

# Guide to Worldwide Plug/Socket Patterns & Power Mains (single phase)

The most frequently specified plug pattern for electrical or electronic equipment will appear in bold type. Note that the information provided for developing countries is not precise. The data given for single phase voltages and frequencies are nominal and are subject to a standard tolerance of 10%, but in some areas—particularly in developing countries—tolerances may be much greater. The information was compiled from several sources, including the BSI publications "World Electricity Supplies" and "Electrical Plugs and Wiring". Information current as of the time of publication. Subject to change without notification. Call our Customer Service Department for current information.

Country	Voltage	Freq./Hz	Pattern	Country	Voltage	Freq./Hz	Pattern	Country	Voltage	Freq./Hz	Pattern	Country	Voltage	Freq./Hz	Pattern	Country	Voltage	Freq./Hz	Pattern
Afghanistan	220	50	A, B	Chile	220	50	<b>A, B, I</b>	Grenada	230	50	<b>D, G</b>	Luxembourg	230	50	<b>A, B</b>	Paraguay	220	50	A, B
Algeria	220	50	A, B, F	China, People's Rep. of	220	50	<b>X</b>	Guadeloupe	220	50/60	B, F	Macao	230	50	<b>D, G</b>	Peru	220	60	A, B
American Samoa	120/220	60	<b>C, K, N, M</b>	Christmas Is. (Austral.)	240	50	C	Guam	120/240	60	<b>K, N</b>	Guatemala	110/220	60	<b>K, N</b>	Philippines	220	60	<b>K, N</b>
Angola	220	50	A, B	Cocos Is. (Austral.)	240	50	C	Guinea	220	50	B, F	Madagascar	110/220	50	B, F	Pitcairn Is. (U.K.)	240	50	G
Anguilla (U.K.)	120/240	60	<b>D</b>	Colombia	120	60	K, N	Guinea-Bissau	220	50	A, B	Malawi	230	50	D, G	Poland	230	50	A, B, F
Antigua	120/240	60	<b>D, K, N</b>	Congo, Rep. of	220-240	50	A, B, F	Guyana	120/240	50-60	<b>D, G, K, N</b>	Malaysia	240	50	D, G	Portugal	230	50	A, B
Argentina	220	50	T	Cook Is. (N.Z.)	240	50	C, P	Haiti	110/220	60	<b>K, N</b>	Maldives	220	50	D, G	Puerto Rico	120	60	K, N
Armenia	220	50	A, B	Costa Rica	120/240	60	<b>D, K, N</b>	Honduras	110/220	60	<b>K, N</b>	Mali, Rep. of	220	50	B, F	Qatar	240	50	D, G
Aruba	127/220	60	A, B, K, N	Croatia	230	50	A, B	Hong Kong	220	50	<b>D, G</b>	Malta	230	50	D	Romania	230	50	A, B
Australia	230	50	<b>C, P</b>	Cuba	115/230	60	A, B, K, N	Hungary	230	50	A, B	Mauritania	220	50	A, B	Russia Federation	220	50	A, B
Austria	230	50	A, B	Curacao Is.	110/220	60	A, K, N	Iceland	230	50	<b>A, B</b>	Mauritius	230	50	<b>D, G</b>	Rwanda	220	50	A, B, L
Azores (Portugal)	230	50	A, B	Cyprus	230	50	<b>D, G</b>	India	230	50	G	Mexico	127	60	<b>K, N</b>	Saudi Arabia	127/220	60A, D, F, G, K	Saudi Arabia
				Czech., Rep. of	230	50	B, F	Monaco	220	50	<b>A, B, F</b>	Iceland	230	50	<b>A, B</b>	Uganda	240	50	<b>D, G</b>
<b>Bahamas</b>	120	60	B, K, N, G, D	<b>Denmark</b>	230	50	<b>B, E</b>	Indonesia	220	50	A, B, F	India	230	50	G	United Arab Emir.	220-240	50	<b>D, G</b>
