

# Polycom® KIRK® Repeater

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## Installation and Configuration Guide

14183300 Version 2



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Catalog No. 14183300

Version 2

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# Installing KIRK Repeater

This section provides information about the repeater and how to unpack and install it. Installing repeaters requires a software installation as well as a hardware installation.

Before you install the equipment, ensure that a site planner defines the location of the repeaters.

This section includes information about:

- [“KIRK Repeater Description”](#) on page 1-1
- [“Installing the KIRK Repeater”](#) on page 1-4
- [“Recording the Installation Information”](#) on page 1-7
- [“Checking Indicators”](#) on page 1-7
- [“Powering the KIRK Repeater”](#) on page 1-7
- [“Programming a KIRK Repeater with the KIRK Programming Kit”](#) on page 1-7

## **KIRK Repeater Description**

This section contains information about:

- [“KIRK Repeater provides RF Channels to KIRK Handsets”](#) on page 1-1
- [“KIRK Repeater Types and Part Numbers”](#) on page 1-2
- [“KIRK Repeater - Appearance and Components”](#) on page 1-3
- [“KIRK Repeater LED Indicators”](#) on page 1-4

## **KIRK Repeater provides RF Channels to KIRK Handsets**

The KIRK Repeater is a building block to be used to extend the coverage area in a KIRK solution. The repeater does not increase the number of traffic channels, however it provides a larger physical spreading of the traffic channels and thereby increases the coverage area established with the KIRK

Base Stations. The repeaters are mainly used in areas with limited traffic. The KIRK Repeater is available with either 2 or 4 voice channels. It is wireless and does not need physical connection to the KIRK Wireless Server, making it very easy to install. The repeaters can be supplied with an external antenna making it possible to create radio coverage in a remote area without cabling to the rest of the installation.

**Note**

The repeater is also termed by some manufacturers as the WRFP (Wireless Radio Fixed Part).

The RF communication is provided according to the band standard at the site:

- Repeater - DECT provides four RF channels of 1.88 GHz, DECT standard, used in Europe, Australia and South America.
- Repeater - USA DECT provides four RF channels of 1.9 GHz, USA DECT standard, used in North America.

## KIRK Repeater Types and Part Numbers

The repeater contains RF circuitry that comply with the local band standards: UPCS, DECT, or ETSI DECT. The wall mounted repeater and the ceiling mounted repeater is available as a full slot repeater. A full slot repeater covers four simultaneous speech channels. These channels are borrowed from the attached base station, and are not additional channels to the total number of channels on the system.

The table below includes a list of available repeaters and their part numbers.

**Table 1-1** KIRK Repeater - Wall - Part Number

Variants of KIRK Repeaters	Part Number
<b>KIRK Repeater 1.8 GHz, 2 channels</b> (Supported on KWS300, KWS500, KWS600 and KWS600v3 single cell).	0244 0300
<b>KIRK Repeater Residential 1.8 GHz, 4 channels</b> (Supported on KWS300, KWS500, KWS600 and KWS600v3 single cell).	0233 4600
<b>KIRK Repeater Business 1.8 GHz, 4 channels</b> (Supported on KWS300, KWS500, KWS600, KWS600v3 single and multi cell, KWS1500, KWS3000 and KWS6000).	0233 4601
<b>KIRK Repeater Business 1.9 GHz, 4 channels</b> (Supported on KWS300, KWS500, KWS600, KWS600v3 single and multi cell, KWS1500, KWS3000 and KWS6000).	0233 8200

**Table 1-1** KIRK Repeater - Wall - Part Number

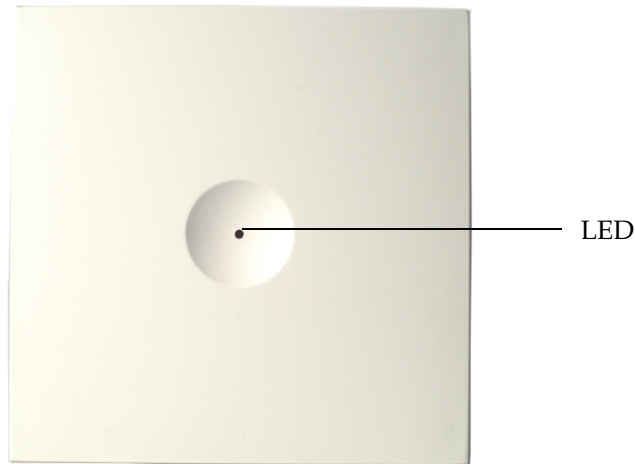
Variants of KIRK Repeaters	Part Number
<b>KIRK Repeater with external antenna 1.8 GHz, 2 channels</b> (Supported on KWS300, KWS500, KWS600, KWS600v3 single and multi cell, KWS1500, KWS3000 and KWS6000).	0244 0000
<b>KIRK Repeater with external antenna 1.8 GHz, 4 channels</b> (Supported on KWS300, KWS500, KWS600, KWS600v3 single and multi cell, KWS1500, KWS3000 and KWS6000).	0244 1600
<b>KIRK Repeater with external antenna 1.9 GHz, 4 channels</b> (Supported on KWS300, KWS500, KWS600, KWS600v3 single and multi cell, KWS1500, KWS3000 and KWS6000).	0244 0200

