represent it is the empty String ("" )
- **boolean CanDeposit**  
Indicates if the Device has deposit module and if it supports the commands related with cash in operations
- **boolean CanDispense**  
Indicates if the Device has dispense module and if it supports the commands related with cash out operations
- **boolean CanCount**  
Indicates if the Device has count capability, i.e. if it supports the [XPEAK\\_COMMAND\\_COUNT](#) command
- **boolean CanRetract**  
Indicates if the Device has retract capability, i.e. if it supports the [XPEAK\\_COMMAND\\_RETRACT](#) command
- **boolean HasEscrow**  
Indicates if the device has an intermediate cassette between the feed unit and the cassettes where the items are going to be saved in the deposit operations. If so, after a command [XPEAK\\_COMMAND\\_DEPOSIT](#) the notes will be stored in the Escrow cassette. The command

[XPEAK\\_COMMAND\\_ACCEPT\\_DEPOSIT](#) will move the notes from the Escrow to the final cassettes and command [XPEAK\\_COMMAND\\_CANCEL\\_DEPOSIT](#) will eject the notes contained in the Escrow.

- **boolean HasIntermediateStacker**  
Indicates if the device has an intermediate stacker for the dispense commands. If so, after a command [XPEAK\\_COMMAND\\_DISPENSE](#) with the parameter *Present* equals *false*, the command [XPEAK\\_COMMAND\\_PRESENT](#) should be executed. If this capability has *false* value, the command [XPEAK\\_COMMAND\\_DISPENSE](#) can not be executed with parameter *Present* equals *false*
- **boolean HasAlarm**  
Indicates if the device has silent alarm that can be activated or deactivated by the command [XPEAK\\_COMMAND\\_SET\\_ALARM](#)
- **boolean ItemsTakenSensor**  
Indicates if the device has a sensor to detect if the dispensed items have been taken
- **boolean RejectedItemsTakenSensor**  
Indicates if the device has a sensor to detect if the rejected items have been taken
- **boolean CancelledItemsTakenSensor**  
Indicates if the device has a sensor to detect when the items ejected in a cancel deposit have been taken.
- **boolean CanOpenSafeDoor**  
Indicates if the device has a safe door and if it can be opened by a software command ( [XPEAK\\_COMMAND\\_OPEN\\_SAFE\\_DOOR](#))
- **int MaxOutBills**  
Indicates the maximum number of bills that can be dispensed at once. If not known or not applicable, this value will be 0
- **boolean ManagePartialDispenses**  
Indicates if the device is ready to manage partial dispenses if more than the MaxOutBills note are requested. Some devices are prepared to dispense several bundles automatically until completing the total amount. Only for these devices, this parameter will be *true*.
- **boolean CanFace**  
Indicates if the Device has facing capability, i.e. if it supports the [XPEAK\\_COMMAND\\_FACE](#) command
- **boolean CanSeparateDenominations**  
Indicates if the Device can separate notes by denomination, i.e. if it supports the [XPEAK\\_COMMAND\\_SEPARATE\\_DENOMINATIONS](#) command

- **boolean NumberDenominationsToSeparate**  
This array indicates the number of denominations the device is able to separate. This values are the possible values for the parameter 'numberOfDenominations' of the command [XPEAK\\_COMMAND\\_SEPARATE\\_DENOMINATIONS](#)
- **boolean CanSeparateUnfit**  
Indicates if the Device can separate notes by fitness, i.e. if it is valid to call the commands [XPEAK\\_COMMAND\\_SEPARATE\\_DENOMINATIONS](#) and [XPEAK\\_COMMAND\\_COUNT](#) with the parameter 'SeparateUnfit' set to true.
- **int MaximumWadSize**  
Indicates the maximum number of bills that can be separated in a wad during the execution of the [XPEAK\\_COMMAND\\_SEPARATE\\_DENOMINATIONS](#) command.



## XPEAK\_COMMAND\_GET\_CASH\_UNITS (0x706009D)

**Version:** 0706

### Description:

Retrieve the cash units information: configuration, contents and status of each cash unit. This command does not return information about any temporal cash unit (escrows, intermediate stackers, etc)

### Parameters:

- **boolean ShowAll**  
Parameter to indicate whether the application wants to get the information of all the denominations that could be present in each cash unit (even when there are no notes of this denominations in this moment) or not.
  - If the value of this parameter is *true*, the service will return information of every denomination that is or could be in each cash unit.
  - If the value of this parameter is *false*, the service will only return information about the denominations that are currently in each cash unit (none of them will have *count = 0*).

