Polycom® VVX® Series

Expansion Module Administrator Guide

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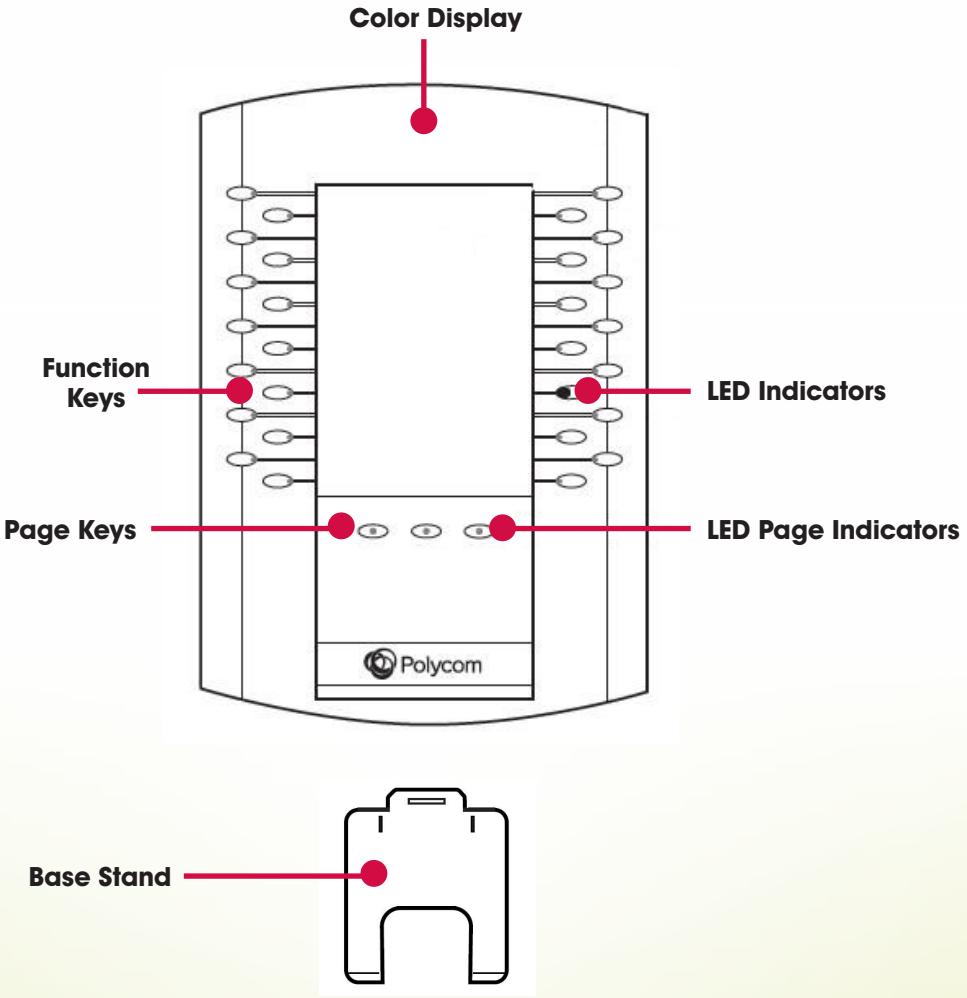
VVX (Color) Expansion Modules

The VVX Expansion Module (EM) enables configuration of additional keys on the VVX Business Media Phones. Although the EM is optimized for use with the VVX410, it may also be used with the VVX500 and VVX600 touch screen phones.

Each EM has 28 keys with LED Indicators and 3 Page Keys under the display, allowing you to add up to 84 additional Function keys to your phone (3 x 28 = 84). By combining up to 3 EM's per phone, you can add up to 252 additional keys to your VVX Business Media Phone. Please refer to the diagram below.



Color Display—Displays Status Connect Monitored Users and local Speed Dial Favorites.

Function Keys—Press these keys to select an available feature or function.