Bahrain	230/240	50	D, G	Djibouti, Rep. of	220	50	B, F	Iran	220	50	A, B	Monaco	220	50	A, B, F	United Kingdom & Ire.	230	50	<b>D, G</b>
Bangladesh	230	50	D, G	Dominica	230	50	D, G	Iraq	220	50	A, B, D, G	Mongolia	220	50	A, B	United States	120	60	K, N
Barbados	115	50	<b>K, N</b>	Dominican Rep.	120/240	60	<b>K, N</b>	Ireland, Rep. of (S.)	230	50	<b>D</b>	Montserrat	230	60	<b>D, K, N</b>	Ukraine	220	50	A, B
Belarus	220	50	A, B	Ecuador	110	60	<b>K, N</b>	Israel	230	50	B, H	Mozambique	220	50	A, B, G	Uruguay	220	50	A, B, C*, I
Belgium	230	50	B, F	Egypt	220	50	A, B, D	Italy	230	50	B, I	Namibia (W.S.Africa)	220	50	D, G	Venezuela	120/208/277	60	<b>K, N</b>
Belize	110/220	60	<b>K, N, G</b>	El Salvador	120, 240	60	<b>K, N</b>	Ivory Coast	230	50	A, B	Nepal	220	50	G	Vietnam	220	50	B, F, K, N
Benin	220	50	A, N	England	230	50	<b>D, G</b>	Jamaica	110	50	K, D, G	Netherlands	230	50	A, B	Virgin Islands	120	60	<b>K, N</b>
Bermuda	120	60	K, N	Equatorial Guinea	220	50	B	Japan	100	50 & 60	J, M	New Caledonia	220	50	B, F	Wales	230	50	<b>D, G</b>
Bolivia	230	50	A, B, K, N	Estonia	220-330	50	A, B	Jordan	230	50	A, B, D	New Zealand	230	50	C, P	Western Samoa	230	50	C
Bosnia-Herzegovina	220	50	A, B	Ethiopia	230	50	A, B, I	<b>Kenya</b>	240	50	<b>D, G</b>	Nicaragua	120/240	60	<b>K, N</b>	Yemen	250	50	<b>D, G</b>
Botswana	230	50	<b>D, G</b>	Fiji	240	50	C, P	Kuwait	230	50	<b>D, G</b>	Niger	220	50	A, B	Yugoslavia	230	50	A, B
Brazil	127-220	60	B, K, N, O	Finland	230	50	A, B	Kyrgyzstan	220	50	A, B	Nigeria	230	50	<b>D, G</b>	Zaire, Rep. of	220-240	50	A, B, F
Bulgaria	220	50	<b>A, B</b>	France	230	50	B, F	<b>Laos</b>	220	50	A, B, F, <b>K, N</b>	North Ireland	230	50	D	Zambia	230	50	D, G
Burkina Faso	220/230	50	<b>D, G</b>	French Guiana	220	50	B, F	Latvia	220	50	A, B	North Korea	220	60	A, B	Zimbabwe	220-230	50	<b>D, G</b>
Burundi	220	50	<b>A, B</b>	<b>Gabon</b>	220	50	B, F	Lebanon	220	50	A, B, D, G	Oman	240	50	A, B, D, G				
<b>Cambodia</b>	220	50	A, B	Gambia	220	50	B, F	Lesotho	220	50	D, G	<b>Pakistan</b>	230	50	G				
Cameroon	220-260	50	B, F	Germany	230	50	A, B	Liberia	220-230	50	A, N, K	Panama	120/240	60	<b>K, N</b>				
Canada	120	60	<b>K, N</b>	Greece	230	50	A, B	Libya	220	50	A, G, K, N	Papua New Guinea	240	50	C, P				
Canary Islands (Spain)	220	50	A, B, F	Greenland (Den.)	230	50	B, E	Liechtenstein	230	50	L								
Cape Verde, Rep. of	220	50	A, B					Lithuania	230	50	A, B								
Cayman Islands	120	60	K, N																
Central African Rep.	220	50	A, B																
Chad	220	50	<b>A, F, B</b>																
Channel Islands	240	50	B, D																

\* This country uses the Australia standard with modifications. The contacts are approximately 1mm longer than the Australian (18.2mm).