- **int[] UnitTypes**  
Indicates the types of cash units the application desires to get information from. This parameter is optional, if it is not sent, the service will retrieve information of every kind of cash unit.

Possible values for each element of the array are:

- XPEAK\_CASH\_TYPE\_DISPENSE (0x70600A7)
- XPEAK\_CASH\_TYPE\_DEPOSIT (0x70600A8)
- XPEAK\_CASH\_TYPE\_RECYCLE (0x70600A9)
- XPEAK\_CASH\_TYPE\_REJECT (0x70600AA)
- XPEAK\_CASH\_TYPE\_RETRACT (0x70600AB)
- XPEAK\_CASH\_TYPE\_UNFIT (0x706013A)

- **boolean MaximumAccuracy**  
Parameter to indicate whether to get the information from the device with the maximum of accuracy or not. This parameter is only applicable for some devices that requires too much time to get the complete and accurate information (for instance, number of notes of each denomination in a multidenomination cassette)
  - If the value of this parameter is *true*, the service will return as much accurate information as possible from the device (with the consequential extra time on the execution)
  - If the value of this parameter is *false*, the service will only return the information that can be get from the device without any extra time. Some devices will always return the most accurate information (independently of this parameter). In that case, the application will know it with the result *MaximumAccuracyUsed*

 **Result:**

- **Struct[] CashUnits**  
Contains the list of cash units. Each element represents one physical cash unit, that could contain one or more denominations inside.
- **String Id**  
Identification name for the cassette (unique name for each cash unit)
- **int Type**  
Defines the type of cassette and the use it is defined for. Possible values are:

Algorithm	Description
XPEAK_CASH_TYPE_DISPENSE (0x70600A7)	Cash units of this type are only used for dispense operations. It is not possible to deposit notes in cash units of this type.
XPEAK_CASH_TYPE_DEPOSIT (0x70600A8)	Cash units of this type are only used for deposit operations. It is not possible to dispense notes from cash units of this type.
XPEAK_CASH_TYPE_RECYCLE (0x70600A9)	Cash units of this type are able to be used during dispense and deposit operations.
XPEAK_CASH_TYPE_REJECT (0x70600AA)	The notes rejected in a <a href="#">XPEAK_COMMAND_REJECT</a> command are sent to a cash unit of this type. If the device stores the notes rejected during the reject operations and the notes retracted during the retract operations and the notes unfitted or rejected during the dispense operations in the same cash unit, the type of this cash unit should be <a href="#">XPEAK_CASH_TYPE_REJECT</a> (0x70600AA).
XPEAK_CASH_TYPE_RETRACT (0x70600AB)	The notes retracted during the <a href="#">XPEAK_COMMAND_RETRACT</a> command are sent to a cash unit of this type. If the device stores the notes retracted during the retract operations and the notes rejected during the reject operations in the same cash unit, the type of this cash unit should be <a href="#">XPEAK_CASH_TYPE_REJECT</a> (0x70600AA).
XPEAK_CASH_TYPE_UNFIT (0x706013A)	Some devices discard notes during the dispense operation due to their size, thickness... these notes are sent to a cassette of this type during the <a href="#">XPEAK_COMMAND_DISPENSE</a> command. If the device stores the notes discarded during the dispense operations and the notes rejected during the reject operations in the same cash unit, the type of this cash unit should be <a href="#">XPEAK_CASH_TYPE_REJECT</a> (0x70600AA).

- **boolean Locked**  
Indicates if the cash unit is locked
- **boolean CanBeLocked**  
Indicates if the cash unit can be locked, i.e. if the device supports the lock of this cash unit
- **int Status**  
Status of the cash unit. Possible values are defined below. Depending on the cash unit type, some of the status values listed are not applicable. For instance, if a cash unit is a [XPEAK\\_CASH\\_TYPE\\_DEPOSIT](#) (0x70600A8), the status [XPEAK\\_UNIT\\_STATUS\\_LOW](#) (0x70600B3) or [XPEAK\\_UNIT\\_STATUS\\_EMPTY](#) (0x70600B4) will not be applicable.