- **LED Indicators**—Light up to indicate line or busy lamp field contact's status.
  - Fast-Flashing Green—Incoming call to Status Connect monitored user.
  - Solid Red—The phone of the Status Connect monitored user is off-hook busy, has a held call, or is placing a call.
  - Red & Green Alternate Flashing—Status Connect monitored user is on a call while another call is waiting on their station.

Page Keys—Press these keys to navigate to a different page on the display and to view additional lines.

- **LED Indicators**—Light up to indicate page status.
  - Fast-Flashing Green—Incoming call on a page not currently displayed. When you press the page key with the fast-flashing green LED indicator, the LED indicator stops flashing.
  - Solid Red—Current page displayed.

Base Stand—Inserts into one of three slots on the back of the EM to stand up the display.

The maximum keys that can be supported by each VVX phone with an expansion module is outlined in the table below:

VVX Model	Line Keys	1 EM	2 EM's	3 EM's	Maximum Programmable Keys*
410	12	84	168	252	264
500	12	84	168	252	264
600	16	84	168	252	268

*Maximum Programmable keys equals the line keys plus three Expansion Modules. Programmable keys can be a combination of line keys (phone dependent), Status Connect Monitored Users (limit 50), and Speed Dial Favorites.

Depending on the user's role and use of the EM's, the following configurations are available:

Standard Configuration

The standard configuration will automatically assign keys to your phone and EM(s) in the following order:

- Line Keys (includes Primary line, Shared Call Appearances (SCAs), & Secondary Directory Numbers (SDNs)
- Status Connect (SC) Monitored Users
- Speed Dial/Favorites (Directory)

Note: Please visit the *managed*IP Hosted support site at http://support.tdsmanagedip.com to learn more about monitoring users via the Status Connect feature.

For example, if you have 4 line keys on your VVX500 phone, 35 Status Connect Monitored Users, and 50 Speed Dial entries, the following configuration will appear on your phone and EM:

Line keys 1 – 4	VVX500, keys 1 – 4
SC Monitored Users 1 – 8	VVX500, keys 5 – 12
SC Monitored Users 9 – 35	EM (1), page 1, keys 1 – 27
Speed Dial (1)	EM (1), page 1, key 28
Speed Dial (2 – 29)	EM (1), page 2, keys 1 – 28
Speed Dial (30 – 50)	EM (1), page 3, keys 1 – 21

Note: With the standard configuration, all functions are assigned to consecutive keys. Unassigned keys always appear at the end of your key configuration. The standard configuration is the default, which means no web portal changes are required.

Custom Configuration 1 – Mini-console with 1 EM

This configuration is ideal for an answering position ("mini-console") with only one EM that uses Status Connect to monitor other users.

With this custom configuration, only line keys will appear on the VVX phone. Status Connect keys (up to 50) will appear on pages 1-2 of the EM, with Speed Dial Favorites appearing on additional keys. Although this configuration is primarily targeted for a single EM, additional EM's may be used to provide access to more Speed Dial Favorites. See the Appendix - ***Custom Configuration 1***, for specific key assignments.

To enable Custom Configuration 1:

1. Log in to the *managed*IP Administrator web portal and navigate to the user with the expansion module(s).
2. Enable Expansion Module Templates by using the "Modify Tags" function. Change the value of **%EXP_MOD_TEMPLATES_ENABLED%** to "1" (on) to activate.
3. Rebuild the device.
4. Reset the device.

NOTE: Please refer to the *managed*IP Administrator User Guide for more detailed instructions on the "Modify Tags" function.

Custom Configuration 2 – Mini-console with 2 or 3 EMs

This configuration is ideal for an answering position ("mini-console") with two or more EM's that uses Status Connect to monitor other users. With this configuration, Status Connect keys appear on page 1 of both the first and second EM's.

This eliminates the need for a busy answering position monitoring more than 28 Status Connect users to toggle between pages one and two of the first EM. By selecting page 1 of both EM 1 and EM 2, all Status Connect users are visible with a single glance, providing greater efficiency for the user. See the Appendix - ***Custom Configuration 2***, for specific key assignment.

