



PrintAssist Parameter Spec Sheet



# PrintAssist Parameter Spec Sheet

Rev.2.0  
2017-08-31



Introduction	4
Overview	5
Spec	6
URL Scheme	6
Page size	7
Format	8
List of parameters (open)	8
List of parameters (encode-barcode)	10
Parameter	11
<b>x-success</b>	<b>11</b>
<b>printer</b>	<b>11</b>
<b>orientation</b>	<b>11</b>
<b>reverse</b>	<b>11</b>
<b>unit</b>	<b>12</b>
<b>width</b>	<b>12</b>
<b>height</b>	<b>12</b>
<b>paper</b>	<b>12</b>
<b>pages</b>	<b>17</b>
<b>copies</b>	<b>17</b>
<b>duplex</b>	<b>17</b>
<b>bordertype</b>	<b>17</b>
<b>papersource</b>	<b>17</b>
<b>quality</b>	<b>18</b>
<b>media</b>	<b>18</b>
<b>previewmode</b>	<b>22</b>
<b>separator</b>	<b>22</b>
<b>xoffset</b>	<b>22</b>
<b>yoffset</b>	<b>22</b>
<b>continuospaper</b>	<b>22</b>
<b>papercut</b>	<b>23</b>
<b>monochrome</b>	<b>23</b>
<b>autolength</b>	<b>23</b>
<b>scale</b>	<b>23</b>
<b>waitforprintcomplete</b>	<b>24</b>
<b>removepreview</b>	<b>24</b>
<b>rolto-errordiffusion</b>	<b>24</b>
<b>rolto-imageblocksize</b>	<b>24</b>
<b>rolto-imageoffset</b>	<b>24</b>
<b>buzzer</b>	<b>25</b>
<b>buzzer count</b>	<b>25</b>



<b>brothercustompaper</b>	<b>25</b>
<b>brotherdensity</b>	<b>25</b>
<b>autolengthbottom</b>	<b>25</b>
<b>topmargin</b>	<b>26</b>
<b>bottommargin</b>	<b>26</b>
<b>leftmargin</b>	<b>26</b>
<b>rightmargin</b>	<b>26</b>
<b>tapemargins</b>	<b>26</b>
<b>halfcut</b>	<b>27</b>
<b>drawer</b>	<b>27</b>
<b>speech</b>	<b>28</b>
<b>speechvoice</b>	<b>28</b>
<b>speechpitch</b>	<b>28</b>
<b>speechrate</b>	<b>28</b>
<b>speechinbackground</b>	<b>28</b>
<b>notification</b>	<b>29</b>
<b>notificationidentifier</b>	<b>29</b>
<b>notificationdate</b>	<b>29</b>
<b>notificationremove</b>	<b>29</b>
<b>notificationcallback</b>	<b>29</b>
<b>contentsserialnumber</b>	<b>30</b>
<b>printdata(identifier)</b>	<b>30</b>
<b>Command</b>	<b>31</b>
<b>1~</b>	<b>31</b>
<b>Command specs</b>	<b>32</b>
<b>string</b>	<b>33</b>
<b>&lt;&lt;&lt;Image&gt;&gt;&gt;</b>	<b>34</b>
<b>&lt;&lt;&lt;Line&gt;&gt;&gt;</b>	<b>34</b>
<b>&lt;&lt;&lt;Frame&gt;&gt;&gt;</b>	<b>35</b>
<b>&lt;&lt;&lt;Barcode&gt;&gt;&gt;</b>	<b>36</b>
<b>&lt;&lt;&lt;Object&gt;&gt;&gt;</b>	<b>37</b>
<b>Barcode-encode command</b>	<b>38</b>
<b>code</b>	<b>38</b>
<b>type</b>	<b>38</b>
<b>width</b>	<b>38</b>
<b>height</b>	<b>38</b>
<b>text</b>	<b>38</b>
<b>checkDigit</b>	<b>38</b>
<b>Input sample</b>	<b>39</b>
<b>Output sample</b>	<b>39</b>
<b>FileMaker script sample</b>	<b>39</b>



<b>URL Data</b>	<b>40</b>
Barcode encode sample	41
<b>FileMaker script sample</b>	<b>41</b>
Appendix A	42
<b>iOS 9 font list</b>	<b>42</b>
Appendix B	45
<b>iOS 9 Speech Voices</b>	<b>45</b>
<b>iOS 10 Speech Voices</b>	<b>46</b>
Revision history	48



## Introduction

This document contains information on PrintAssist parameter specs.

Information on this document is compatible with PrintAssist and PrintAssist LITE Version 1.2.0

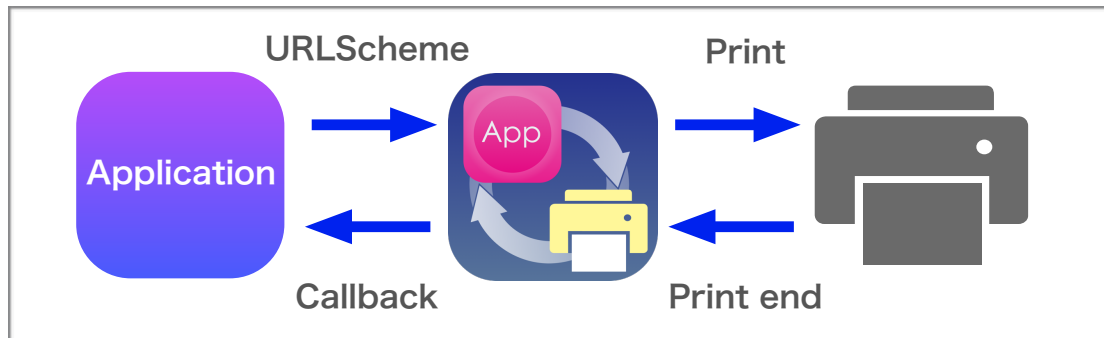


## Overview

PrintAssist renders data transferred via URL scheme and prints it out.

You can print barcodes and images as well.

If you have a callback URL specified, it will return to the original application after printing.



By registering printers to PrintAssist, you can choose which printer to print from.

You can automatically detect and register printer using Bonjour or manually set it up using an IP address.

You can print out from printers connected in the same LAN network as the iOS device.

Download PrintAssist or PrintAssist LITE from the AppStore.

You must input PrintAssist command to an app with URL scheme such as FileMaker,LANSA LongRange.

PrintAssist

<https://itunes.apple.com/us/app/printassist/id1059142601?mt=8>

PrintAssist LITE

<https://itunes.apple.com/us/app/printassist-lite/id1059142742?mt=8>

If you are printing more than 5 items or the document contains an object, there will be watermarks if you are using PrintAssist Lite.



## Spec

Item	Detail
Compatible OS	iOS7.0 or later
Compatible device	iPhone, iPad, iPadPro, and iPod touch
Compatible printer Wi-Fi	Printers with AirPrint, ESC/P-R, PCL3GUI, PostScript, ESC/Page, ESC/Page-Color, PCL, LIPS, BJNP(*1), ESC/POS, Brother Raster mode, iP100, CP910, or Mac OS X communal printer (*1), Rolto(*2)
Compatible printer Bluetooth(MFi)	Epson TM-P80, TM-P20, TM-P60II, TM-m30, TM-m10, TM-t88V, TM-T88V, TM-T70II, TM-T20II Star SM-S210i series, SM-T300i series, SM-T400i series, mPOP Brother QL-820NWB, RJ-3150Ai, RJ-3050Ai, RJ-2150, RJ-2050, RJ-4030Ai, PF763MFi, MW-260MFi, MW-145MFi

(\*1)BJNP is a model compatible with Canon Easy Photo-Print.