- XPEAK\_UNIT\_STATUS\_OK (0x70600B0)
- XPEAK\_UNIT\_STATUS\_HIGH (0x70600B1)
- XPEAK\_UNIT\_STATUS\_FULL (0x70600B2)
- XPEAK\_UNIT\_STATUS\_LOW (0x70600B3)
- XPEAK\_UNIT\_STATUS\_EMPTY (0x70600B4)
- XPEAK\_UNIT\_STATUS\_INOPERATIVE (0x70600B5)

- **int ItemType**

Type of cash unit, based on the kind of items it is used for. Possible values are:

Type	Description
XPEAK_CASH_ITEM_NOTE (0x70600AC)	The cash unit contains bank notes
XPEAK_CASH_ITEM_COIN (0x70600AD)	The cash unit contains coins
XPEAK_CASH_ITEM_COIN_CYLINDER (0x70600AE)	The cash unit contains coin cylinders
XPEAK_CASH_ITEM_DOCUMENT (0x70600AF)	The cash unit contains documents. In this case, the <i>Currency</i> in the <i>Contents</i> Struct will be an empty String ("" ) and the <i>Value</i> and <i>Variant</i> will be 0

- **Struct[] Denominations**

Gives information about the contents of the cash unit as number of items per each denomination inside.

If the parameter *ShowAll* is *true*, it will give information of any denomination that could be in the cash unit, even when the *Count* for this denomination is 0

If the *ItemType* is XPEAK\_CASH\_ITEM\_DOCUMENT (0x70600AF), then, the denomination will have no values: *Currency* = "", *Value* = 0, *Variant* = 0

- **String Currency**

ISO representation of the currency (EUR, USD, etc)

- **double Value**

Value of the denomination as a double

- **int Variant**

Integer representation of the denomination variant. If the variant is not known, the value of this field will be 0

- **String Category**

Category of the denomination ("3", "4a", "4b", etc). The empty String ("" ) indicates that the category is unknown.

- **int Count**

Number of items of this denomination that the Cash Unit contains inside. If the value of this field is -1, it means that the service can not provide this information.

- **int Capacity**

Returns the capacity of the cash unit as number of items of the configured denomination/s that can be stored on it. If the device does not provide this information, the value of this field will be -1.

- **int Count**

Returns the total number of items that are currently on the cash unit. If the value of this field is -1, it means that the service can not provide this information.

- **boolean RequiresManualMaintenance**

Boolean determining if the cash unit requires manual maintenance (*true*) or if it must be filled and emptied by software command (see command [XPEAK\\_COMMAND\\_EMPTY](#)).

In some cases, the cash unit can be a recycle unit, but if it is configured to accept more than one denomination, it will become automatically into a deposit cash unit (because you will not be able to dispense from it).

- **boolean CanConfigureDenominations**

Boolean determining if the denominations of the cash unit can be configured or not

- **boolean MaximumAccuracy**

Indicates if the information returned was obtained from the device with the maximum of accuracy possible on the device (*true*) or if it is possible to ask for more detailed information (*false*). The value of this result can only be *false* if the parameter *MaximumAccuracy* was *false* and the device allows a more detailed call of the command (with the parameter *MaximumAccuracy* equals *true*)

## **XPEAK\_COMMAND\_GET\_CATEGORIES\_DESTINATION** (0x70600CC)

**Version:** 0706

### **Description:**

Obtains the destination of the categories according to the current configuration

### **Result:**

- **Struct[] CategoriesDestinations**  
Contains the configured destinations for each category
- **String Category**  
Name of the Category (usually "2", "3" or "4b" if any)
- **String[] Destinations**  
Destinations to which these category banknotes goes. Each destination is represented by the *id* String of the cash unit (see command [XPEAK\\_COMMAND\\_GET\\_CASH\\_UNITS](#)). If the destination is the output tray, the String that will represent this is the empty String ("" )

## XPEAK\_COMMAND\_GET\_REJECTED\_ITEMS (0x706013B)

**Version:** 0706

### **Description:**

Returns the items rejected by the device during the last [XPEAK\\_COMMAND\\_DEPOSIT](#) or [XPEAK\\_COMMAND\\_COUNT](#) operation. If none of these operations were previously executed, this command will return a Result XPEAK\_RESULT\_SEQUENCE\_ERROR (0x706009A).