To enable Custom Configuration 2:

1. Log in to the managedIP Administrator web portal and navigate to the user with the expansion module(s).
2. Using the "Modify Tags" function:
   a. Enable Expansion Module Templates by changing the value of **%EXP_MOD_TEMPLATES_ENABLED%** to "1" (on).
   b. Enable the Status Connect View by changing the value of **%EXP_MOD_STATUS_CONNECT_VIEW%** to "Unassigned".
3. Rebuild the device.
4. Reset the device.

NOTE: With the EM custom configurations, specify the exact key a Speed Dial Favorite should appear on by setting the Favorite Index to the value noted on the template. Please refer to the Polycom Detailed Guide, "Managing Favorites" for further detail on programming Favorites and changing indices.

Power Requirements for VVX Expansion Modules

Due to the additional power required for Expansion Module(s), the Power over Ethernet (PoE) that powers your phone may not be sufficient to power multiple expansion modules and the USB port(s) on the phone (VVX500/VVX600 only). Please refer to the table below to determine whether you need an additional 48V power supply unit to accommodate your configuration.

VVX Expansion Modules – Power Requirements		
Model	**PoE Only**	**Additional Power Supply Required**
VVX410	Up to 3 Expansion Modules	N/A
VVX500	Up to 2 EM's and 1 USB Port	3 EM's
VVX600	2 EM's and top USB port **OR** 1 EM and rear USB port	3 EM's **OR** 2 EM with rear USB port

Note: The USB port on the rear of the VVX500 and VVX600 phones is used for local call recording with a USB thumb drive.

APPENDIX – Custom Configuration 1

SC = Status Connect Fav = Favorites Index

Expansion Module 1 - Page 1

Key	Key Function	Key	Key Function
1	SC - 1	15	SC - 15
2	SC - 2	16	SC - 16
3	SC - 3	17	SC - 17
4	SC - 4	18	SC - 18
5	SC - 5	19	SC - 19
6	SC - 6	20	SC - 20
7	SC - 7	21	SC - 21
8	SC - 8	22	SC - 22
9	SC - 9	23	SC - 23
10	SC - 10	24	SC - 24
11	SC - 11	25	SC - 25
12	SC - 12	26	SC - 26
13	SC - 13	27	SC - 27
14	SC - 14	28	SC - 28

Expansion Module 1 - Page 2

Key	Key Function	Key	Key Function
29	SC - 29	43	SC - 43
30	SC - 30	44	SC - 44
31	SC - 31	45	SC - 45
32	SC - 32	46	SC - 46
33	SC - 33	47	SC - 47
34	SC - 34	48	SC - 48
35	SC - 35	49	SC - 49
36	SC - 36	50	SC - 50
37	SC - 27	51	Fav - 300
38	SC - 38	52	Fav - 301
39	SC - 39	53	Fav - 302
40	SC - 40	54	Fav - 303
41	SC - 41	55	Fav - 304
42	SC - 42	56	Fav - 305

Expansion Module 1 - Page 3

Key	Key Function	Key	Key Function
57	Fav - 1	71	Fav - 15
58	Fav - 2	72	Fav - 16
59	Fav - 3	73	Fav - 17
60	Fav - 4	74	Fav - 18
61	Fav - 5	75	Fav - 19
62	Fav - 6	76	Fav - 20
63	Fav - 7	77	Fav - 21
64	Fav - 8	78	Fav - 22
65	Fav - 9	79	Fav - 23
66	Fav - 10	80	Fav - 24
67	Fav - 11	81	Fav - 25
68	Fav - 12	82	Fav - 26
69	Fav - 13	83	Fav - 27
70	Fav - 14	84	Fav - 28