(\*2)Rolto is a screen printer from King Jim co., ltd.

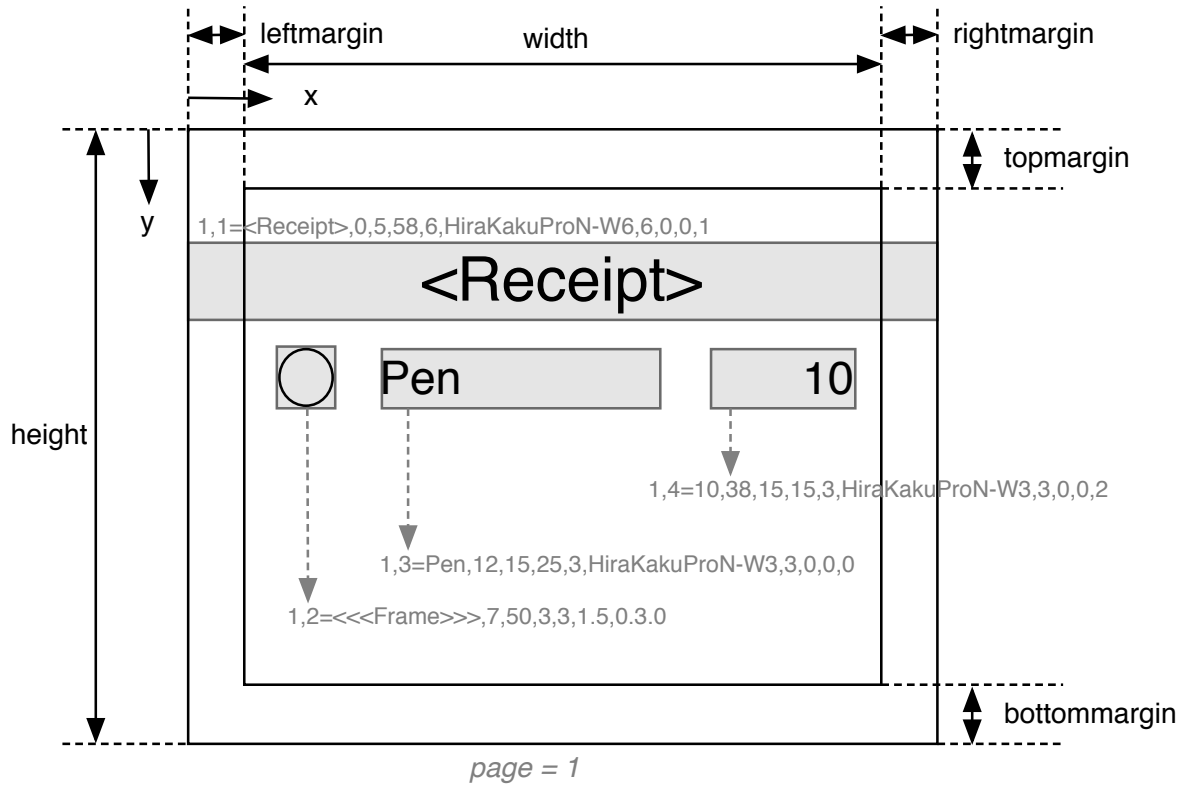
## URL Scheme

Name	Detail
printassist-x-callback-url://	URL Scheme
x-callback-url/open	Print
x-callback-url/barcode-encode	Create barcode
x-callback-url/speech	
x-callback-url/notification	

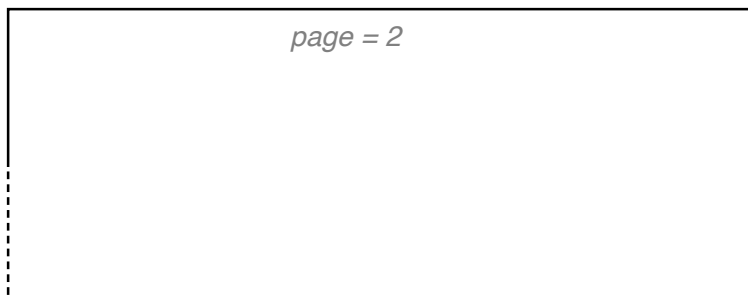
To read aloud at the same time as printing, when notifying please specify x - callback - url / open and set speech, notification in print parameters respectively.



# Page size



page = 1



page = 2





## Format

This is the parameter format for URL.

From “printassist-x-callback-url://.....”

<Name of variable>= <Value>&<Name of variable>= <Value>& . . .

<p>Example of variable name</p> <p>1,2,3,4...</p> <p>printer</p> <p>orientation</p> <p>...</p>	<p>Example of value</p> <p>&lt;&lt;&lt;Image&gt;&gt;&gt;</p> <p>&lt;&lt;&lt;Frame&gt;&gt;&gt;</p> <p>&lt;&lt;&lt;Line&gt;&gt;&gt;</p> <p>...</p>
--	--

## List of parameters (open)

Variable	Value
<a href="#">x-success</a>	Callback URL
<a href="#">printer</a>	Name of printer
<a href="#">orientation</a>	Orientation
<a href="#">reverse</a>	Flip
<a href="#">unit</a>	Unit
<a href="#">width</a>	Width
<a href="#">height</a>	Height
<a href="#">paper</a>	Paper size
<a href="#">pages</a>	Page number
<a href="#">copies</a>	Number of copies
<a href="#">duplex</a>	Double sided
<a href="#">bordertype</a>	Edge
<a href="#">papersource</a>	Paper feeding device
<a href="#">quality</a>	Print quality
<a href="#">media</a>	Type of paper
<a href="#">previewmode</a>	Preview mode
<a href="#">separator</a>	Separator
<a href="#">xoffset</a>	Offset in the X direction



<a href="#"><u>yoffset</u></a>	Offset in the Y direction
<a href="#"><u>continuouspaper</u></a>	Continuous paper
<a href="#"><u>papercut</u></a>	Papercut
<a href="#"><u>monochrome</u></a>	Black & white print mode
<a href="#"><u>autolengh</u></a>	Automatically adjust length of paper
<a href="#"><u>scale</u></a>	Scale
<a href="#"><u>waitforprintcomplete</u></a>	Callback timing
<a href="#"><u>removepreview</u></a>	Specify preview action after print
<a href="#"><u>rolto-errordiffusion</u></a>	How to set binarize (For Rolto)
<a href="#"><u>rolto-imageblocksize</u></a>	Compatible block sizes for binarization (For Rolto)
<a href="#"><u>rolto-imageoffset</u></a>	Compatible offset for binarization (For Rolto)
<a href="#"><u>buzzer</u></a>	Buzzer when the print finishes (Only for ESC/POS and other compatible printers)
<a href="#"><u>buzzer count</u></a>	Number of buzzer beeps (Only for ESC/POS and other compatible printers)
<a href="#"><u>brothercustompaper</u></a>	Paper size (For brother)
<a href="#"><u>brotherdensity</u></a>	Density (For brother)
<a href="#"><u>autolengthbottom</u></a>	Margin(autolength mode)
<a href="#"><u>topmargin</u></a>	Top margin
<a href="#"><u>bottommargin</u></a>	Top margin
<a href="#"><u>leftmargin</u></a>	Left margin
<a href="#"><u>rightmargin</u></a>	Right margin
<a href="#"><u>tapemargins</u></a>	Left and Right margin (Only for Brother PT-P950NW,PT-9700PC,PT-9800PCN)
<a href="#"><u>halfcut</u></a>	Halfcut (Only for Brother PT-P950NW,PT-9700PC,PT-9800PCN)
<a href="#"><u>drawer</u></a>	Open the drawer
<a href="#"><u>speech</u></a>	Speech
<a href="#"><u>speechvoice</u></a>	Speech Voices
<a href="#"><u>speechpitch</u></a>	Speech Pitch
<a href="#"><u>speechrate</u></a>	Speech Speed
<a href="#"><u>speechinbackground</u></a>	Background
<a href="#"><u>notification</u></a>	Callback message (string)



