

DISPLAY_LEFTPANEL

This command will direct the device to optionally display text, image, offer data selection, charity donation selection, buttons, and maskable numeric input fields on left panel of the Line Item screen during a payment session, replacing any other display residing on the left panel. SCA will continue to receive new line items and display them during this time.

Device UI Required: Yes

Request Packet

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
FUNCTION_TYPE	Required	Static value	N/A	N/A	DEVICE	Type of function
COMMAND	Required	Static value	N/A	N/A	DISPLAY_LEFTPANEL	Command name
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 used to authenticate the POS. Example: 100
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: REG1

Top Section

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
LEFTPANEL_TEXT	Optional	Character	1	50	DEVICE	Top section. Message or instructions to display to customer on top of left panel. Example: Ask us about upcoming sales!
LEFTPANEL_IMG_TOP	Optional	Base64 Encoded Data				Top section. Base64 encoded string (maximum 30,000) to be converted to an image. Displays on top of left panel.

Note

In Top section, user needs to send either LEFTPANEL_TEXT or LEFTPANEL_IMG_TOP field.

Middle Section

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
LEFTPANEL_IMG_TOP	Optional	Base64 Encoded Data				Middle section. Base64 encoded string (maximum 30,000) to be converted to an image. Displays in middle of left panel.

Or Offer Data

Note

With respect to the combination of TOP section Image field and Middle section Offer data fields, POS_IP and POS_PORT fields must be specified in Start Session command, and this will return an unsolicited response. Refer to [Top Image and Middle Offer Data](#) for the sample request and [Unsolicited Response - Top Image and Middle Offer Data](#) for the sample response. Also refer to [Display Left Panel - Offers](#) for the screen display example.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
LEFTPANEL_OFFER_ROW_1	Optional	Character	1	22		Left panel offer text row 1 display.
LEFTPANEL_OFFER_ROW_2	Optional	Character	1	22		Left panel offer text row 2 display.
LEFTPANEL_OFFER_ROW_3	Optional	Character	1	22		Left panel offer text row 3 display.
LEFTPANEL_OFFER_ROW_4	Optional	Character	1	22		Left panel offer text row 4 display.
LEFTPANEL_OFFER_ROW_5	Optional	Character	1	22		Left panel offer text row 5 display.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
LEFTPANEL_OFFER_ROW_6	Optional	Character	1	22		Left panel offer text row 6 display.
LEFTPANEL_OFFER_ROW_7	Optional	Character	1	22		Left panel offer text row 7 display.
LEFTPANEL_OFFER_ROW_8	Optional	Character	1	22		Left panel offer text row 8 display.
LEFTPANEL_OFFER_ROW_9	Optional	Character	1	22		Left panel offer text row 9 display.
LEFTPANEL_OFFER_ROW_10	Optional	Character	1	22		Left panel offer text row 10 display.

Or Charity Amount Data Capture

Note

POS_IP and POS_PORT must be specified in Start Session command. Refer to [Display Left Panel - Charity](#) for example.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
DISPLAY_TEXT1	Optional	Character	1	26		Charity amount capture text label 1.
DISPLAY_TEXT2	Optional	Character	1	26		Charity amount capture text label 2.
DISPLAY_TEXT3	Optional	Character	1	26		Charity amount capture text label 3.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
DISPLAY_TEXT4	Optional	Character	1	26		Charity amount capture text label 4.
DISPLAY_TEXT5	Optional	Character	1	26		Charity amount capture text label 5.
AMOUNT1	Optional	Character	1	10		Amount text display 1.
AMOUNT2	Optional	Character	1	10		Amount text display 2.
AMOUNT3	Optional	Character	1	10		Amount text display 3.
AMOUNT4	Optional	Character	1	10		Amount text display 4.
AMOUNT5	Optional	Character	1	10		Amount text display 5.

Bottom Section

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
LEFTPANEL_IMG_BOTTOM	Optional	Base64 Encoded Data				Base64 encoded string (maximum 30,000) to be converted to an image. Displays on bottom of left panel.