### **Result:**

- **Struct[] Denominations**  
Gives information of the items rejected by the device only on the last deposit operation.
- **String Currency**  
ISO representation of the currency (EUR, USD, etc)
- **double Value**  
Value of the denomination as a double
- **int Variant**  
Integer representation of the denomination variant
- **String Category**  
Name of the Category (the empty String ("") indicates the category is unknown)
- **int Count**  
Number of items of this denomination that the device rejected.

 **XPEAK\_COMMAND\_GET\_STATUS** (0x7060051)**Version:** 0706**Description:**

This command allows to get different current status of the device.

 **Result:**

- **int[] Statuses**

Possible values are:

Status	Description
XPEAK_STATUS_CASH_UNIT_ERROR (0x70600B7)	One of the cash units is in error state.
XPEAK_STATUS_RESET_REQUIRED (0x70600B8)	The device needs a reset to recover from an error.
XPEAK_STATUS_SHUTTER_ERROR (0x7060097)	If the device has a shutter, it indicates that it is in error status
XPEAK_STATUS_ITEMS_JAMMED (0x70600B9)	There is a items jam in the device
XPEAK_STATUS_ITEMS_IN_INPUT (0x70600BB)	There are items in any input position
XPEAK_STATUS_ITEMS_IN_OUTPUT (0x70600BA)	There are items in any output position
XPEAK_STATUS_SAFE_DOOR_OPEN (0x7060174)	The safe door is open

Besides this statuses, the command can return any of the ones specified in the generic command [XPEAK\\_COMMAND\\_GET\\_STATUS](#)

## XPEAK\_COMMAND\_INITIALIZE (0x7060015)

**Version:** 0706

### **Description:**

Initializes the service, communicating, if needed, with the physical device. The only commands that can be sent to the service before this one are:

- [XPEAK\\_COMMAND\\_GET\\_COMMANDS](#)
- [XPEAK\\_COMMAND\\_SET\\_CONFIGURATION](#)
- [XPEAK\\_COMMAND\\_GET\\_CONFIGURATION](#)

Executing this command more than once will not return an error, it will just increase the counter of initializations done. The command [XPEAK\\_COMMAND\\_SHUTDOWN](#) will be correctly executed when it is invoked as many times as the initialize command.

The returned result will always be [XPEAK\\_RESULT\\_OK](#) (0x7060001), indicating that the connection between the application and the service is established. This does not mean that the device is in a proper state, so a call to the [XPEAK\\_COMMAND\\_GET\\_STATUS](#) command should be done to know the real device state.

### **Events:**

[XPEAK\\_RESULT\\_ITEMS\\_IN\\_OUTPUT](#) (0x706013C) Since 0706

This event will be thrown if during the initialization process any note is rejected in the output tray.

[XPEAK\\_RESULT\\_ITEMS\\_TAKEN](#) (0x70600BC) Since 0706

This event is thrown when the rejected items are taken by the user from the output tray.

This event will only be thrown if the *ItemsTakenSensor* capability of the device is true.



 **XPEAK\_COMMAND\_OPEN\_SAFE\_DOOR** (0x7060161)

**Version:** 0706

**Description:**

If the device has the capability of opening the safe door (*CanOpenSafeDoor* capability), this command unlock the safe door after the time in minutes specified in the parameter.

 **Parameters:**

- **int MinutesDelay**  
Delay of the safe door to be opened, expressed in minutes.

 **Result:**

See Common Results

## XPEAK\_COMMAND\_PRESENT (0x70600A5)

**Version:** 0706

### Description:

This command presents the items previously dispensed. This command should be executed always after a [XPEAK\\_COMMAND\\_DISPENSE](#) with parameter *Present* equals *false*, and only with those services with intermediate stacker capability

### Parameters:

- **int Position**  
Indicates the position of the items to go out, based on the teller position who executes the present command. Can be one of the following values:
  - XPEAK\_POSITION\_RIGHT (0x70600C7)
  - XPEAK\_POSITION\_LEFT (0x70600C8)
- **int Timeout**  
Time, in milliseconds, during which the device will wait for the user to take the presented items. If this value is less than zero, the device will wait until it receive the command [XPEAK\\_COMMAND\\_RETRACT](#). If an error is detected, it will be notified with an event and the device will not wait for this timeout.