<a href="#"><u>notificationidentifier</u></a>	Callback identifier
<a href="#"><u>notificationdate</u></a>	Callback Date and time. (Set in time zone)
<a href="#"><u>notificationremove</u></a>	Delete registered notification
<a href="#"><u>notificationcallback</u></a>	A URL scheme that recalls notifications when tapped
<a href="#"><u>contentsserialnumber</u></a>	Compatible with old version
<a href="#"><u>printdata(identifier)</u></a>	Print data for multiple printers
<a href="#"><u>1~</u></a>	Draw command

## List of parameters (encode-barcode)

Variable	Value
<a href="#"><u>code</u></a>	Code
<a href="#"><u>type</u></a>	Types of barcode
<a href="#"><u>width</u></a>	Width
<a href="#"><u>height</u></a>	Height
<a href="#"><u>text</u></a>	Text display
<a href="#"><u>checkDigit</u></a>	checkDigit



## Parameter

### x-success

---

Specify callback URL.

Specify the callback URL scheme after the process has been completed.

Example: Specify “x-success=fmp://\$” for FileMaker.

### printer

---

Specify the printer.

Tap “Select printer” on the top left after launching PrintAssist.

If there are no printers registered, look for one in the “Nearby printers” and register a printer.

Enter the name shown under “printer name” in printer settings into printer=”xxxx”.

You must be accurate when entering the name, including spaces.

If the printer is not compatible with AirPrint, you must check and see if the printer is compatible with PrintAssist. You can check using “Prime Print” or “Prime Print LITE” from our print app.

### orientation

---

Specify orientation. You can specify the parameters shown below.

If you do not specify a value, it will be set to 0: Portrait.

- 0 : Portrait
- 1 : Landscape

### reverse

---

Choose the print direction. You can specify parameters shown below.

If you do not specify a value, it will be set to 0: Do not flip

- 0 : Do not flip
- 1 : Flip 180°



## unit

---

Numerically set units. You can specify the parameters shown below.

If you do not specify a value, it will be set to 0: mm

- 0 : mm
- 1 : inch
- 2 : point

## width

---

Set the width of the object using numerical values.

Units specified in the unit's parameter will be used.

## height

---

Specify the height of the object using numerical values.

Units specified in the unit's parameter will be used.

## paper

---

Specify the paper size code using numerical values.

Example: For A4, enter "1".

Value	Size	Maker/Model name	
1	A4		
2	Letter		
3	A3		
4	A5		
5	B4		
6	B5		
7	HalfLetter		
8	Legal		
9	L		
10	2L		



11	KG		
12	PostCard		
13	8x10		
10000	Roll_max_80x1000mm	brother RJ-3050/3150	
10001	Roll_max_62x1000mm	brother QL-720NW	
10002	Roll_max_63x1000mm	brother TD-2130N/2130NSA	
10003	Reservation		
10004	brother_label_30x30mm	brother TD-2130N/2130NSA	RD-U09J1
10005	brother_label_40x40mm	brother TD-2130N/2130NSA	RD-U08J1
10006	brother_label_40x50mm	brother TD-2130N/2130NSA	RD-U07J1
10007	brother_label_40x60mm	brother TD-2130N/2130NSA	RD-U06J1
10008	brother_label_30x50mm	brother TD-2130N/2130NSA	RD-U05J1
10009	brother_label_60x60mm	brother TD-2130N/2130NSA	RD-U04J1
10010	Roll_max_58x1000mm	ESC/POS	
10011	brother_label_29x90m	brother QL-720NW	
10012	brother_label_38x90mm		
10013	brother_label_29x62mm		
10014	brother_label_62x100mm		
10015	brother_label_17x54mm		
10016	brother_label_17x87mm		
10017	brother_label_58x58mm		
10018	brother_label_29x42mm		
10019	brother_label_29x52mm		
10020	brother_label_23x23mm		
10021	brother_label_39x48mm		
10022	brother_label_12x12mm		
10023	brother_label_24x24mm		
10024	brother_label_50x85mm	brother RJ-3050/3150	
10025	brother_label_60x92mm	brother RJ-3050/3150	
10026	brother_label_44x76mm	brother RJ-3050/3150	
10100	Roll_max_80x50mm	brother RJ-3050/3150	
10101	Roll_max_80x100mm	brother RJ-3050/3150	
10102	Roll_max_80x150mm	brother RJ-3050/3150	



10103	Roll_max_80x200mm	brother RJ-3050/3150	
10200	Roll_max_62x50mm	brother QL-720NW	
10201	Roll_max_62x100mm	brother QL-720NW	
10202	Roll_max_62x150mm	brother QL-720NW	
10203	Roll_max_62x200mm	brother QL-720NW	
10204	Roll_max_62x250mm	brother QL-720NW	
10205	Roll_max_62x300mm	brother QL-720NW	
10300	Roll_max_58x50mm	brother TD-2130N/2130NSA	
10301	Roll_max_58x100mm	brother TD-2130N/2130NSA	
10302	Roll_max_58x150mm	brother TD-2130N/2130NSA	
10303	Roll_max_58x200mm	brother TD-2130N/2130NSA	
10304	Roll_max_58x250mm	brother TD-2130N/2130NSA	
10305	Roll_max_58x300mm	brother TD-2130N/2130NSA	
10400	brother_A4_CutSheet	brother PJ-773	
10401	brother_A4_Roll	brother PJ-773	
10402	brother_A4_PerforatedRoll	brother PJ-773	
10403	brother_A4_PerforatedRollRetract	brother PJ-773	
10404	brother_LETTER_CutSheet	brother PJ-773	
10405	brother_LETTER_Roll	brother PJ-773	
10406	brother_LETTER_PerforatedRoll	brother PJ-773	
10407	brother_LETTER_PerforatedRollRetract	brother PJ-773	
10408	brother_LEGAL_CutSheet	brother PJ-773	
10409	brother_LEGAL_Roll	brother PJ-773	
10410	brother_LEGAL_PerforatedRoll	brother PJ-773	
10411	brother_LEGAL_PerforatedRollRetract	brother PJ-773	
10412	brother_Infinite	brother PJ-773	
10413	brother_A5_CutSheet	brother PJ-773	
10414	brother_A5_LANDSCAPE_CutSheet	brother PJ-773	
10415	brother_CUSTOM	brother PJ-773	
10416	brother_A7	brother MW-145MF	
10417	brother_A6	brother MW-260MF	
10418	brother_RJ2050_50mm	brother RJ-2050	