## KIRK Repeater - Appearance and Components

The repeater connection panel includes the following:

- Power supply connection (connection for programming the repeater as well).  
**Note:** The power supply for the repeater is to be ordered separately (Part no. 84642602 - worldwide).
- Antenna connector for repeaters supplied with external antenna connection.  
**Note:** The external antenna incl. antenna cable is to be ordered separately (part no. 02319505).
- LED that indicates whether or not the unit is functioning.

**Figure 1-1** Repeater



## **KIRK Repeater LED Indicators**

The repeater has one LED indicator describing the repeater operations: The indicator is off when the repeater is not powered. When the LED flashes after the repeater has been powered, sync has still not been established. As soon as sync has been established the LED is on. Each time a handset connects to the repeater, the LED flashes shortly. Each time a handset makes handover to a repeater, the LED flashes shortly.

## **Installing the KIRK Repeater**

Before beginning the installation, determine the position of the repeater for best coverage. The coverage depends on the construction of the building, architecture, and the choice of building materials.

## Environmental requirements

- Avoid installing repeaters on large concrete or marble columns because these columns affect radio coverage. If possible, place the base station a minimum of one meter/3.3 feet from these types of columns.
- Do not install a repeater with the antenna housings near metal objects. Be careful not to damage existing wiring or panels.
- Do not position repeaters in ducts, plenums or hollow spaces used to transport environmental air except where the duct, plenum or hollow space is created by a suspended ceiling having lay-in panels.
- Keep the repeater away from steel constructions.
- Do not position repeaters directly on metallic surfaces. If possible, place the base station a minimum of one meter/3.3 feet from these types of surfaces.
- Do not position repeaters behind furniture.
- Only position repeaters where the signal is needed.
- The installation area must be clean, free of traffic and excess dust, dry, and well ventilated.
- The installation area must be within the temperature ranges of 10°C and 40°C/50°F and 104°F.
- The installation area must be between 20% and 80% non-condensing relative humidity.

### Note

The repeater does not add channels, it only adds additional coverage area.

### Note

The repeater can be registered on the system 1) when placed within the coverage area of a base station 2) when placed within the coverage area of an already-installed repeater or 3) when placed outside the coverage area using an external antenna.

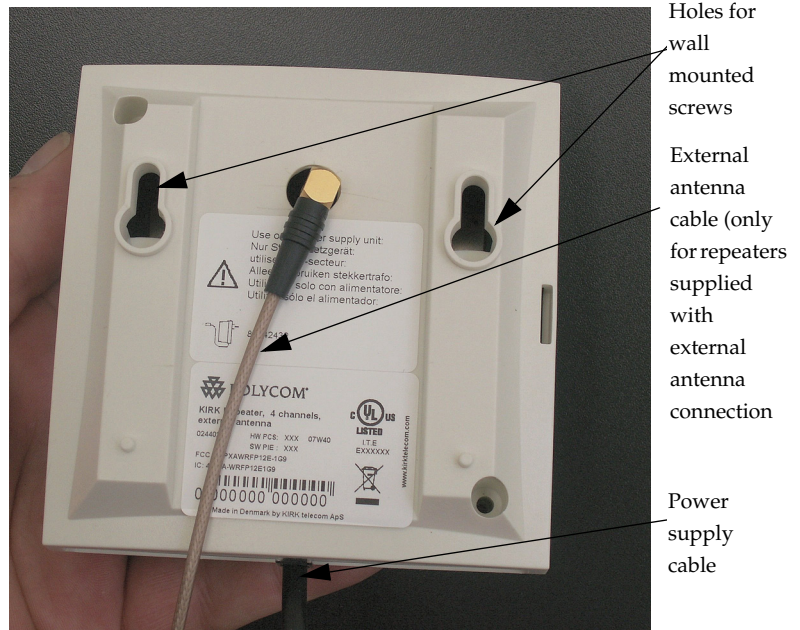
For best RF coverage, the repeater must be mounted vertically on walls. The antennas must always be kept perpendicular to the floor.