### Result:

- **int Result**  
Apart from the common values, this command could return as result:

Result	Description
XPEAK_RESULT_ITEMS_JAMMED (0x706009B)	Error due to a jam of one of the items.
XPEAK_RESULT_ITEMS_NOT_PRESENT (0x70600C6)	There are no items to present in the Intermediate Stacker

### Events:

XPEAK\_RESULT\_ITEMS\_TAKEN (0x70600BC) Since 0706

This event is thrown if and only if the *ItemsTakenSensor* capability of the device is true, when the presented items are taken by the user from the output tray.

 **XPEAK\_COMMAND\_REJECT** (0x70600DC)**Version:** 0706**Description:**

This command can be executed only in the devices that has an intermediate stacker (*HasIntermediateStacker* capability equals true) after a [XPEAK\\_COMMAND\\_DISPENSE](#) with *Present* parameter *false*. This command will cancel the dispensation and will put the notes back from the intermediate stacker to the cash unit or cash units defined by the device.

 **Result:**

- **int Result**

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

Result	Description
XPEAK_RESULT_ITEMS_JAMMED (0x706009B)	Error due to a jam of one of the items.
XPEAK_RESULT_ITEMS_NOT_PRESENT (0x70600C6)	There are no items to reject.

 **XPEAK\_COMMAND\_RESET** (0x7060004)

**Version:** 0706

**Description:**

This command executes a reset of the device. In some devices, the execution of this command is required to recover it from some errors. Also, in some devices items can be rejected during this process, in this case the proper event will be delivered, see events section below.

 **Result:**

See Common Results

 **Events:**

XPEAK\_RESULT\_ITEMS\_IN\_OUTPUT (0x706013C) Since 0706

This event will be thrown if during the resetting process any note is rejected in the output tray.

XPEAK\_RESULT\_ITEMS\_TAKEN (0x70600BC) Since 0706

This event is thrown when the rejected items are taken by the user from the output tray.

This event will only be thrown if the *ItemsTakenSensor* capability of the device is true.

 **XPEAK\_COMMAND\_RETRACT** (0x70600A6)**Version:** 0706**Description:**

This command can be executed, in some devices (those with *CanRetract* capability equals true), to retract the items that were ejected via a [XPEAK\\_COMMAND\\_CANCEL\\_DEPOSIT](#), [XPEAK\\_COMMAND\\_DISPENSE](#) and pull them back inside the device.

 **Result:**

- **int Result**

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

Result	Description
XPEAK_RESULT_ITEMS_JAMMED (0x706009B)	Error due to a jam of one of the items.
XPEAK_RESULT_ITEMS_NOT_PRESENT (0x70600C6)	There are no items to retract.

## XPEAK\_COMMAND\_SEPARATE\_DENOMINATIONS (0x7060170)

**Version:** 0706

### Description:

Counts the items inserted and returns them back separated by denomination. The number of denominations separated is given by the parameter 'numberOfDenominations', the denominations separated are given by the denominations of the first 'numberOfDenominations' notes of the bundle. Other denominations are rejected. Check the capability 'NumberDenominationsToSeparate' in [XPEAK\\_COMMAND\\_GET\\_CAPABILITIES](#) to see how many denominations the device can separate. Gives information of the items counted by the device up to the current separate operation. This command can be executed as many times as needed, always after an [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) with the parameter Operation equals XPEAK\_COMMAND\_SEPARATE\_DENOMINATIONS (0x7060170). If a previous [XPEAK\\_COMMAND\\_ENABLE\\_INSERT](#) with parameter Operation = XPEAK\_COMMAND\_SEPARATE\_DENOMINATIONS (0x7060170) has not been executed, this command will return the result XPEAK\_RESULT\_SEQUENCE\_ERROR (0x706009A)

### Parameters:

- **int Timeout**  
Time, in milliseconds, during which the device will wait for the user to take the items returned during the counting process (the counted notes as well as the rejected notes). This time starts counting when the count command finishes.
- **int NumberOfDenominations**  
Number of denominations to separate. See 'NumberDenominationsToSeparate' in [XPEAK\\_COMMAND\\_GET\\_CAPABILITIES](#).
- **boolean SeparateUnfit**  
Indicates if unfit notes should be separated in a different compartment. Check the field 'CanSeparateUnfit' in the [XPEAK\\_COMMAND\\_GET\\_CAPABILITIES](#) command's answer to see if the device is able to separate unfit notes.
- **int WadSize**  
Indicates the number of notes of the separated wad of notes. When, during the execution of this command, the wad size is reached, the separate denominations operation should stop. If this parameter is 0, no wad size is defined and the operation will stop when the device requires it. The maximum wad size is defined in the field 'MaximumWadSize' in the [XPEAK\\_COMMAND\\_GET\\_CAPABILITIES](#) answer.