10419	brother_RJ2050_58mm	brother RJ-2050	
10420	brother_RJ2150_50mm	brother RJ-2150	
10421	brother_RJ2150_58mm	brother RJ-2150	
10422	brother_RJ2150_50x85mm	brother RJ-2150	
10423	brother_RJ2150_51x26mm	brother RJ-2150	
10424	brother_RJ2150_55x40mm	brother RJ-2150	
10425	brother_RJ4030_58mm	brother RJ-4030	
10426	brother_RJ4030_102mm	brother RJ-4030	
10427	brother_RJ4030_60x92mm	brother RJ-4030	
10428	brother_RJ4030_80x115mm	brother RJ-4030	
10429	brother_RJ4030_102x50mm	brother RJ-4030	
10430	brother_RJ4030_102x152mm	brother RJ-4030	
10431	brother_RJ4030_115x80mm	brother RJ-4030	
10432	brother_RJ4030_50x85mm	brother RJ-4030	
10433	brother_RJ3000_50mm	brother RJ-3000 series	
10434	brother_RJ3000_58mm	brother RJ-3000 series	
10435	brother_RJ3000_76mm	brother RJ-3000 series	
10436	brother_RJ3000_80mm	brother RJ-3000 series	
10437	brother_QL720_12mm	brother QL series	
10438	brother_QL720_29mm	brother QL series	
10439	brother_QL720_38mm	brother QL series	
10440	brother_QL720_50mm	brother QL series	
10441	brother_QL720_54mm	brother QL series	
10442	brother_QL720_62mm	brother QL series	
10443	reserved		
10444	brother_label_60x86mm_60x86mm	brother QL series	
10445	brother_label_54x29mm_54x29mm	brother QL series	
10446	brother_TD2130_57mm	brother TD-2130N/2130NSA	
10447	brother_TD2130_58mm	brother TD-2130N/2130NSA	
10448	brother_PT9700_3mm		
10449	brother_PT9700_6mm		
10450	brother_PT9700_9mm		
10451	brother_PT9700_12mm		





10451	brother_PT9700_12mm		
10452	brother_PT9700_18mm		
10453	brother_PT9700_24mm		
10454	brother_PT9700_36mm		
10455	brother_PT950_3mm		
10456	brother_PT950_6mm		
10457	brother_PT950_9mm		
10458	brother_PT950_12mm		
10459	brother_PT950_18mm		
10460	brother_PT950_24mm		
10461	brother_PT950_36mm		
10462	brother_RJ3050_50mm	Bluetooth専用	
10463	brother_RJ3050_58mm	Bluetooth専用	
10464	brother_RJ3050_76mm	Bluetooth専用	
10465	brother_RJ3050_80mm	Bluetooth専用	
10466	brother_RJ3150_50mm	Bluetooth専用	
10467	brother_RJ3150_58mm	Bluetooth専用	
10468	brother_RJ3150_76mm	Bluetooth専用	
10469	brother_RJ3150_80mm	Bluetooth専用	
10470	brother_RJ3150_50x85mm	Bluetooth専用	
10471	brother_RJ3150_60x92mm	Bluetooth専用	
10472	brother_RJ3150_76x44mm	Bluetooth専用	
10473	Brother_RJ3150_55x40mm	Bluetooth専用	
20000	kuronekoyamato	ESC/P kuronekoyamato	
20001	sagawa	ESC/P sagawa	
-1	variable length	Only for AirPrint,ESC/P,ESC/POS	It determines the paper size in width and height.



## pages

---

Specify number of pages using numerical values. If you do not specify a value, it will be set to 1 page.

## copies

---

Specify number of copies using numerical values. If you do not specify a value, it will be set to 1 copy.

## duplex

---

Adjust double-sided print settings using numerical values. You can specify the parameters shown below.

If you do not specify a value, it will be set to 1: No double-sided printing.

- 1 : No double-sided printing
- 2 : Long edge binding
- 3 : Short edge binding

## bordertype

---

Enable or disable edges using numerical values. You can specify the parameters shown below.

If you do not specify a value, it will be set to 1: Enable edges.

- 1 : Enable edges
- 2 : Disable edges

## papersource

---

Specify paper feeding device using numerical values. You can specify the parameters shown below.

If you do not specify a value, it will be set to 1: Tray 1.

- 1 : Tray 1
- 2 : Tray 2
- 3 : Tray 3



## quality

Specify print quality using numerical values. You can specify the parameters shown below.

If you do not specify a value, it will be set to 2: Standard.

- 1 : Fast
- 2 : Standard
- 3 : High quality

## media

Specify paper type code using numerical values. You can specify the parameters shown below.

If you do not specify a value, it will be set to 1: Normal paper.

- 1 : Normal paper
- 62 : Fine
- 63 : Photo

If you wish to use other manufacture papers, please specify the values shown in the chart below.

Example: For Epson photo paper, specify the value, “5”.

Value	Paper type	Maker
1	<b>Plain paper</b>	
2	Photo Quality Ink Jet Paper	EPSON
3	Premium Presentation Paper Matte	EPSON
4	Photo Paper	EPSON
5	Premium Photo Paper Glossy	EPSON
6	Premium Photo Paper Semi-Gloss	EPSON
7	Premium Luster Photo Paper	EPSON
8	Glossy Paper – Photo Weight	EPSON
9	Recycled Paper Postcard	EPSON
10	Ink Jet Postcard	EPSON
11	Ultra Premium Photo Paper Glossy	EPSON
12	Premium Glossy Photo Paper	EPSON
13	Glossy Postcard	EPSON
14	Photo Paper Glossy	EPSON
15	Epson Photo	EPSON
16	HP Bright White Paper	HP



17	HP Premium Paper	HP
18	HP Color Inkjet paper	HP
19	HP Premium Presentation Paper	HP
20	Other inkjet papers	HP
21	HP Premium Plus Photo Papers	HP
22	HP Premium Photo Papers	HP
23	HP Advanced Photo Papers	HP
24	HP Everyday Photo Paper, Semi-gloss	HP
25	HP Everyday Photo Paper, Matte	HP
26	Other photo papers	HP
27	HP Photo Greeting Card	HP
28	Other specialty papers	HP
29	Glossy Greeting Card	HP
30	Matte Greeting Card	HP
31	HP Brochure & Flyer Paper, Matte	HP
32	HP Brochure Paper 180g, Glossy	HP
33	Other Glossy Brochure	HP
34	Other Matte Brochure	HP
35	Plain hagaki	HP
36	Inkjet hagaki	HP
37	Photo Hagaki	HP
38	HP Tri-fold Brochure Paper, Glossy	HP
39	HP Tri-fold Brochure Paper, Matte	HP
40	Inkjet Scrapbook Paper, Photo	HP
41	Inkjet Scrapbook Paper, Matte	HP
42	Photo Paper Pro	Canon
43	Photo Paper Plus Glossy	Canon
44	Photo Paper Plus Glossy 2	Canon
45	Photo Paper Plus Semi-gloss	Canon
46	Matte Photo Paper	Canon
47	Glossy Photo Paper	Canon
48	High Resolution Paper	Canon
49	Inkjet Postcard	Canon