Or Numeric Input

Note

Refer to [Display Left Panel - Numeric Input](#) for example.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
REQUEST_NUMERIC_INPUT	Optional	Boolean	N/A	N/A	• True • False	TRUE will request SCA to display a numeric input field. NOTE: Two unlabeled buttons (red + green) will display by default.
NUMERIC_INPUT_FORMAT	Optional	Character	1	19		N indicates numeric. Allowed literals: /, -, \$, , ., #, (,), %, (Space). Example: • \$ N N N . N N • # (N N N)- N N N N N

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
NUMERIC_INPUT_MASK	Optional	List			- FALSE - No masking - TRUE - Full password entry masking - TRAILING - Trailing masking (default)	Numeric entry to be masked.

Or Display Buttons

Note

Refer to [Display Left Panel - Numeric Input](#) for example.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
REQUEST_BTNS	Optional	List			0 - No buttons 1 - Display 1 button 2 - Display 1 buttons	Requesting for displaying buttons. Any other value will display 1 button. This cannot be used with REQUEST_NUMERIC_INPUT. POS_IP and POS_PORT must be specified in START command.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
BUTTON_LABEL1	Optional	Character	1	15		Label for Button 1. Space dependent on combination of input to left panel. As of this publication, Button 1 is on the right. This is used also with Offer Data or Charity Data Capture.
BUTTON_LABEL2	Optional	List	1	15		Space dependent on combination of input to left panel. As of this publication, Button 2 is on the left. This is used also with Offer Data or Charity Data Capture.

Example

Following is an example of request packet

```
<TRANSACTION>
<FUNCTION_TYPE>DEVICE</FUNCTION_TYPE>
<COMMAND>DISPLAY_LEFTPANEL</COMMAND>
<LEFTPANEL_TEXT>Ask us about upcoming sales!</LEFTPANEL_TEXT>
<COUNTER>1</COUNTER>
<MAC> ... </MAC>
<MAC_LABEL>REG2</MAC_LABEL>
</TRANSACTION>
```

Example - Top Image and Middle Offer Data

```
<TRANSACTION>
<FUNCTION_TYPE>DEVICE</FUNCTION_TYPE>
<COMMAND>DISPLAY_LEFTPANEL</COMMAND>
<LEFTPANEL_IMG_TOP>iVB0Rw0KGgoAAAANSUhe..... </LEFTPANEL_IMG_TOP>
<LEFTPANEL_OFFER_ROW_1>Buy 1 Get 1 on Pizzas</LEFTPANEL_OFFER_ROW_1>
<LEFTPANEL_OFFER_ROW_2>Get 30% Discount</LEFTPANEL_OFFER_ROW_2>
<LEFTPANEL_OFFER_ROW_3>Pay using Visa Card</LEFTPANEL_OFFER_ROW_3>
<LEFTPANEL_OFFER_ROW_4>Sunday Special</LEFTPANEL_OFFER_ROW_4>
<LEFTPANEL_OFFER_ROW_5>Holiday Gift</LEFTPANEL_OFFER_ROW_5>
<LEFTPANEL_OFFER_ROW_6>Special Snacks</LEFTPANEL_OFFER_ROW_6>
<LEFTPANEL_OFFER_ROW_7>Offers on Cookies</LEFTPANEL_OFFER_ROW_7>
<LEFTPANEL_OFFER_ROW_8>Pay using Private Card</LEFTPANEL_OFFER_ROW_8>
<LEFTPANEL_OFFER_ROW_9>Sleepwell Beds</LEFTPANEL_OFFER_ROW_9>
<LEFTPANEL_OFFER_ROW_10>Get Pedigrees for Free</LEFTPANEL_OFFER_ROW_10>
<BUTTON_LABEL1>CANCEL</BUTTON_LABEL1>
<BUTTON_LABEL2>APPLY</BUTTON_LABEL2>
</TRANSACTION>
```

Response Packet

Field	Type	Value	Description
RESPONSE_TEXT	Character		Processor response text. Example: Operation SUCCESSFUL
RESULT	Character		Commonly TIP MODIFIED or DECLINED or CAPTURED. Example: OK
RESULT_CODE	Numeric	Expected result code: -1, 59001, 59006	This indicates the result code. Refer to Result/Error Codes for details.
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.
CUST_BUTTON_DATA	Character		Represents button selected information. Example: 3