### Caution

The repeater must not be installed at any angle other than vertical. If the repeater is placed upside-down, the coverage area of the repeater is decreased by 40 - 50% and it might not transmit or receive effectively.

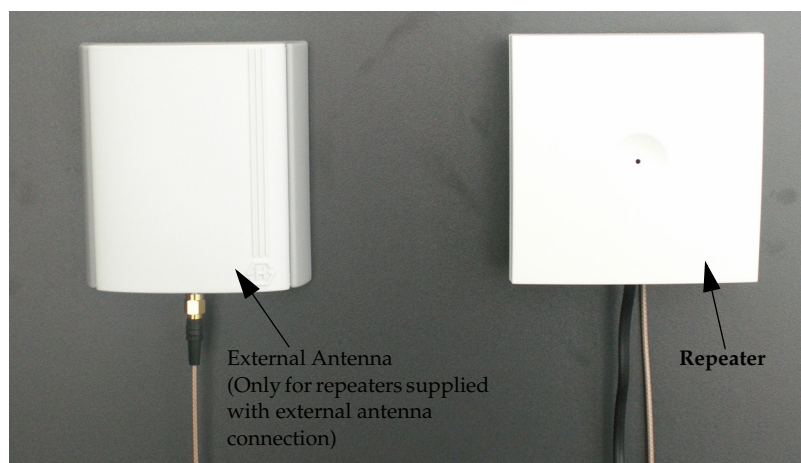


**Figure 1-2** Connect Power to the Bottom of the Repeater and External Antenna Cable to the Rear of the Repeater



- 1 Connect the power supply cable into the RJ11 connector in the bottom of the repeater. For repeaters with external antenna, connect the external antenna cable to the antenna connector in the rear of the repeater as well.
- 2 Mount the repeater onto the wall using the screws accompanying the repeater.

**Figure 1-3** Repeater and External Antenna Installed on the Wall



**Note:** The external antenna used for the transmitter is to be fixed-mounted on indoor permanent structures providing a separation distance of at least 20 cm / 8 inches from all persons during normal operation and must not be co-located or operating in conjunction with any other antenna or transmitter. The maximum radiated output power is 1W e.i.r.p. For more information and technical support, please refer to [www.polycom.com](http://www.polycom.com).

## Recording the Installation Information

After completing the installation of the repeaters, record the location of each repeater.

## Checking Indicators

Verify that the repeater LED indicator is continuously on, indicating that the repeater is functional.

## Powering the KIRK Repeater

### Power Options

The power supply for the repeater is 9VDC, 300mA.

## Programming a KIRK Repeater with the KIRK Programming Kit

This section provides information about:

- [“Content of the KIRK Programming Kit Repeater”](#) on page 1-7
- [“Set up of the Hardware for Repeater Programming”](#) on page 1-8
- [“Programming the KIRK Repeater with the ServiceTool”](#) on page 1-9

### Content of the KIRK Programming Kit Repeater

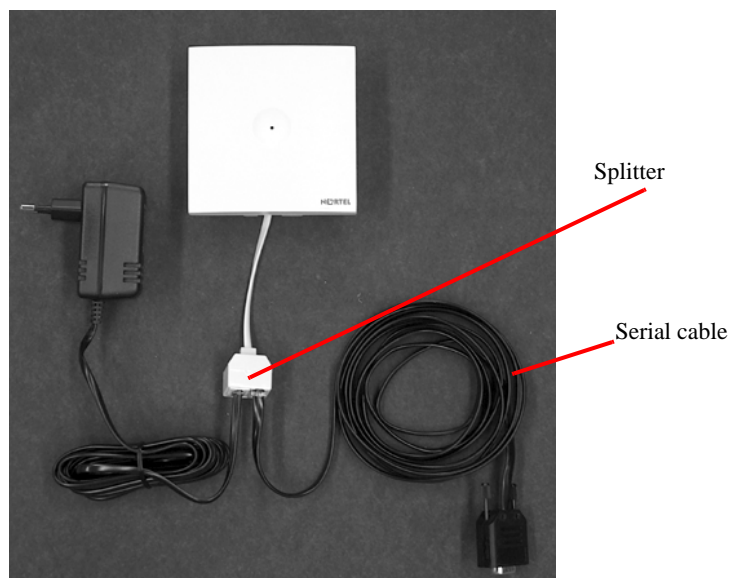
The Programming Kit Repeater (Part no. 02319508) consists of:

- splitter
- serial cable

**Note**

For programming the repeater you also need the programming software (ServiceTool) and the power supply for the repeater. The ServiceTool is not part of the Programming Kit Repeater but can be downloaded from [www.polycom.com](http://www.polycom.com). The power supply for the repeater is to be ordered separately (Part no. UK version: 84642421, Part no. EU version: 84642420, Part no. US version: 84642432).