Expansion Module 2 - Page 1

Key	Key Function	Key	Key Function
85	Unassigned	99	Unassigned
86	Unassigned	100	Unassigned
87	Unassigned	101	Unassigned
88	Unassigned	102	Unassigned
89	Unassigned	103	Unassigned
90	Unassigned	104	Unassigned
91	Unassigned	105	Unassigned
92	Unassigned	106	Unassigned
93	Unassigned	107	Fav - 400
94	Unassigned	108	Fav - 401
95	Unassigned	109	Fav - 402
96	Unassigned	110	Fav - 403
97	Unassigned	111	Fav - 404
98	Unassigned	112	Fav - 405

Expansion Module 2 - Page 2

Key	Key Function	Key	Key Function
113	Fav - 29	127	Fav - 43
114	Fav - 30	128	Fav - 44
115	Fav - 31	129	Fav - 45
116	Fav - 32	130	Fav - 46
117	Fav - 33	131	Fav - 47
118	Fav - 34	132	Fav - 48
119	Fav - 35	133	Fav - 49
120	Fav - 36	134	Fav - 50
121	Fav - 37	135	Fav - 51
122	Fav - 38	136	Fav - 52
123	Fav - 40	137	Fav - 53
124	Fav - 41	138	Fav - 54
125	Fav - 42	139	Fav - 55
126	Fav - 42	140	Fav - 56

Expansion Module 2 - Page 3

Key	Key Function	Key	Key Function
141	Fav - 57	155	Fav - 71
142	Fav - 58	156	Fav - 72
143	Fav - 59	157	Fav - 73
144	Fav - 60	158	Fav - 74
145	Fav - 61	159	Fav - 75
146	Fav - 62	160	Fav - 76
147	Fav - 63	161	Fav - 77
148	Fav - 64	162	Fav - 78
149	Fav - 65	163	Fav - 79
150	Fav - 66	164	Fav - 80
151	Fav - 67	165	Fav - 81
152	Fav - 68	166	Fav - 82
153	Fav - 69	167	Fav - 83
154	Fav - 70	168	Fav - 84

Expansion Module 3 - Page 1

Key	Key Function	Key	Key Function
169	Fav - 85	183	Fav - 99
170	Fav - 86	184	Fav - 100
171	Fav - 87	185	Fav - 101
172	Fav - 88	186	Fav - 102
173	Fav - 89	187	Fav - 103
174	Fav - 90	188	Fav - 104
175	Fav - 91	189	Fav - 105
176	Fav - 92	190	Fav - 106
177	Fav - 93	191	Fav - 107
178	Fav - 94	192	Fav - 108
179	Fav - 95	193	Fav - 109
180	Fav - 96	194	Fav - 110
181	Fav - 97	195	Fav - 111
182	Fav - 98	196	Fav - 112

Expansion Module 3 - Page 2

Key	Key Function	Key	Key Function
197	Fav - 113	211	Fav - 127
198	Fav - 114	212	Fav - 128
199	Fav - 115	213	Fav - 129
200	Fav - 116	214	Fav - 130
201	Fav - 117	215	Fav - 131
202	Fav - 118	216	Fav - 132
203	Fav - 119	217	Fav - 133
204	Fav - 120	218	Fav - 134
205	Fav - 121	219	Fav - 135
206	Fav - 122	220	Fav - 136
207	Fav - 123	221	Fav - 137
208	Fav - 124	222	Fav - 138
209	Fav - 125	223	Fav - 139
210	Fav - 126	224	Fav - 140

Expansion Module 3 - Page 3

Key	Key Function	Key	Key Function
225	Fav - 141	239	Fav - 155
226	Fav - 142	240	Fav - 156
227	Fav - 143	241	Fav - 157
228	Fav - 144	242	Fav - 158
229	Fav - 145	243	Fav - 159
230	Fav - 146	244	Fav - 160
231	Fav - 147	245	Fav - 161
232	Fav - 148	246	Fav - 162
233	Fav - 149	247	Fav - 163
234	Fav - 150	248	Fav - 164
235	Fav - 151	249	Fav - 165
236	Fav - 152	250	Fav - 166
237	Fav - 153	251	Fav - 167
238	Fav - 154	252	Fav - 168