### Result:

- **int Result**

In addition to the common values, this command could return as result:

Result	Description
XPEAK_RESULT_ITEMS_NOT_PRESENT (0x70600C6)	Items not present, so they can not be counted.
XPEAK_RESULT_ITEMS_JAMMED (0x706009B)	Error due to a jam of one of the items.

- **Struct[] Denominations**  
Gives information about the counted items (number of items per each denomination)
- **String Currency**  
ISO representation of the currency (EUR, USD, etc)
- **double Value**  
Value of the denomination as a double
- **int Variant**  
Integer representation of the denomination variant
- **String Category**  
Name of the Category (the empty String ("") indicates the category is unknown)
- **int Count**  
Number of items of this denomination that the device counted.
- **boolean ItemsRejected**  
This result indicates if during the count operation, any of the items has been rejected and not counted.

## Events:

XPEAK\_RESULT\_ITEMS\_TAKEN (0x70600BC) Since 0706

This event is thrown if and only if the *ItemsTakenSensor* or *RejectedItemsTakenSensor* capability of the device is true. This event is sent when both notes (counted and rejected) are taken. If *RejectedItemsTakenSensor* capability is false or the result *ItemsRejected* is false, the Service will only wait for the counted notes to be taken.

 **XPEAK\_COMMAND\_SET\_ALARM** (0x70600DB)

**Version:** 0706

**Description:**

Activates or deactivates the silent alarm, depending on the parameter. It can only be executed if the device has the alarm capability (*HasAlarm* on [XPEAK\\_COMMAND\\_GET\\_CAPABILITIES](#))

 **Parameters:**

- **boolean Activate**  
If the parameter is *true*, the command activates the silent alarm. Otherwise, the silent alarm will be deactivated.

 **Result:**

See Common Results



## XPEAK\_COMMAND\_SET\_CASH\_UNITS (0x706009E)

**Version:** 0706

### Description:

Changes the cash units configuration. The values that can be changed for each cash unit depends on the physical characteristics of the device. If there is any inconsistent information in the configuration data (for instance, more than one denomination assigned to a cash unit that can not be configured as a multi-denomination cash unit), the command will return a Result XPEAK\_RESULT\_INVALID\_PARAMETER

(0x706003A)

### Parameters:

- **Struct[] CashUnits**

The new information of the cash units. This parameter should contain only the information of the cash units which configuration changes.

Each element of the array represents one physical cash unit, that could contain one or more denominations. If any cash unit is not included in this array, it is assumed that its configuration does not change. The field that identifies the cash unit uniquely is the Id

- **String Id**

Identification name for the cassette (unique name for each cash unit). This field can not be changed and should agree with one of the *Id* returned on the command [XPEAK\\_COMMAND\\_GET\\_CASH\\_UNITS](#) This is the only mandatory field in each element of the array. The rest of them are optional fields and, in case any of them is absent, the default value will be the one that the same cash unit (with same Id) had before. If this field contains an invalid Id (a Id that does not exist), the command will fail returning XPEAK\_RESULT\_INVALID\_PARAMETER

(0x706003A)

- **int Type**

Defines the type of cassette and the use it is defined for. Possible values are:

Type	Description
XPEAK_CASH_TYPE_DISPENSE (0x70600A7)	Cash units of this type are only used for dispense operations. It is not possible to deposit notes in cash units of this type.
XPEAK_CASH_TYPE_DEPOSIT (0x70600A8)	Cash units of this type are only used for deposit operations. It is not possible to dispense notes from cash units of this type.
XPEAK_CASH_TYPE_RECYCLE (0x70600A9)	Cash units of this type are able to be used during dispense and deposit operations.
XPEAK_CASH_TYPE_REJECT (0x70600AA)	The notes rejected in a <a href="#">XPEAK_COMMAND_REJECT</a> command are sent to a cash unit of this type. If the device stores the notes rejected during the reject operations and the notes retracted during the retract operations and the notes unfitted or rejected during the dispense operations in the same cash unit, the type of this cash unit should be XPEAK_CASH_TYPE_REJECT (0x70600AA).