**Figure 1-4** Programming Kit Repeater



## Set up of the Hardware for Repeater Programming

- 1 Unplug the repeater power supply and insert the splitter.
- 2 Connect the repeater power supply to the splitter and the mains. LED flashes.  
**Note:** Ensure that you have the appropriate power supply for the local requirements.
- 3 Connect the serial cable to the splitter and Com port of your computer.  
The repeater is now ready for programming via the ServiceTool.  
**Note:** The above mentioned order of the set up (point 1, 2 and 3) is important.

## Programming the KIRK Repeater with the ServiceTool

The ServiceTool is the tool you access from your desktop and use for repeater programming, handset adjustment and software download to the handset and repeater.

The ServiceTool identifies the type of repeater, and with this software it is possible to program the KIRK Repeater to connect to the KIRK DECT Radio Infrastructure solutions.

Before you start programming the repeater, ensure that the repeater is connected to the computer and the mains.

In a single cell solution the numbers assigned to the repeaters must be between 2 and 7. The number of the base station is default set to 1.

In a multi cell solution, the numbering of the base stations and repeaters has to follow the numbering in the table below.

**Table 1-2** Repeater Numbering in a Multi Cell Solution

Base Station	Repeater 1	Repeater 2	Repeater 3
0	64	128	192
1	65	129	193
2	66	130	194
3	67	131	195
4	68	132	196
5	69	133	197
6	70	134	198
7	71	135	199
8	72	136	200
9	73	137	201
10	74	138	202
11	75	139	203
12	76	140	204
13	77	141	205
14	78	142	206
15	79	143	207
16	80	144	208
17	81	145	209
18	82	146	210
19	83	147	211
20	84	148	212
21	85	149	213

**Table 1-2** Repeater Numbering in a Multi Cell Solution

Base Station	Repeater 1	Repeater 2	Repeater 3
22	86	150	214
23	87	151	215
24	88	152	216
25	89	153	217
26	90	154	218
27	91	155	219
28	92	156	220
29	93	157	221
30	94	158	222
31	95	159	223
32	96	160	224
33	97	161	225
34	98	162	226
35	99	163	227
36	100	164	228
37	101	165	229
38	102	166	230
39	103	167	231
40	104	168	232
41	105	169	233
42	106	170	234
43	107	171	235
44	108	172	236
45	109	173	237
46	110	174	238
47	111	175	239
48	112	176	240
49	113	177	241
50	114	178	242
51	115	179	243
52	116	180	244
53	117	181	245
54	118	182	246
55	119	183	247
56	120	184	248

**Table 1-2** Repeater Numbering in a Multi Cell Solution

Base Station	Repeater 1	Repeater 2	Repeater 3
57	121	185	249
58	122	186	250
59	123	187	251
60	124	188	252
61	125	189	253
62	126	190	254
63	127	191	255
64	128	192	0
65	129	193	1
66	130	194	2
67	131	195	3
68	132	196	4
69	133	197	5
70	134	198	6
71	135	199	7
72	136	200	8
73	137	201	9
74	138	202	10
75	139	203	11
76	140	204	12
77	141	205	13
78	142	206	14
79	143	207	15
80	144	208	16
81	145	209	17
82	146	210	18
83	147	211	19
84	148	212	20
85	149	213	21
86	150	214	22
87	151	215	23
88	152	216	24
89	153	217	25
90	154	218	26
91	155	219	27

**Table 1-2** Repeater Numbering in a Multi Cell Solution

Base Station	Repeater 1	Repeater 2	Repeater 3
92	156	220	28
93	157	221	29
94	158	222	30
95	159	223	31
96	160	224	32
97	161	225	33
98	162	226	34
99	163	227	35
100	164	228	36
101	165	229	37
102	166	230	38
103	167	231	39
104	168	232	40
105	169	233	41
106	170	234	42
107	171	235	43
108	172	236	44
109	173	237	45
110	174	238	46
111	175	239	47
112	176	240	48
113	177	241	49
114	178	242	50
115	179	243	51
116	180	244	52
117	181	245	53
118	182	246	54
119	183	247	55
120	184	248	56
121	185	249	57
122	186	250	58
123	187	251	59
124	188	252	60
125	189	253	61
126	190	254	62