50	Postcard	Canon
51	Envelope	Canon
52	Photo Paper Other	Canon
53	Auto	AirPrint
54	Photo	AirPrint
55	Photo Glossy Paper	AirPrint
56	Photo High Gloss Paper	AirPrint
57	Photo Matte Paper	AirPrint
58	Inkjet Paper	AirPrint
59	Labels	AirPrint
60	Envelope	AirPrint
61	Reservation	
62	<b>Fine</b>	
63	<b>Photo</b>	
64	Reservation	
65	Film	AirPrint
66	Card Stock	AirPrint
67	CD – DVD	AirPrint
68	Photo Advanced Paper	AirPrint
69	Brochure Glossy Paper	AirPrint
70	Brochure Matte Paper	AirPrint
71	Everyday Glossy Paper	AirPrint
72	Everyday Matte Paper	AirPrint
73	Inkjet Premium Paper	AirPrint
74	Photo Premium Paper	AirPrint
75	Continuous Paper	AirPrint
76	Continuous Paper – Long Edge	AirPrint
77	Continuous Paper – Short Edge	AirPrint
78	Envelope – Plain	AirPrint
79	Envelope – Window	AirPrint
80	Tabbed Paper – Full Cut	AirPrint
81	Photo Paper Plus Glossy II	AirPrint
82	Photo Paper Pro Platinum	AirPrint



83	Form – Multi-layer	AirPrint
84	Form – Multi-part	AirPrint
85	Photo – Film	AirPrint
86	Photo Satin Paper	AirPrint
87	Photo Semi-gloss Paper	AirPrint
88	Tabbed Paper – Pre-cut	AirPrint
89	Roll	AirPrint
90	Screen	AirPrint
91	Paged Screen	AirPrint
92	Bond Paper	AirPrint
93	Coated Paper	AirPrint
94	Color Paper	AirPrint
95	Fine Art Paper	AirPrint
96	Heavyweight Paper	AirPrint
97	Letterhead	AirPrint
98	Lightweight Paper	AirPrint
99	Preprinted Paper	AirPrint
100	Three Hole Punched Paper	AirPrint
101	Tabbed Paper	AirPrint
102	Transparency	AirPrint
103	Photo Paper Plus Glossy II	Canon
104	Photo Paper Pro II	Canon
105	Photo Paper Pro Platinum	Canon
106	Photo Paper Plus Semi-gloss	Canon
107	Photo Paper	Canon



## previewmode

---

Preview. This will not print anything.

If you do not specify a value, it will be set to 0: No preview.

- 0 : No preview, print immediately
- 1 : Preview
- 2 : Preview + command display

## separator

---

Specify separators in strings.

It will be set to “,” (comma) by default.

Example: separator = ,

## xoffset

---

Specify offset in the X direction using numerical values.

Units specified in the unit's parameter will be used.

## yoffset

---

Specify offset in the Y direction using numerical values.

Units specified in the units parameter will be used.

## continuospaper

---

Specify if using continuous paper. You can specify the parameters shown below.

If you do not specify a value, it will be set to 0: Cut paper

- 0 : Cut paper
- 1 : Continuous paper



## papercut

---

Specify papercut. You can specify the parameters shown below.

If you do not specify a value, it will be set to 0: No cut.

- 0 : No cut
- 1 : Cut (Only for ESC/POS)

## monochrome

---

Specify black & white print settings.

You can use this on black & white printers with ESC/P、ESC/POS、 and AirPrint.

If you do not specify a value, it will be set to 0.

- 0 : ESC/P,ESC/POS : Error diffusion, AirPrint : Binarization by printer
- 1 : Black & White

## autolength

---

Automatically adjust the length of the paper.

You can use this with ESC/POS.

After the vertical print data is finished, the printing process will be terminated.

This is convenient when printing things with different lengths such as receipts.

If you do not specify a value, it will be set to 0: Fixed length.

- 0 : Fixed length
- 1 : Automatic length

## scale

---

Automatically adjust the length of the paper.

Set the scale. Specify using decimal points.

If you do not specify a value, it will be set to 1.





## waitforprintcomplete

---

Specify action to return to callback.

If you do not specify a value, it will be set to 0: Return immediately.

- 0 : Return immediately if x-callback is set
- 1 : Stay in PrintAssist until printing is finished or transmission is completed.

## removepreview

---

Delete preview after printing.

If you do not specify a value it will be set to 0: Do not delete preview after printing.

- 0 : Do not delete preview after printing.
- 1 : Delete preview after printing.

## rolto-errordiffusion

---

Specify binarization method using numerical values.

If you do not specify a value, it will be set to 1: Error diffusion.

- 0:Adaptive binarization
- 1:Error diffusion

## rolto-imageblocksize

---

Specify block size for adaptive binarization using numerical values.

If you do not specify a value it will be set to 0.79.

Range : 0.0~1.0

## rolto-imageoffset

---

Specify offset value for adaptive binarization.

If you do not specify a value it will be set to 0.05.

Range : 0.0~1.0



## buzzer

---

Enable/disable buzzer after printing using numerical values.

If you do not specify a value, there will be no buzzer.

The range varies by the type of printer. (Refer to ESC/POS command reference)

Example

n : Pattern

1 : Pattern A

2 : Pattern B

3 : Pattern C

4 : Pattern D

5 : Pattern E

6 : Error buzzer pattern

7 : No paper pattern

## buzzer count

---

Set the number of beeps for the buzzer.

The settings range varies by the type of printer. (ESC/POS command reference)

## brothercustompaper

---

Specify name of paper size file in strings.

The paper size definition file is stored in iTunes file sharing in PrintAssist.

## brotherdensity

---

Specify density using numerical values.

Only for brother PJ/RJ series.

PJ : 0 ~ 10

RJ : -5 ~ 5

## autolengthbottom

---

In autolength mode, specify the margin to be added.

If you do not specify a value, it will be set to 0.



## topmargin

---

Specify top margin using numerical values.

If you do not specify a value, it will be set to 5mm.

## bottommargin

---

Specify bottom margin using numerical values.

If you do not specify a value, it will be set to 5mm.

## leftmargin

---

Specify left margin using numerical values.

If you do not specify a value, it will be set to 5mm.

## rightmargin

---

Specify right margin using numerical values.

If you do not specify a value, it will be set to 5mm.

## tapemargins

---

Only for Brother PT-P950NW、PT-9700PC、PT-9800PCN.

Specify left and right margin using numerical values.

Range : 1mm~127mm

If you do not specify a value, it will be set to 1mm.

The minimum margin when not precutting should be 27 mm or more.



## halfcut

---

Only for Brother PT-P950NW、PT-9700PC、PT-9800PCN.

Enable or disable halfcut using numerical values. You can specify the parameters shown below.

If you do not specify a value, it will be set to 0: Disable halfcut.

1 : Enable halfcut

0 : Disable halfcut

## drawer

---

Open the drawer.

You can use this with ESC/POS,Epson Bluetooth model,Star Bluetooth model.