Type	Description
XPEAK_CASH_TYPE_RETRACT (0x70600AB)	The notes retracted during the <a href="#">XPEAK_COMMAND_RETRACT</a> command are sent to a cash unit of this type. If the device stores the notes retracted during the retract operations and the notes rejected during the reject operations in the same cash unit, the type of this cash unit should be XPEAK_CASH_TYPE_REJECT (0x70600AA).
XPEAK_CASH_TYPE_UNFIT (0x706013A)	Some devices discard notes during the dispense operation due to their size, thickness... these notes are sent to a cassette of this type during the <a href="#">XPEAK_COMMAND_DISPENSE</a> command. If the device stores the notes discarded during the dispense operations and the notes rejected during the reject operations in the same cash unit, the type of this cash unit should be XPEAK_CASH_TYPE_REJECT (0x70600AA).

- **boolean Locked**

In some devices, it is possible to lock or unlock a cash unit to avoid it to be used. In that case, this field can be modified. If this field is not present, the default value will be the one that the cash unit with the same Id had before.

- **int ItemType**

Type of cash unit, based on the kind of items it is used for. It is an optional field, in case it is not defined, it will maintain the type of items the same cash unit had before. Some items type configuration has no sense. For instance, if a cassette is a notes cassette, the device will not probably allow to configure it as a coins cassette. If any impossible change of configuration of this kind is done, the command will return a XPEAK\_RESULT\_INVALID\_PARAMETER (0x706003A)

Possible values are:

Type	Description
XPEAK_CASH_ITEM_NOTE (0x70600AC)	The cash unit contains bank notes
XPEAK_CASH_ITEM_COIN (0x70600AD)	The cash unit contains coins
XPEAK_CASH_ITEM_COIN_CYLINDER (0x70600AE)	The cash unit contains coin cylinders
XPEAK_CASH_ITEM_DOCUMENT (0x70600AF)	The cash unit contains documents. In this case, the <i>Currency</i> in the <i>Contents</i> Struct will be an empty String ("" ) and the <i>Value</i> and <i>Variant</i> will be 0

- **Struct[] Denominations**

Information about the contents of the cash unit as number of items per each denomination. With this parameter the possible denominations in a cash unit and the number of items on it will be configure.

If the fields *Currency*, *Value* and *Variant* have the same values as the ones returned on the command [XPEAK\\_COMMAND\\_GET\\_CASH\\_UNITS](#), then it means that the only value to change is the *Count* field.

It will not be possible to change the *Currency*, *Value* or *Variant* values on a cash unit if the field *CanConfigureDenominations* value returned by [XPEAK\\_COMMAND\\_GET\\_CASH\\_UNITS](#) is *false*

Configuration of the denominations should be consistent with the *ItemType* configuration (i.e. if the cash unit is a documents cash unit, the denomination should have no values: *Currency* = "", *Value* = 0.0, *Variant* = 0 )

- **String Currency**  
ISO representation of the currency (EUR, USD, "", etc)
- **double Value**  
Value of the denomination as a double
- **int Variant**  
Integer representation of the denomination variant
- **String Category**  
Category of the denomination ("3", "4a", "4b", etc). The empty String ("") indicates that the category is unknown or not relevant.
- **int Count**  
Number of notes of this denomination that the Cash Unit contains inside.

### Result:

- **int Result**  
Apart from the common values, this command could return as result:

Result	Description
XPEAK_RESULT_CASH_UNIT_NOT_EMPTY (0x706009C)	Error trying to configure due to a non empty cash unit

- **String[] ResultDetails**  
If the Result value is XPEAK\_RESULT\_INVALID\_PARAMETER (0x706003A), this field will contain the cash units Ids that cause the error.

## XPEAK\_COMMAND\_SET\_CATEGORIES\_DESTINATION (0x70600BF)

**Version:** 0706

### Description:

Changes the destination of the categories that can be configured. The categories which destination can be configured and the available destinations depend on the device and can be obtained with the command [XPEAK\\_COMMAND\\_GET\\_CAPABILITIES](#).