**Table 1-2** Repeater Numbering in a Multi Cell Solution

Base Station	Repeater 1	Repeater 2	Repeater 3
127	191	255	63
128	192	0	64
129	193	1	65
130	194	2	66
131	195	3	67
132	196	4	68
133	197	5	69
134	198	6	70
135	199	7	71
136	200	8	72
137	201	9	73
138	202	10	74
139	203	11	75
140	204	12	76
141	205	13	77
142	206	14	78
143	207	15	79
144	208	16	80
145	209	17	81
146	210	18	82
147	211	19	83
148	212	20	84
149	213	21	85
150	214	22	86
151	215	23	87
152	216	24	88
153	217	25	89
154	218	26	90
155	219	27	91
156	220	28	92
157	221	29	93
158	222	30	94
159	223	31	95
160	224	32	96
161	225	33	97



**Table 1-2** Repeater Numbering in a Multi Cell Solution

Base Station	Repeater 1	Repeater 2	Repeater 3
162	226	34	98
163	227	35	99
164	228	36	100
165	229	37	101
166	230	38	102
167	231	39	103
168	232	40	104
169	233	41	105
170	234	42	106
171	235	43	107
172	236	44	108
173	237	45	109
174	238	46	110
175	239	47	111
176	240	48	112
177	241	49	113
178	242	50	114
179	243	51	115
180	244	52	116
181	245	53	117
182	246	54	118
183	247	55	119
184	248	56	120
185	249	57	121
186	250	58	122
187	251	59	123
188	252	60	124
189	253	61	125
190	254	62	126
191	255	63	127
192	0	64	128
193	1	65	129
194	2	66	130
195	3	67	131
196	4	68	132

**Table 1-2** Repeater Numbering in a Multi Cell Solution

Base Station	Repeater 1	Repeater 2	Repeater 3
197	5	69	133
198	6	70	134
199	7	71	135
200	8	72	136
201	9	73	137
202	10	74	138
203	11	75	139
204	12	76	140
205	13	77	141
206	14	78	142
207	15	79	143
208	16	80	144
209	17	81	145
210	18	82	146
211	19	83	147
212	20	84	148
213	21	85	149
214	22	86	150
215	23	87	151
216	24	88	152
217	25	89	153
218	26	90	154
219	27	91	155
220	28	92	156
221	29	93	157
222	30	94	158
223	31	95	159
224	32	96	160
225	33	97	161
226	34	98	162
227	35	99	163
228	36	100	164
229	37	101	165
230	38	102	166
231	39	103	167

**Table 1-2** Repeater Numbering in a Multi Cell Solution

Base Station	Repeater 1	Repeater 2	Repeater 3
232	40	104	168
233	41	105	169
234	42	106	170
235	43	107	171
236	44	108	172
237	45	109	173
238	46	110	174
239	47	111	175
240	48	112	176
241	49	113	177
242	50	114	178
243	51	115	179
244	52	116	180
245	53	117	181
246	54	118	182
247	55	119	183
248	56	120	184
249	57	121	185
250	58	122	186
251	59	123	187
252	60	124	188
253	61	125	189
254	62	126	190
255	63	127	191

**Note**

Repeater and base station numbers must not be the same. Neither can the repeater have a number similar to another base station or another repeater in a situation where common overlap is present between the actual units (Numbers with red colour show where numbering could be identical between different units). If this occurs, handover between the different units is not possible.

**Table 1-3** *Example of a Normal Base Station/Repeater Configuration*

<b>Numbering of base stations and repeaters in a normal configuration</b>	
First repeater	No. of base station + 64 Base to synchronize on: Number of base station
Second repeater	No. of base station + 128 Base to synchronize on: Number of base station
Third repeater	No. of base station + 192 Base to synchronize on: Number of base station

**Table 1-4** *Example of Repeater Jump Configuration*

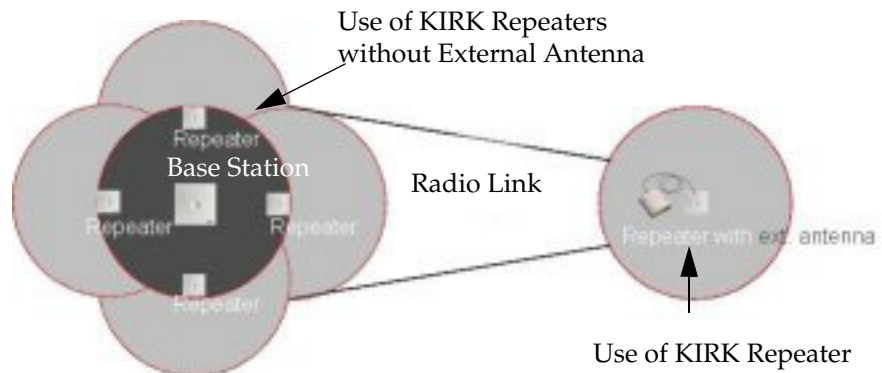
<b>Numbering of repeaters in a repeater jump configuration</b>	
First repeater in chain	No. of base station + 64 Base to synchronize on: Number of base station
Second repeater in chain	No. of base station + 128 Base to synchronize on: Number of previous repeater
Third repeater in chain	No. of base station + 192 Base to synchronize on: Number of previous repeater