• ESC/POS

n1                    0 : 2 Pin  
                         1 : 5 Pin  
n2 Pulse width    : n2 x 100mSec

• Epson Bluetooth model

n1                    0 : 2 Pin  
                         1 : 5 Pin  
n2 Pulse width    0 : 100mSec  
                         1 : 200mSec  
                         2 : 300mSec  
                         3 : 400mSec  
                         4 : 500mSec

• Star Bluetooth model

0 : 2 Pin  
1 : 1 Pin



## speech

---

The text to be spoken in the utterance.

## speechvoice

---

The voice used to speak the utterance. (Specify name of voice of the font installed in iOS)

Refer to Appendix B Voice List

reference : Appendix B

## speechpitch

---

The baseline pitch at which the utterance will be spoken.

If you do not specify a value, it will be set to 0.5.

Range : 0.0 ~1.0

## speechrate

---

The rate at which the utterance will be spoken.

If you do not specify a value, it will be set to 0.5.

Range : 0.0 ~1.0

## speechinbackground

---

I will read it even if I go to the background.

If you do not specify a value, it will be set to 0.

0 : Do not read it

1 : To read

```
ex)
"speech=" & GetAsURLEncoded( "I will read this part" ) & "&" &
"speechvoice=Kyoko&" &
"speechpitch=1.0&" &
"speechrate=0.5&" &
"speechinbackground=0&" &
```



## notification

---

Specify callback message (string)

## notificationidentifier

---

Specify callback identifier.

## notificationdate

---

Specify callback Date and time. (Set in time zone)

yyyy/MM/dd HH:mm:ss

## notificationremove

---

Delete registered notification.

“all” : Delete all registered notifications

“1” : Delete one. (Specify the identifier when registering in notificationidentifier.)

## notificationcallback

---

A URL scheme that recalls notifications when tapped.

ex) [FMP://192.168.10.0/Clients.fmp12?  
script=ListClients&param=TopClients&\\$NumberToList=10](fmp://192.168.10.0/Clients.fmp12?script=ListClients&param=TopClients&$NumberToList=10)

```
ex)
"printassist-x-callback-url://x-callback-url/notification?x-success=fmp://$/"
& "&" &
"notification=" & GetAsURLEncoded ( "It is a notification from MyApp" ) & "&" &
"notificationidentifier=" & GetAsURLEncoded ( "MyApp-001" ) & "&" &
"notificationdate=" & GetAsURLEncoded ( "2017/03/17 17:00:00" ) & "&" &
"notificationcallback=" & GetAsURLEncoded ( "fmp://$/" ) & "&" &
""
```



## contentsserialnumber

---

Specify by numerical value whether to specify the content number specification method to operate compatible with the old version (Ver 2.2.9 or earlier).

If you do not specify a value, it will be set to 0: No compatible.

1 : It does work compatible with old version

(When the content number becomes discontinuous the process ends. Operate the old version)

0 : It does not work compatible with old version

## printdata(identifier)

---

Specify URL encoded print parameters.

You can use this parameter to print from multiple printers simultaneously.

Specify the string of your choice in the (identifier) part of “printdata(identifier)” to specify multiple print data.

Example)

printdata1=<Print data from printer A>

printdata2=<Print data from printer B>

Example when using FileMaker

(※1) Specify the name of the printer registered to PrintAssist in "printer="



# Command

1~

Specify parameters from 1 to display draw command.

Refer to the command specs for more details on command.

If there are 2 or more pages, specify the values as shown below.

Page #, Parameter

Example)

1,1=<Command>

1,2=<Command>

2,1=<Command>

2,2=<Command>

```

"printassist-x-callback-url://x-callback-url/open?" &
"x-success=fmp://$/&" &

"printdata1=" &
GetAsURLEncoded (
"printer=PRINTER-A&" & // (*1)
"orientation=0&" &
"unit=0&" &
:
"1=合計,8,10,20,5,HiraKakuProN-W6,5,0,0,0&" &
:
)
& "&" &
"printdata2=" &
GetAsURLEncoded (
"printer=PRINTER-B&" & // (*1)
"orientation=0&" &
"unit=0&" &
:
"1=合計,8,10,20,5,HiraKakuProN-W6,5,0,0,0&" &
:
)

```

The print parameters in the command will be separated by the separator strings.





## Command specs

Command	
<u>string</u>	,x,y,width, height, font, size, color, underline, align
<u>&lt;&lt;&lt;Image&gt;&gt;&gt;</u>	,x,y,height,name
<u>&lt;&lt;&lt;Line&gt;&gt;&gt;</u>	,x,y,x2,y2,lineWidth,color
<u>&lt;&lt;&lt;Frame&gt;&gt;&gt;</u>	,x,y,width,height,corner,lineWidth,color
<u>&lt;&lt;&lt;Barcode&gt;&gt;&gt;</u>	,x,y,width,height,type,code,,text,checkDigit
<u>&lt;&lt;&lt;object&gt;&gt;&gt;</u>	,x,y,width,height,data



## string

---

Draw character strings.

x : X axis

y : Y axis

width : Width of object

height : Height of object

font : Font name (Specify name of PostScript of the font installed in iOS)

Refer to Appendix A Font List

size : Font size (Unit specified in the unit parameter will be used)

color : Specify color

Gray-scale : 0.0~1.0

Color : #XXXXXX (16 color values)

underline : Type of underline

0 : None

1 : 1 line

2 : Bold line

9 : 2 lines

align : Text placement

0 : Left

1 : Center

2 : Right



## <<<Image>>>

---

Draw an image

x : X axis

y : Y axis

height : Height of object. The width will be adjusted automatically using aspect ratio.

name : Name of image file

## <<<Line>>>

---

Draw a line.

x : X axis

y : Y axis

x2 : X2 axis

y2 : Y2 axis

lineWidth : Line width

color : Specify colors

Gray scale : 0.0~1.0

Color : #XXXXXX (16 color values)



## <<<Frame>>>

---

Draw a frame

x : X axis

y : Y axis

width : Width of object

height : Height of object

corner : Corner radius

lineWidth : Line width

color : Specify colors

Gray Scale : 0.0~1.0

Color : #XXXXXX (16 color values)



## <<<Barcode>>>

---

Draw a barcode

x : X axis

y : Y axis

width : Width of object

height : Height of object

type : Type of barcode

1 : QRCode

2 : JAN13/EAN13

3 : JAN8/EAN8

4 : NW7

5 : UPCA

6 : TF

7 : CODE39

8 : CODE128

9 : Reservation

10 : PDF417

11 : AztecCode

12 : DataMatrix

code : Data

text : Show number

0 : Show number

1 : Show number

checkDigit : Add a check digit.Only for CODE39.

0 : Enable

1 : Disable



There are limitations as shown below.

Type	Number of characters	Check digit
JAN13/EAN13	12 or 13 digits	12 digits will be automatically added by PrintAssist Please add to the data if using 13 digits
JAN8/EAN8	7 or 8 digits	7 digits will be automatically added by PrintAssist Please add to the data if using 8 digits
UPCA	11 or 12 digits	11 digits will be automatically added by PrintAssist Please add to the data if using 12 digits
ITF	1~31	If using odd numbers, it will be automatically added by PrintAssist
CODE39		The parameter checkDigit is enabled.

The error correction level of the QR code is Level L, the type of encoding is binary.

### <<<Object>>>

Draw an object

Draw PDF,JPEG,PNG,(Sign for FileMaker for instance)

x : X axis

y : Y axis

width : Width of object

height : Height of object

data : Data. Requires Base64 encoding.



