



https://verifone.cloud/docs/sca-functional-specification/protocol_spec/barcode/configure_barcode

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CONFIGURE BARCODE

This command is used to configure the barcode scanner by setting the required field values and this configuration will be continuing until it is reconfigured with different values. Barcode configuration can be done whenever required. However, this command cannot be sent when synchronous scan (multi-scan) starts, since it will return error message. In that case, it should be sent after barcode scan stops.

Request Packet

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
FUNCTION_TYPE	Required	Static value	N/A	N/A	BARCODE	Type of function
COMMAND	Required	Static value	N/A	N/A	BCCONFIG	Command name
BCCFG_TRIGMODE	Optional	List	N/A	N/A	<ul style="list-style-type: none">0 - Edge (button press and release required to start scan session)1 - Level (button press and hold required)2 - Soft (scan starts when command is issued)3 - Passive	Trigger mode. Frame triggers do not activate the scanner unless either the iPad/iPod is docked in the frame or the iPad frame is in the charger.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
BCCFG_AUTOBEEP	Optional	List	N/A	N/A	<ul style="list-style-type: none"> • 0 - Disable • 1 - Scan only • 2 - Error only • 3 - Error 	Sets beep behavior of the scanner. Controls whether the beep occurs after a valid scan, only an error, both scenarios, or not at all.
BCCFG_PICKLIST	Optional	Binary	N/A	N/A	<ul style="list-style-type: none"> • 0 - Disable • 1 - Enable 	Picklist mode is where the barcode reader decodes only bar codes that are aligned under the center of the aiming pattern.
BCCFG_SESTIMEOUT	Optional	Numeric			Valid value for timeout ranges is 500 to 10000. Default value is 10000.	Scanner timeout, in milliseconds. This is ignored in Continuous Mode only. If any value is sent which is less than the minimum value, then it will take minimum timeout value(i.e. 500), without returning any error. If any value is sent which is more than the maximum value, then it will take maximum timeout value(i.e. 10000) without returning any error.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
BCCFG_SAMSYMTO	Optional	Numeric			Valid value: Timeout range is 100 to 10000 milliseconds. In Single Scan Mode, the maximum allowed timeout value is 10000 milliseconds. Default value is 600.	Same symbol scan timeout, in milliseconds. This is applicable for Continuous Mode only. If any value is sent which is less than the minimum value, then it will take minimum timeout value (i.e. 100), without returning any error. If any value is sent which is more than the maximum value, then it will take maximum timeout value(i.e. 10000) without returning any error.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
BCCFG_DIFSYMTO	Optional	Numeric			Valid value: Timeout range is 100 to 10000 milliseconds. Default value is 200.	<p>Different symbol scan timeout, in milliseconds. While Continuous mode is enabled, use this method to prevent multiple reads of a symbol left in the decoder's field of view. The timeout begins when a symbol is removed from the field of view. This is applicable for Continuous Mode only. If any value is sent which is less than the minimum value, then it will take minimum timeout value(i.e. 100), without returning any error. If any value is sent which is more than the maximum value, then it will take maximum timeout value(i.e. 10000) without returning any error.</p> <p>Continuous mode is where the barcode laser scans continuously. Normally, the laser shuts off and the scanning session ends after one successful scan/decode. Continuous mode is enabled with any of the Trigger modes.</p>
BCCFG_CONMODE	Optional	Binary			<ul style="list-style-type: none"> • 0 - Disable • 1 - Enable 	<p>This setting improves barcode reading performance with target bar codes displayed on mobile phones and electronic displays.</p>
BCCFG_PHONDISMODE	Optional	Binary			<ul style="list-style-type: none"> • 0 - Disable • 1 - Enable 	

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
BCCFG_DATAPRF	Optional	Character	0x00	0xFF	Value of scan data prefix, Example: 13	This is used when scan data transmission format prefix + data is selected to set the prefix value.
BCCFG_DATASUFFIX1	Optional	Character	0x00	0xFF	Value of scan data suffix 1, Example: 13	This is used when scan data transmission format data + suffix1 is selected to set the suffix1 value
BCCFG_DATASUFFIX2	Optional	Character	0x00	0xFF	Value of scan data suffix 2, Example: 13	This is used when scan data transmission format data + suffix2 is selected to set the suffix1 value
BCCFG_DATATRNSMODE	Optional	Numeric			<ul style="list-style-type: none"> • 0 - Scan data as is (default) • 1 - Suffix 1 added • 2 - Suffix 2 added • 3 - Suffix 1 and 2 added • 4 - Prefix added • 5 - Prefix and Suffix 1 added • 6 - Prefix and Suffix 2 added • 7 - Prefix and Suffix 1 and 2 added 	Changes the scan data format to have a custom prefix and/or suffix1 and/or suffix2 value.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
BCCFG_AIMPATTERN	Optional	Binary			<ul style="list-style-type: none"> • 0 - Disable • 1 - Enable (Default) 	Enables or disables AIM pattern. When enabled, the dot pattern for the laser is used during bar code capture. Default is enabled.
BCCFG_UNIREPORT	Optional	Binary			<ul style="list-style-type: none"> • 0 - Disable • 1 - Enable 	While continuous mode is enabled, use this setting to only report unique bar codes during the scanning session.
BCCFG_ASYNCPOSSCAN	Optional	Binary			<ul style="list-style-type: none"> • 0 - Disable • 1 - Enable 	Enables multi-scan. When Enabled, any scanned barcode data (manual or software) is redirected to POS port if it is set up.
BCCFG_DISPLAY_UI	Optional	Binary			<ul style="list-style-type: none"> • 0 - Disable (default) • 1 - Enable 	Enables or disables barcode UI display for e280 device. This field is always enable for M440 and M424 devices. Example: < BCCFG_DISPLAY_UI >1</ BCCFG_DISPLAY_UI >
POS_RECON	Optional	Character	1	30		POS reconciliation. POS Reconciliation field to be echoed back in response to POS. Example: RetailPOS1
COUNTER	Required	Numeric	1	10		COUNTER is used for a given MAC label. Each COUNTER should be higher than the last one. This is sed to authenticate the POS. Example: 2
MAC	Required	Base64 Encoded Data	N/A	N/A	N/A	Message Authentication Code. This is used to authenticate the POS.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
MAC_LABEL	Required	Character	1	50		Associated label that tells the device which MAC_KEY to use to decrypt the value of MAC. This is used to authenticate the POS. Example: P_JTY065