For more information about programming the repeater with the ServiceTool, refer to the Help File in the ServiceTool. The ServiceTool is to be downloaded from [www.polycom.com](http://www.polycom.com).

## Use of KIRK Repeater With External Antenna

If radio coverage between a base station and a repeater is not needed, it is possible to synchronize between the radio units using a repeater with external antenna.

**Figure 1-5** Use of Repeaters



The distance from the repeaters without external antenna to the base station must correspond to a RSSI loss of maximum 25dB.

Be aware that inside the area named "radio link" there is no radio coverage, and therefore a wireless handset cannot be used in this area.

The distance between the base station and the repeater with external antenna depends on the type of antenna used as well as on the signal attenuation created by surroundings such as buildings, trees, etc.

## Synchronization Ways

The repeater with external antenna, 4 channels, can be programmed to obtain synchronization on two radio units (base station, wireless server or repeater).



If a situation occurs where the primary sync for some reason breaks down, the repeater will obtain sync on the alternative sync.

Be aware that the primary sync has priority; the alternative sync is only in use as long as the primary sync is down.

# Regulatory Notices

This section contains important safety regulations for the KIRK Repeaters.

## International Regulatory and Product Information


	<p>This KIRK product has been marked with the CE mark. This mark indicates compliance with EEC Directives 1999/5/EC. A full copy of the Declaration of conformity can be obtained from Polycom Ltd, 270 Bath Road, Slough, Berkshire, SL1 4DX, UK.</p>
	<p>The WEEE Marking on this equipment indicates that the product must not be disposed of with unsorted waste, but must be collected separately.</p>

Cesky [Czech]:	Polycom (UK) Ltd tímto prohlašuje, že tento KIRK Repeater je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk [Danish]:	Undertegnede Polycom (UK) Ltd erklærer herved, at følgende KIRK Repeater overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.

Deutsch [German]:	Hiermit erklärt Polycom (UK) Ltd, dass sich das Gerät KIRK Repeater in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Eesti [Estonian]:	Käesolevaga kinnitab Polycom (UK) Ltd seadme KIRK Repeater vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
English:	Hereby, Polycom (UK) Ltd. declares that this KIRK Repeater is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]:	Por medio de la presente Polycom (UK) Ltd declara que el KIRK Repeater cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Ελληνική [Greek]:	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Polycom (UK) Ltd ΔΗΛΩΝΕΙ ΟΤΙ KIRK Repeater ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/EK.
Français [French]:	Par la présente Polycom (UK) Ltd déclare que l'appareil KIRK Repeater est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Italiano [Italian]:	Con la presente Polycom (UK) Ltd dichiara che questo KIRK Repeater è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Íslenska (Icelandic):	Hér með lýsir Polycom (UK) Ltd yfir því að KIRK Repeater er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC
Latviski [Latvian]:	Ar šo Polycom (UK) Ltd deklare, ka KIRK Repeater atbilst Direktivas 1999/5/EK butiskajam prasibam un citiem ar to saistitajiem noteikumiem.
Lietuviu [Lithuanian]:	Šiuo Polycom (UK) Ltd deklaruoja, kad šis KIRK Repeater atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Nederlands [Dutch]:	Hierbij verklaart Polycom (UK) Ltd dat het toestel KIRK Repeater in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.

Malti [Maltese]:	Hawnhekk, Polycom (UK) Ltd, jiddikjara li dan KIRK Repeater jikkonforma mal-htigijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
Magyar [Hungarian]:	Alulírott, Polycom (UK) Ltd nyilatkozom, hogy a KIRK Repeater megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Norsk [Norwegian]:	Polycom (UK) Ltd erklærer herved at utstyret KIRK Repeater er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.
Polski [Polish]:	Niniejszym Polycom (UK) Ltd oświadcza, że KIRK Repeater jest zgodne z zasadniczymi wymaganiami oraz innymi stosownymi postanowieniami Dyrektywy 1999/5/WE
Português [Portuguese]:	Polycom (UK) Ltd declara que este KIRK Repeater está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]:	Polycom (UK) Ltd izjavlja, da je ta KIRK Repeater v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]:	Polycom (UK) Ltd týmto vyhlasuje, že KIRK Repeater spĺna základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Suomi [Finnish]:	Polycom (UK) Ltd vakuuttaa täten että KIRK Repeater tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]:	Härmed intygar Polycom (UK) Ltd att denna KIRK Repeater står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