## Barcode-encode command

### code

---

Specify code for barcode

### type

---

Specify the type of barcode.

This is the same as the <<<Barcode>>> “type” in the print parameters.

### width

---

Specify the width.

### height

---

Specify the height

### text

---

Enable/disable numerical display

0 : Show numbers

1 : Do not show numbers

### checkDigit

---

Add a check digit. Only for checkDigit

0 : Enable

1 : Disable



## Input sample

## Output sample



## FileMaker script sample

Contents of "open URL"

```

"printassist-x-callback-url://x-callback-url/open?" &
"x-success=fmp://$%" &
"orientation=0%" &
"unit=0%" &
"width=100%" &
"height=50%" &
"paper=1%" &
"copies="&Shop::Quantity&" &
"1=<<<Frame>>>,5,5,90,40,0,0.2,0%" &
"2=&Producer::Name&",12,8,50,10,HiraKakuProN-W3,8,0,0,0%" &
"3=<<<Barcode>>>,12,25,50,15,2,02"&Producer::ProducerCode&"2"&Right("0000" &
Item::Price ; 4 )" &
"4=<<<Object>>>,70,10,20,20,"&Base64Encode ( Producer::Photo )

```





## URL Data

Data that actually gets transmitted to PrintAs

```
"printassist-x-callback-url://x-callback-url/open?"  
"x-success" = "fmp://$"   
"orientation" = "0"   
"unit" = "0"   
"width" = "100"   
"height" = "50"   
"paper" = "1"   
"copies" = "1"   
"1" = "<<<Frame>>>,5,5,90,40,0,0.2,0"   
"2" = "John Smith,12,8,50,10,HiraKakuProN-W3,8,0,0,0"   
"3" = "<<<Barcode>>>,12,25,50,15,2,020000220150"   
"4" = "<<<Object>>>,70,10,20,20,image decode data"
```



## Barcode encode sample

### FileMaker script sample

#### Contents of the script

```
Open URL [ "printassistfb-x-callback-url://x-callback-url/barcode-encode?" &
"x-success=fmp://$@" &
"code=" & GetAsURLEncoded ( Barcode::QR Code Code ) & "&" & "type=" & Get
( ScriptParameter )& "&" &
"width=1024" &
"height=1024" ]
[ No dialog ]
Pause/Resume Script [ Duration (seconds): 1 ]
Paste [ Barcode::QR Code ]
Commit Records/Requests
[ No dialog ]
```



# Appendix A

## iOS 9 font list

Academy Engraved LET	ArialRoundedMTBold	AvenirNextCondensed-Heavy	ChalkboardSE-Light
AcademyEngravedLetPlain	Avenir Next Condensed	AvenirNextCondensed-HeavyItalic	ChalkboardSE-Regular
Al Nile	Avenir Next	AvenirNextCondensed-Italic	Chalkduster
AlNile	Avenir	AvenirNextCondensed-Medium	Chalkduster
AlNile-Bold	Avenir-Black	AvenirNextCondensed-MediumItalic	Cochin
American Typewriter	Avenir-BlackOblique	AvenirNextCondensed-Regular	Cochin-Bold
AmericanTypewriter	Avenir-Book	AvenirNextCondensed-UltraLight	Cochin-BoldItalic
AmericanTypewriter-Bold	Avenir-BookOblique	AvenirNextCondensed-UltraLightItalic	Cochin-Italic
AmericanTypewriter-Condensed	Avenir-Heavy	Bangla Sangam MN	Copperplate
AmericanTypewriter-CondensedBold	Avenir-HeavyOblique	Baskerville	Copperplate
AmericanTypewriter-CondensedLight	Avenir-Light	Baskerville	Copperplate-Bold
AmericanTypewriter-Light	Avenir-LightOblique	Baskerville-Bold	Copperplate-Light
Apple Color Emoji	Avenir-Medium	Baskerville-BoldItalic	Courier
Apple SD Gothic Neo	Avenir-MediumOblique	Baskerville-Italic	Courier New
AppleColorEmoji	Avenir-Oblique	Baskerville-SemiBold	Courier-Bold
AppleSDGothicNeo-Bold	Avenir-Roman	Baskerville-SemiBoldItalic	Courier-BoldOblique
AppleSDGothicNeo-Light	AvenirNext-Bold	Bodoni 72 Oldstyle	Courier-Oblique
AppleSDGothicNeo-Medium	AvenirNext-BoldItalic	Bodoni 72 Smallcaps	CourierNewPS-BoldItalicMT
AppleSDGothicNeo-Regular	AvenirNext-DemiBold	Bodoni 72	CourierNewPS-BoldMT
AppleSDGothicNeo-SemiBold	AvenirNext-DemiBoldItalic	Bodoni Ornaments	CourierNewPS-ItalicMT
AppleSDGothicNeo-Thin	AvenirNext-Heavy	BodoniOrnamentsITCTT	CourierNewPSMT
AppleSDGothicNeo-UltraLight	AvenirNext-HeavyItalic	BodoniSvtyTwoITCTT-Bold	Damascus
Arial Hebrew	AvenirNext-Italic	BodoniSvtyTwoITCTT-Book	DamascusBold
Arial Rounded MT Bold	AvenirNext-Medium	BodoniSvtyTwoITCTT-BookIta	DamascusLight
Arial	AvenirNext-MediumItalic	BodoniSvtyTwoOSITCTT-Bold	DamascusMedium
Arial-BoldItalicMT	AvenirNext-Regular	BodoniSvtyTwoOSITCTT-Book	DamascusSemiBold
Arial-BoldMT	AvenirNext-UltraLight	BodoniSvtyTwoOSITCTT-BookIt	Devanagari Sangam MN
Arial-ItalicMT	AvenirNext-UltraLightItalic	BodoniSvtyTwoSCITCTT-Book	DevanagariSangamMN
ArialHebrew	AvenirNextCondensed-Bold	Bradley Hand	DevanagariSangamMN-Bold