If there is any inconsistent information in the configuration data or the configuration to set is not possible for the device, the command will return a Result XPEAK\_RESULT\_INVALID\_PARAMETER (0x706003A)

### Parameters:

- **Struct[] CategoriesDestinations**  
Contains the destinations to configure for each category.
- **String Category**  
Name of the Category to configure (usually "2", "3" or "4b" if any)
- **String[] Destinations**  
Destinations to which these category banknotes will go. Each destination is represented by the *id* String of the cash unit (see command [XPEAK\\_COMMAND\\_GET\\_CASH\\_UNITS](#)). If the destination to configure is the output try, the String that will represent it is the empty String ( "" )

### Result:

- **int Result**  
Apart from the common values, this command could return as result:

Result	Description
XPEAK_RESULT_CASH_UNIT_NOT_EMPTY (0x706009C)	Error trying to configure due to a non empty cash unit

- **String[] ResultDetails**  
If the Result value is XPEAK\_RESULT\_INVALID\_PARAMETER (0x706003A), this field will contain the categories number that cause the error.

 **XPEAK\_COMMAND\_SET\_SECURITY\_ACCESS\_DATA** (0x7060165)

**Version:** 0706

**Description:**

Sets the data required for the secure communications. In most of the cases (of devices with security communications), this command must be executed before the XPEAK\_COMMAND\_INITIALIZE command.

 **Parameters:**

- **Struct[] Data**  
Parameter with the security data to set.
- **String Name**  
Name of the secure parameter to set (depends on the device and security communications system used)
- **String Value**  
Value to set for the previous parameter (length and format will depend on the device and security communications used)

 **Result:**

See Common Results

## XPEAK\_COMMAND\_START\_EMPTY (0x7060144)

**Version:** 0706

### Description:

Starts the empty operation. This command has to be executed before the command [XPEAK\\_COMMAND\\_EMPTY](#).

No notes will be ejected during the execution of this command.

A complete Empty transaction would be:

- [XPEAK\\_COMMAND\\_START\\_EMPTY](#)
- [XPEAK\\_COMMAND\\_EMPTY](#) (the value of the result *IsEmptyFinished* will be *false*).
- [XPEAK\\_COMMAND\\_EMPTY](#) (the value of the result *IsEmptyFinished* will be *false*).
- ...
- [XPEAK\\_COMMAND\\_EMPTY](#) (the value of the result *IsEmptyFinished* will be *true*).
- [XPEAK\\_COMMAND\\_END\\_EMPTY](#)

The command [XPEAK\\_COMMAND\\_END\\_EMPTY](#) has to be execute to finish the Empty transaction even if an error has succeeded or the command [XPEAK\\_COMMAND\\_EMPTY](#) has not been executed.

### Parameters:

- **int Position**  
Indicates the position which the items will be emptied to, in case the device has more than one.
  - XPEAK\_POSITION\_RIGHT (0x70600C7)
  - XPEAK\_POSITION\_LEFT (0x70600C8)
- **String[] CashUnits**  
Array of the cash units to empty. Each cash unit is represented by the *Id* String (see command [XPEAK\\_COMMAND\\_GET\\_CASH\\_UNITS](#)). Only the *Id* of the cash units that can not be emptied manually can be on this array (see *IsEmptyManually* field of the [XPEAK\\_COMMAND\\_GET\\_CASH\\_UNITS](#) command)

### Result:

- **int Result**  
Apart from the common values, this command could return as result:

Result	Description
XPEAK_RESULT_ITEMS_IN_OUTPUT (0x706013C)	It was not possible to dispense because there were items in the output bin.

## XPEAK\_COMMAND\_START\_MANUAL\_MAINTENANCE (0x70600D8)

**Version:** 0706

### **Description:**

Command to prepare the cash units for a manual maintenance (load, unload or empty). This command will be used only in the devices that has any cash unit that requires manual maintenance (value *RequiresManualMaintenance* of the command [XPEAK\\_COMMAND\\_GET\\_CASH\\_UNITS](#)). When the manual maintenance has been finished a [XPEAK\\_COMMAND\\_END\\_MANUAL\\_MAINTENANCE](#) should be executed. After that, the command [XPEAK\\_COMMAND\\_SET\\_CASH\\_UNITS](#) should be used to establish the new configuration or counters.

Between the [XPEAK\\_COMMAND\\_START\\_MANUAL\\_MAINTENANCE](#) (0x70600D8) and [XPEAK\\_COMMAND\\_END\\_MANUAL\\_MAINTENANCE](#) (0x70600D9) commands no any other command can be executed.

### **Result:**

See Common Results