## Explosive Device Proximity Warning

	<p><b>Warning. Do not operate your wireless network device near unshielded blasting caps or in an explosive environment unless the device has been modified to be especially qualified for such use.</b></p>
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<b>Waarschuwing</b>	<b>Gebruik dit draadloos netwerkapparaat alleen in de buurt van onbeschermden ontstekers of in een omgeving met explosieven indien het apparaat speciaal is aangepast om aan de eisen voor een dergelijk gebruik te voldoen.</b>
<b>Varoitus</b>	<b>Älä käytä johdotonta verkkolaitetta suojaamattomien räjäytysnallien läheisyydessä tai räjäytysalueella, jos laitetta ei ole erityisesti muunneltu sopivaksi sellaiseen käyttöön.</b>
<b>Attention</b>	<b>Ne jamais utiliser un équipement de réseau sans fil à proximité d'un détonateur non blindé ou dans un lieu présentant des risques d'explosion, sauf si l'équipement a été modifié à cet effet.</b>
<b>Warnung</b>	<b>Benutzen Sie Ihr drahtloses Netzwerkgerät nicht in der Nähe ungeschützter Sprengkapseln oder anderer explosiver Stoffe, es sei denn, Ihr Gerät wurde eigens für diesen Gebrauch modifiziert und bestimmt.</b>
<b>Avvertenza</b>	<b>Non utilizzare la periferica di rete senza fili in prossimità di un detonatore non protetto o di esplosivi a meno che la periferica non sia stata modificata a tale proposito.</b>
<b>Advarsel</b>	<b>ikke bruk den trådløse nettverksenheten nært inntil uisolerte fengheter eller i et eksplosivt miljø med mindre enheten er modifisert slik at den tåler slik bruk.</b>
<b>Aviso</b>	<b>Não opere o dispositivo de rede sem fios perto de cápsulas explosivas não protegidas ou num ambiente explosivo, a não ser que o dispositivo tenha sido modificado para se qualificar especialmente para essa utilização.</b>
<b>¡Advertencia!</b>	<b>No utilizar un aparato de la red sin cable cerca de un detonador que no esté protegido ni tampoco en un entorno explosivo a menos que el aparato haya sido modificado con ese fin.</b>
<b>Varning!</b>	<b>Använd inte den trådlösa nätverksenheten i närheten av oskyddade tändhatten eller i en explosiv miljö om inte enheten modifierats för att kunna användas i sådana sammanhang.</b>

### **Appropriate RF safety/installation information**

The repeater is intended to be installed by authorized personal. The repeater shall be installed in accordance with FCC rules.

#### ***WARNING***

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures. The above warning is inserted for regulatory reasons. If any customer believes that they have an interference problem, either because their KIRK product seems to cause interference or suffers from interference, they should contact their distributor immediately. The distributor will assist with a remedy for any problems and, if necessary, will have full support from Polycom.

### **Safety**

#### ***WARNING!***

Only qualified service personnel may install this equipment. The instructions in this manual are intended for use by qualified service personnel only.

#### ***Only qualified persons should service the system.***

The installation and service of this hardware is to be performed only by service personnel having appropriate training and experience necessary to be aware of hazards to which they are exposed in performing a task and of measures to minimize the danger to themselves or other persons.

Electrical shock hazards from the telecommunication network and AC mains are possible with this equipment. To minimize risk to service personnel and users, the system must be connected to an outlet with a third-wire Earth.

Service personnel must be alert to the possibility of high leakage currents becoming available on metal system surfaces during power line fault events near network lines. These leakage currents normally safely flow to Protective Earth via the power cord. Therefore, it is mandatory that connection to an earthed outlet is performed first and removed last when cabling to the unit. Specifically, operations requiring the unit to be powered down must have the network connections (exchange lines) removed first.

## Important Safety Instructions and Product Information

Before using your telephone equipment, you should always follow basic safety instruction to reduce the risk of fire, electrical shock and injury to persons, and damage to property.