Example

Following is an example of request packet

```

<TRANSACTION>
<FUNCTION_TYPE>BARCODE</FUNCTION_TYPE>
<COMMAND>BCCONFIG</COMMAND>
<BCCFG_TRIGMODE>2</BCCFG_TRIGMODE>
<BCCFG_AUTOBEEP>1</BCCFG_AUTOBEEP>
<BCCFG_PICKLIST>0</BCCFG_PICKLIST>
<BCCFG_SESTIMEOUT>5000</BCCFG_SESTIMEOUT>
<BCCFG_SAMSYMTO>600</BCCFG_SAMSYMTO>
<BCCFG_DIFSYMTO>200</BCCFG_DIFSYMTO>
<BCCFG_CONMODE>0</BCCFG_CONMODE>
<BCCFG_PHONDISMODE>0</BCCFG_PHONDISMODE>
<BCCFG_DATAPRF>13</BCCFG_DATAPRF>
<BCCFG_DATASUF1>13</BCCFG_DATASUF1>
<BCCFG_DATASUF2>13</BCCFG_DATASUF2>
<BCCFG_DATATRNSMODE>0</BCCFG_DATATRNSMODE>
<BCCFG_AIMPATTERN>1</BCCFG_AIMPATTERN>
<BCCFG_UNIREPORT>0</BCCFG_UNIREPORT>
<BCCFG_DISPLAY_UI>1</BCCFG_DISPLAY_UI>
<MAC>... . .</MAC>
<COUNTER>2</COUNTER>
<MAC_LABEL>P_JTY065</MAC_LABEL>
</TRANSACTION>

```

Response Packet

Field	Type	Value	Description
RESPONSE_TEXT	Character		Processor response text. Example: Command response 0
RESULT	Character		This indicates the Result details. Example: SUCCESS
RESULT_CODE	Numeric	Expected result code: -1, 59001, 59006, 59040	This indicates the result code. Refer to Result/Error Codes for details.

Field	Type	Value	Description
TERMINATION_STATUS	Character	SUCCESS or FAILURE	This indicates the transaction termination status. This is the overall status of the transaction irrespective of approved or declined. Like, if the output is generated then the status is SUCCESS and if no output is generated then the status will be FAILURE.
POS_RECON	Character		POS reconciliation field echoed back if sent in request. Example: RetailPOS1
COUNTER	Numeric		Echoes counter sent in the request. Example: 2

Transaction Performance Metric

Note

These fields are returned, if SCAPERFMETRIC parameter ([Application Parameters](#)) is enabled.

Field	Type	Value	Description
UI_TIME	Time		This indicates the time duration, for which the device screen is displayed (like error message, prompt screen, remove card screen) till any user action is performed in the command execution flow. This field is not applicable to capture the time for the Processing, Authorizing and transaction status screen. The format of the returned value would be S.sss, where S is seconds (this can be 0 to any positive integer) and sss is milliseconds. In case of any insignificant time or 0.000 value, will not be returned in the response. Example: <UI_TIME>44.028</UI_TIME>
HOST_TIME	Time		This indicates the time taken for the Connection to the host, sending request and receives data from the host. This field also take the cumulative time for multiple requests which may sent to the host during the transaction including two legged transactions, timeout requests, Auto Last Tran requests, DCC, Credit app proxy. The format of the returned value would be S.sss, where S is seconds (this can be 0 to any positive integer) and sss is milliseconds. In case of any insignificant time or 0.000 value, will not be returned in the response. Example: <HOST_TIME>1.389</HOST_TIME>
CMD_TIME	Time		This field indicates the total amount of time for a command, which is executed by the application from request received to the response sent. The format of the returned value would be S.sss, where S is seconds (this can be 0 to any positive integer) and sss is milliseconds. In case of any insignificant time or 0.000 value, will not be returned in the response. Example: <CMD_TIME>70.765</CMD_TIME>

Example

Following is an example of response packet


```
<RESPONSE>  
<RESPONSE_TEXT>Command response 0</RESPONSE_TEXT>  
<RESULT>SUCCESS</RESULT>  
<RESULT_CODE>-1</RESULT_CODE>  
<TERMINATION_STATUS>SUCCESS</TERMINATION_STATUS>  
<COUNTER>2</COUNTER>  
</RESPONSE>
```