Field	Type	Value	Description
CUST_NUMERIC_DATA	Numeric		This field will be sent to POS via unsolicited response, not via primary port. Contains numeric data selected. If Numeric Input is not entered and pressed OK, then another unsolicited response will be sent as "Numeric Data Input Skipped". Refer to Unsolicited Response to POS (If Numeric Input is not entered) for example below. Example: 1
LEFTPANEL_OFFER_ROW_DATA	Numeric		This field will be sent to POS via unsolicited response, not via primary port. Contains offer row data selected. If any of the Offer data is not selected and pressed OK, then another unsolicited response will be sent as "No Offer Selected". Refer to Unsolicited Response to POS (If Offer Data is not selected) for example below. Example: 2 3 6
AMOUNT_DATA	Numeric		This field will be sent to POS via unsolicited response, not via primary port. Contains charity selection. Example: 4
POS_RECON	Character		POS reconciliation field echoed back if sent in request. Example: RetailPOS1
COUNTER	Numeric		Echoes counter sent in the request. Example: 100

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>

Field	Type	Value	Description
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>Operation SUCCESSFUL</RESPONSE_TEXT>
<RESULT>OK</RESULT>
<RESULT_CODE>-1</RESULT_CODE>
<TERMINATION_STATUS>SUCCESS</TERMINATION_STATUS>
<COUNTER>59</COUNTER>
</RESPONSE>
```

Example - Unsolicited Response to POS IP and Port - Top Image and Middle Offer Data

```
Message Received: <?xml version="1.0"?>
<RESPONSE>
<RESPONSE_TEXT>INPUT FROM OFFER DATA</RESPONSE_TEXT>
<RESULT>OK</RESULT>
<RESULT_CODE>-1</RESULT_CODE>
<TERMINATION_STATUS>SUCCESS</TERMINATION_STATUS>
<LEFTPANEL_OFFER_ROW_DATA>2|3|6</LEFTPANEL_OFFER_ROW_DATA> //If 2, 3 and 6 are selected
</RESPONSE>
```

Example - Unsolicited Response to POS (If Offer Data is not selected)

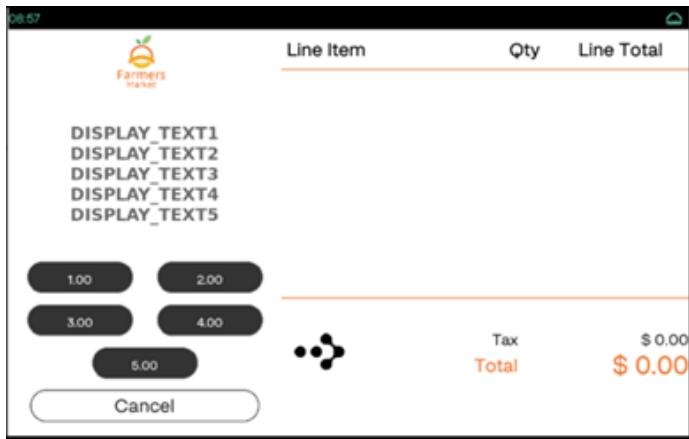
```
Message Received: <?xml version="1.0"?>
<RESPONSE>
<RESPONSE_TEXT>No Offer Selected</RESPONSE_TEXT>
<RESULT>OK</RESULT>
<RESULT_CODE>-1</RESULT_CODE>
<TERMINATION_STATUS>SUCCESS</TERMINATION_STATUS>
</RESPONSE>
```

Example - Unsolicited Response to POS (If Numeric Input is not entered)