- 1 Read and understand all instructions
- 2 Follow all warnings and instructions including those marked on the product
- 3 Unplug this product before cleaning. Do not use liquid cleaners or aerosol cleaners. Use damp cloth for cleaning
- 4 Do not install the telephone equipment in the bathroom or near a wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool
- 5 The product should be operated only from the type of power source indicated on the instructions. If you are not sure of the type of power supply, consult your dealer or local power company.
- 6 Do not overload wall outlets and extension cords as this can result in fire or electrical shock.
- 7 Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in fire, electrical shock, or injury. Never spill liquid of any kind into this product.
- 8 To reduce the risk of electrical shock or burns, do not disassemble this product. Opening or removing covers may expose you to dangerous voltages, dangerous electrical current, or other risks. Incorrect reassemble can cause electrical shock when the appliance is subsequently used. If the product need repair, consult your dealer.
- 9 This product does not support conections to outside plant.
- 10 Refer servicing to qualified service personnel under the following conditions:
  - If liquid has been spilled into the product
  - If the product has been exposed to rain or water
  - If the product does not operate normally when following the operating instructions in the manual. Adjust only those controls that are covered by the operation instructions. Improper adjustment of other controls may result in damage and will often require extensive work by qualified service personnel to restore the product to normal operation.
  - If the product has been dropped or cabinet has been damaged
  - If the product exhibits a distinct change in performance
- 11 Avoid using telephone during an electrical storm. There may be a risk of electrical shock from lightning

- 12 Do not use the telephone to report a gas leak in the vicinity of the leak
- 13 Do not place the unit near microwave ovens, radio equipment, or non-ground connected televisions. These appliances may cause electrical interference to the base or handset
- 14 The unit must be installed on a hard, plane surface and connected to a functional 120 volt AC power net adapter and plug the adapter into the power outlet
- 15 The system will not operate in the event of a blackout. Please keep a backup phone for emergencies

### **Intrinsic safety**

Do not install the unit in conditions where there is a danger of electrically ignited explosions.

### **Exposure to sunlight, heat and moisture**

Do not expose the unit to direct sunlight for long periods. Keep away from excessive heat and moisture.

### **Spare parts and accessories**

Use only approved spare parts and accessories. The operation of non-approved parts cannot be guaranteed and may even cause damage.

### **RF compliance information**

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### **NOTICES**

**FCC Note:** This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**IC Note:** Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. The term "IC:" before the certification /registration number only signifies that the Industry Canada technical specifications were met.

**Information to user:** The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## **LIMITED WARRANTY**

This limited, non-transferable warranty is provided to the original purchaser. The product is warranted to be free from defects in materials and workmanship under normal installation, use and service for a period of one (1) year from the date of purchase as shown on the purchaser's receipt.

Our obligation under this warranty is limited to repair or replacement (at our option) of the product or any part(s) which are defective provided that the product is returned to the original place of purchase or an authorized service location during the warranty period. Products returned must be accompanied by a copy of the purchase receipt. In the absence of a purchase receipt, the warranty period shall be one (1) year from the date of manufacture. Repair or replacement of the product is your sole and exclusive remedy.

If the product is repaired, reconditioned component parts or materials may be used. If the product is replaced, we may replace it with a new or reconditioned product of the same or similar design. The repaired product will be warranted for either (a) 90 days or (b) the remainder of the original one (1) year warranty period, whichever is longer.

This warranty does not apply to the defects outside of our control, including but not limited to acts of God, fire, flood and damage while in transit to service facility. We do not warranty that the product will be compatible with any telephone equipment, systems or party lines.

This warranty shall be void if the product is damaged as a result of defacement, misuse, abuse, neglect, accident, destruction or alteration of the serial number, improper electrical voltages or currents, repair, alteration or maintenance by any person or party other than our authorized service facility, or any violation of instructions furnished by us.

This warranty is also void if this product is removed from the country in which it was purchased by the original purchaser, if it is used in a country in which it is not registered for use, or if it is used in a country for which it was not designed. Due to variations in telephone systems and communications laws, this product may be illegal for use in some countries. We assume no responsibilities for damages or penalties incurred resulting from the use of this product in a manner or location other than that for which it was intended.

**THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. ANY IMPLIED WARRANTIES INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED TO THE DURATION OF THIS WRITTEN LIMITED WARRANTY. WE DISCLAIM ANY LIABILITY FOR DAMAGES FOR LOSS OF USE OF THE PRODUCTS, LOSS OF TIME, INCONVENIENCE, INJURY TO ANY**

PERSON, OR DAMAGE TO PROPERTY CAUSED BY THE PRODUCT, LOSS OF REVENUE OR PROFIT OR DAMAGES FOR ANY FAILURE TO PERFORM. IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES EVEN IF WE ARE ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. This warranty is the sole and exclusive warranty provided for the product. There are no other express warranties. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