PrintAssist Parameter Spec Sheet

ArialHebrew-Bold	AvenirNextCondensed-BoldItalic	BradleyHandITCTT-Bold	Didot
ArialHebrew-Light	AvenirNextCondensed-DemiBold	Chalkboard SE	Didot-Bold
ArialMT	AvenirNextCondensed-DemiBoldItalic	ChalkboardSE-Bold	Didot-Italic
DiwanMishafi	Heiti TC	lowanOldStyle-Italic	Noteworthy
Euphemia UCAS	Helvetica	lowanOldStyle-Roman	Noteworthy-Bold
EuphemiaUCAS	Helvetica-Bold	Kailasa	Noteworthy-Light
EuphemiaUCAS-Bold	Helvetica-BoldOblique	Kailasa-Bold	Optima
EuphemiaUCAS-Italic	Helvetica-Light	Kannada Sangam MN	Optima-Bold
Farah	Helvetica-LightOblique	KannadaSangamMN	Optima-BoldItalic
Futura	Helvetica-Oblique	KannadaSangamMN-Bold	Optima-ExtraBlack
Futura-CondensedExtraBold	HelveticaNeue	Khmer Sangam MN	Optima-Italic
Futura-CondensedMedium	HelveticaNeue-Bold	KhmerSangamMN	Optima-Regular
Futura-Medium	HelveticaNeue-BoldItalic	Kohinoor Bangla	Oriya Sangam MN
Futura-MediumItalic	HelveticaNeue-CondensedBlack	Kohinoor Devanagari	OriyaSangamMN
Geeza Pro	HelveticaNeue-CondensedBold	Kohinoor Telugu	OriyaSangamMN-Bold
GeezaPro	HelveticaNeue-Italic	KohinoorBangla-Light	Palatino
GeezaPro-Bold	HelveticaNeue-Light	KohinoorBangla-Regular	Palatino-Bold
Georgia	HelveticaNeue-LightItalic	KohinoorBangla-Semibold	Palatino-BoldItalic
Georgia-Bold	HelveticaNeue-Medium	KohinoorDevanagari-Light	Palatino-Italic
Georgia-BoldItalic	HelveticaNeue-MediumItalic	KohinoorDevanagari-Regular	Palatino-Roman
Georgia-Italic	HelveticaNeue-Thin	KohinoorDevanagari-Semibold	Papyrus
Gill Sans	HelveticaNeue-ThinItalic	KohinoorTelugu-Light	Papyrus-Condensed
GillSans	HelveticaNeue-UltraLight	KohinoorTelugu-Medium	Party LET
GillSans-Bold	HelveticaNeue-UltraLightItalic	KohinoorTelugu-Regular	PartyLetPlain
GillSans-BoldItalic	HiraMinProN-W3	Lao Sangam MN	PingFang HK
GillSans-Italic	HiraMinProN-W6	LaoSangamMN	PingFang SC
GillSans-Light	Hiragino Mincho ProN	Malayalam Sangam MN	PingFang TC
GillSans-LightItalic	Hiragino Sans	MalayalamSangamMN	PingFangHK-Light
GillSans-SemiBold	HiraginoSans-W3	MalayalamSangamMN-Bold	PingFangHK-Medium
GillSans-SemiBoldItalic	HiraginoSans-W6	Marker Felt	PingFangHK-Regular
GillSans-UltraBold	Hoefler Text	MarkerFelt-Thin	PingFangHK-Semibold
Gujarati Sangam MN	HoeflerText-Black	MarkerFelt-Wide	PingFangHK-Thin
GujaratiSangamMN	HoeflerText-BlackItalic	Menlo	PingFangHK-Ultralight
GujaratiSangamMN-Bold	HoeflerText-Italic	Menlo-Bold	PingFangSC-Light



## PrintAssist Parameter Spec Sheet

Gurmukhi MN	HoeflerText-Regular	Menlo-BoldItalic	PingFangSC-Medium
GurmukhiMN	lowan Old Style	Menlo-Italic	PingFangSC-Regular
GurmukhiMN-Bold	lowanOldStyle-Bold	Menlo-Regular	PingFangSC-Semibold
Heiti SC	lowanOldStyle-BoldItalic	Mishafi	PingFangSC-Thin
PingFangSC-Ultralight	SinhalaSangamMN-Bold	Thonburi	TrebuchetMS
PingFangTC-Light	Snell Roundhand	Thonburi-Bold	TrebuchetMS-Bold
PingFangTC-Medium	SnellRoundhand	Thonburi-Light	TrebuchetMS-Italic
PingFangTC-Regular	SnellRoundhand-Black	Times New Roman	Verdana
PingFangTC-Semibold	SnellRoundhand-Bold	TimesNewRomanPS-BoldItalicMT	Verdana-Bold
PingFangTC-Thin	Symbol	TimesNewRomanPS-BoldMT	Verdana-BoldItalic
PingFangTC-Ultralight	Tamil Sangam MN	TimesNewRomanPS-ItalicMT	Verdana-Italic
Savoye LET	TamilSangamMN	TimesNewRomanPSMT	Zapf Dingbats
SavoyeLetPlain	TamilSangamMN-Bold	Trebuchet MS	ZapfDingbatsITC
Sinhala Sangam MN	Telugu Sangam MN	Trebuchet-BoldItalic	Zapfino
SinhalaSangamMN			



## Appendix B

### iOS 9 Speech Voices

iOS9.x	
名前	言語
Maged	ar-SA
Zuzana	cs-CZ
Sara	da-DK
Anna	de-DE
Melina	el-GR
Karen	en-AU
Daniel	en-GB
Moira	en-IE
Samantha	en-US
Tessa	en-ZA
Monica	es-ES
Paulina	es-MX
Satu	fi-FI
Amelie	fr-CA
Thomas	fr-FR
Carmit	he-IL
Lekha	hi-IN
Mariska	hu-HU
Damayanti	id-ID
Alice	it-IT
Kyoko (Enhanced)	ja-JP
Kyoko	ja-JP
Yuna	ko-KR
Ellen	nl-BE
Xander	nl-NL
Nora	no-NO
Zosia	pl-PL
Luciana	pt-BR
Joana	pt-PT
Ioana	ro-RO



iOS9.x	
名前	言語
Milena	ru-RU
Laura	sk-SK
Alva	sv-SE
Kanya	th-TH
Yelda	tr-TR
Ting-Ting	zh-CN
Sin-Ji	zh-HK
Mei-Jia	zh-TW

## iOS 10 Speech Voices

iOS10.x	
名前	言語
Maged	ar-SA
Zuzana	cs-CZ
Sara	da-DK
Anna	de-DE
Helena	de-DE
Martin	de-DE
Melina	el-GR
Catherine	en-AU
Gordon	en-AU
Karen	en-AU
Arthur	en-GB
Daniel	en-GB
Martha	en-GB
Moira	en-IE
Aaron	en-US
Fred	en-US
Nicky	en-US
Samantha	en-US
Tessa	en-ZA
Monica	es-ES



iOS10.x	
名前	言語
Paulina	es-MX
Satu	fi-FI
Amelie	fr-CA
Daniel	fr-FR
Marie	fr-FR
Thomas	fr-FR
Carmit	he-IL
Lekha	hi-IN
Mariska	hu-HU
Damayanti	id-ID
Alice	it-IT
O-ren (拡張)	ja-JP
Hattori	ja-JP
Kyoko	ja-JP
O-ren	ja-JP
Yuna	ko-KR
Ellen	nl-BE
Xander	nl-NL
Nora	no-NO
Zosia	pl-PL
Luciana	pt-BR
Joana	pt-PT
Ioana	ro-RO
Milena	ru-RU
Laura	sk-SK
Alva	sv-SE
Kanya	th-TH
Yelda	tr-TR
Li-mu	zh-CN
Ting-Ting	zh-CN
Yu-shu	zh-CN
Sin-Ji	zh-HK
Mei-Jia	zh-TW





## Revision history

Date	Revision	Memo
2016-08-24	1.6	First edition
2017-02-05	1.7	Add paper size Add parameters (brothercustompaper,brotherdensity,autolengthbottom,topmargin,bottommargin,left margin,rightmargin,drawer)
2017-03-14	1.8	Add parameters (speech,speechvoice,speechpitch,speechrate,speechinbackground) Add Speech Voices Add check digit to Barcode parameter.
2017-05-18	1.9	Add paper size Add parameters
2017-08-31	2.0	Add paper size Add parameters (tapemargins、halfcut、contentsserialnumber) Add Page size Change specification of command 1 Delete “Note: Numbers must be sequential from 1.” Add Support printer