APPENDIX – Custom Configuration 2

SC = Status Connect Fav = Favorites Index

Expansion Module 1 - Page 1

Key	Key Function	Key	Key Function
1	SC - 1	15	SC - 15
2	SC - 2	16	SC - 16
3	SC - 3	17	SC - 17
4	SC - 4	18	SC - 18
5	SC - 5	19	SC - 19
6	SC - 6	20	SC - 20
7	SC - 7	21	SC - 21
8	SC - 8	22	SC - 22
9	SC - 9	23	SC - 23
10	SC - 10	24	SC - 24
11	SC - 11	25	SC - 25
12	SC - 12	26	SC - 26
13	SC - 13	27	SC - 27
14	SC - 14	28	SC - 28

Expansion Module 1 - Page 2

Key	Key Function	Key	Key Function
29	Unassigned	43	Unassigned
30	Unassigned	44	Unassigned
31	Unassigned	45	Unassigned
32	Unassigned	46	Unassigned
33	Unassigned	47	Unassigned
34	Unassigned	48	Unassigned
35	Unassigned	49	Unassigned
36	Unassigned	50	Unassigned
37	Unassigned	51	Fav - 300
38	Unassigned	52	Fav - 301
39	Unassigned	53	Fav - 302
40	Unassigned	54	Fav - 303
41	Unassigned	55	Fav - 304
42	Unassigned	56	Fav - 305

Expansion Module 1 - Page 3

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57	Fav - 1	71	Fav - 15
58	Fav - 2	72	Fav - 16
59	Fav - 3	73	Fav - 17
60	Fav - 4	74	Fav - 18
61	Fav - 5	75	Fav - 19
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66	Fav - 10	80	Fav - 24
67	Fav - 11	81	Fav - 25
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69	Fav - 13	83	Fav - 27
70	Fav - 14	84	Fav - 28

Expansion Module 2 - Page 1

Key	Key Function	Key	Key Function
85	SC - 29	99	SC - 43
86	SC - 30	100	SC - 44
87	SC - 31	101	SC - 45
88	SC - 32	102	SC - 46
89	SC - 33	103	SC - 47
90	SC - 34	104	SC - 48
91	SC - 35	105	SC - 49
92	SC - 36	106	SC - 50
93	SC - 27	107	Fav - 400
94	SC - 38	108	Fav - 401
95	SC - 39	109	Fav - 402
96	SC - 40	110	Fav - 403
97	SC - 41	111	Fav - 404
98	SC - 42	112	Fav - 405

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120	Fav - 36	134	Fav - 50
121	Fav - 37	135	Fav - 51
122	Fav - 38	136	Fav - 52
123	Fav - 40	137	Fav - 53
124	Fav - 41	138	Fav - 54
125	Fav - 42	139	Fav - 55
126	Fav - 42	140	Fav - 56

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146	Fav - 62	160	Fav - 76
147	Fav - 63	161	Fav - 77
148	Fav - 64	162	Fav - 78
149	Fav - 65	163	Fav - 79
150	Fav - 66	164	Fav - 80
151	Fav - 67	165	Fav - 81
152	Fav - 68	166	Fav - 82
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154	Fav - 70	168	Fav - 84

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177	Fav - 93	191	Fav - 107
178	Fav - 94	192	Fav - 108
179	Fav - 95	193	Fav - 109
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205	Fav - 121	219	Fav - 135
206	Fav - 122	220	Fav - 136
207	Fav - 123	221	Fav - 137
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231	Fav - 147	245	Fav - 161
232	Fav - 148	246	Fav - 162
233	Fav - 149	247	Fav - 163
234	Fav - 150	248	Fav - 164
235	Fav - 151	249	Fav - 165
236	Fav - 152	250	Fav - 166
237	Fav - 153	251	Fav - 167
238	Fav - 154	252	Fav - 168

Additional Support

- Contact Technical Support at 1-888-850-5915 or
- Visit support.tdsmanagedip.com/hosted for additional resources