```
Message Received: <?xml version="1.0"?>
<RESPONSE>
<RESPONSE_TEXT>Numeric Data Input Skipped</RESPONSE_TEXT>
<RESULT>OK</RESULT>
<RESULT_CODE>-1</RESULT_CODE>
<TERMINATION_STATUS>SUCCESS</TERMINATION_STATUS>
</RESPONSE>
```

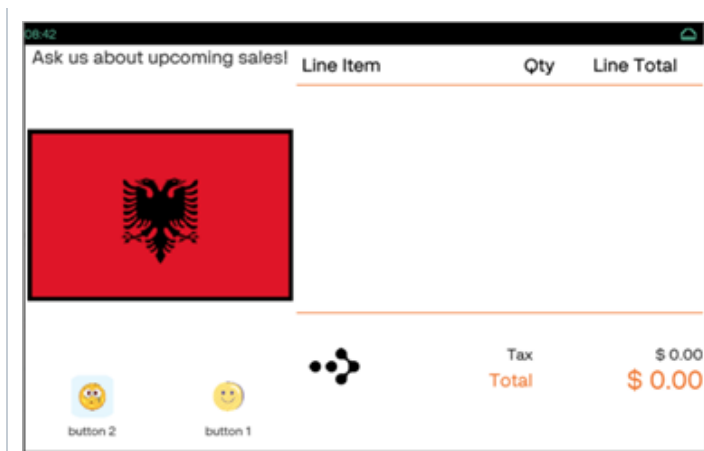
Display Left Panel Sample Categories

Display Left Panel - Charity

Display Screen	Sample Request
	<pre><TRANSACTION> <FUNCTION_TYPE>DEVICE</FUNCTION_TYPE> <COMMAND>DISPLAY_LEFTPANEL</COMMAND> <LEFTPANEL_IMG_TOP> /*some img data*/ </LEFTPANEL_IMG_TOP> <DISPLAY_TEXT1>DISPLAY_TEXT1</DISPLAY_TEXT1> <DISPLAY_TEXT2>DISPLAY_TEXT2</DISPLAY_TEXT2> <DISPLAY_TEXT3>DISPLAY_TEXT3</DISPLAY_TEXT3> <DISPLAY_TEXT4>DISPLAY_TEXT4</DISPLAY_TEXT4> <DISPLAY_TEXT5>DISPLAY_TEXT5</DISPLAY_TEXT5> <AMOUNT1>1.00</AMOUNT1> <AMOUNT2>2.00</AMOUNT2> <AMOUNT3>3.00</AMOUNT3> <AMOUNT4>4.00</AMOUNT4> <AMOUNT5>5.00</AMOUNT5> </TRANSACTION></pre>

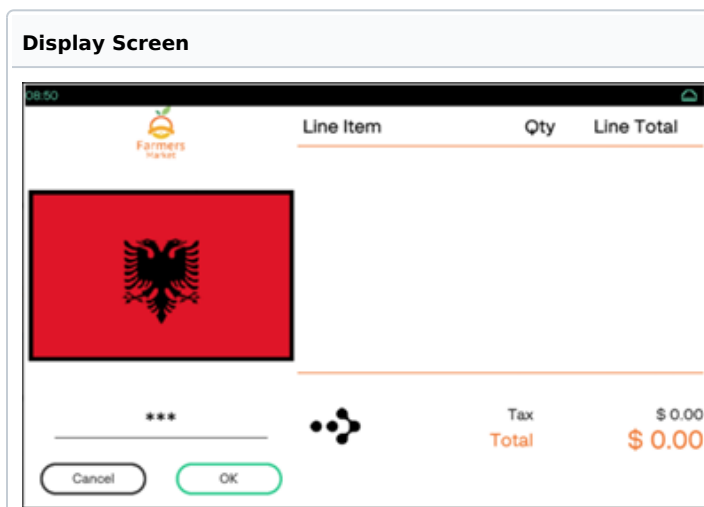
Display Left Panel - Custom Buttons

Display Screen	Sample Request



```
<TRANSACTION>
<FUNCTION_TYPE>DEVICE</FUNCTION_TYPE>
<COMMAND>DISPLAY_LEFTPANEL</COMMAND>
<LEFTPANEL_TEXT>Ask us about upcoming sales!</LEFTPANEL_TEXT>
<LEFTPANEL_IMG> /*some img data*/ </LEFTPANEL_IMG>
<REQUEST_BTNS>2</REQUEST_BTNS>
<BUTTON_LABEL1>button 1</BUTTON_LABEL1>
<BUTTON_LABEL2>button 2</BUTTON_LABEL2>
</TRANSACTION>
```

Display Left Panel - Numeric Input



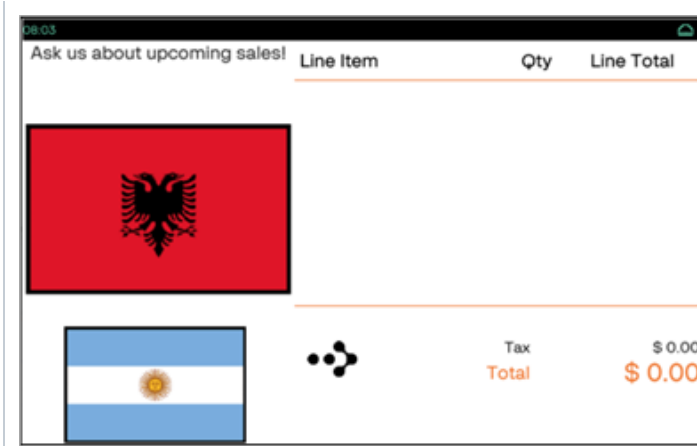
Sample Request

```
<TRANSACTION>
<FUNCTION_TYPE>DEVICE</FUNCTION_TYPE>
<COMMAND>DISPLAY_LEFTPANEL</COMMAND>
<LEFTPANEL_IMG_TOP> /*some img data*/ </LEFTPANEL_IMG_TOP>
<LEFTPANEL_IMG> /*some img data*/ </LEFTPANEL_IMG>
<REQUEST_NUMERIC_INPUT>TRUE</REQUEST_NUMERIC_INPUT>
</TRANSACTION>
```

Display Left Panel - No User Input



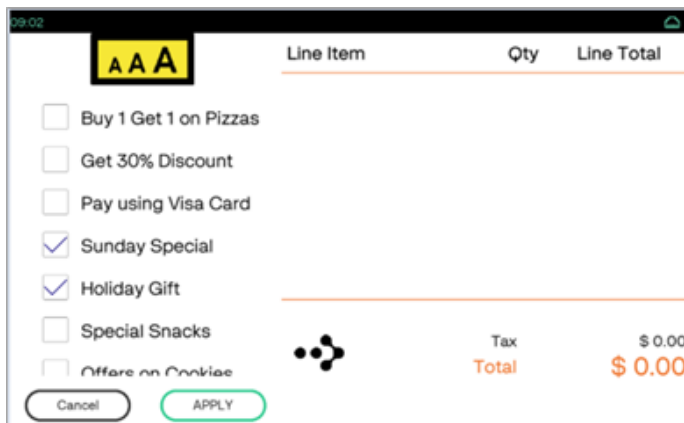
Sample Request



```
<TRANSACTION>
<FUNCTION_TYPE>DEVICE</FUNCTION_TYPE>
<COMMAND>DISPLAY_LEFTPANEL</COMMAND>
<LEFTPANEL_TEXT>Ask us about upcoming sales!</
LEFTPANEL_TEXT>
<LEFTPANEL_IMG> /* some img data*/</LEFTPANEL_IMG
>
<LEFTPANEL_IMG_BOTTOM> /* some img data*/ </
LEFTPANEL_IMG_BOTTOM>
</TRANSACTION>
```

Display Left Panel - Offers

Display Screen



Sample Request

```
<TRANSACTION>
<FUNCTION_TYPE>DEVICE</FUNCTION_TYPE>
<COMMAND>DISPLAY_LEFTPANEL</COMMAND>
<LEFTPANEL_IMG_TOP> /*some img data*/ </
LEFTPANEL_IMG_TOP>
<LEFTPANEL_OFFER_ROW_1>Buy 1 Get 1 on Pizzas</
LEFTPANEL_OFFER_ROW_1>
<LEFTPANEL_OFFER_ROW_2>Get 30% Discount</
LEFTPANEL_OFFER_ROW_2>
<LEFTPANEL_OFFER_ROW_3>Pay using Visa Card</
LEFTPANEL_OFFER_ROW_3>
<LEFTPANEL_OFFER_ROW_4>Sunday Special</
LEFTPANEL_OFFER_ROW_4>
<LEFTPANEL_OFFER_ROW_5>Holiday Gift</
LEFTPANEL_OFFER_ROW_5>
<LEFTPANEL_OFFER_ROW_6>Special Snacks</
LEFTPANEL_OFFER_ROW_6>
<LEFTPANEL_OFFER_ROW_7>Offers on Cookies</
LEFTPANEL_OFFER_ROW_7>
<LEFTPANEL_OFFER_ROW_8>Pay using Private Card</
LEFTPANEL_OFFER_ROW_8>
<LEFTPANEL_OFFER_ROW_9>Sleepwell Beds</
LEFTPANEL_OFFER_ROW_9>
<LEFTPANEL_OFFER_ROW_10>Get Pedigrees for Free</
LEFTPANEL_OFFER_ROW_10>
<BUTTON_LABEL1>CANCEL</BUTTON_LABEL1>
<BUTTON_LABEL2>APPLY</BUTTON_LABEL2>
</TRANSACTION>
```