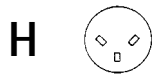
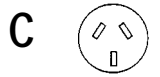
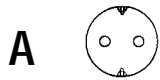


# Guide to Worldwide Plug/Socket Patterns & Power Mains (single phase)

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 are nominal and are subject to a standard tolerance of 10%, but in some areas - particularly in developing countries - tolerances may be much greater. Variations from the nominal frequencies as listed may be considerably greater in developing countries than in the industrialized world.



<b>Afghanistan</b>	220	50	<b>G</b>
Algeria	127/220	50	<b>B, G</b>
American Samoa	120/240	60	<b>A, C, K, N</b>
Angola	220	50	<b>B</b>
Anguilla (U.K.)	240	50	<b>D</b>
Antigua	230	60	<b>K, D, N</b>
Argentina	220	50	<b>B, C</b>
Aruba	115/127	60	<b>A, B, G, K, N</b>
Australia	240	50	<b>C, P</b>
Austria	220-230*	50	<b>A, B</b>
Azores (Portugal)	220	50	<b>B, G</b>
<b>Bahamas</b>	120	60	<b>K, N</b>
Bahrain	220	50	<b>D, G</b>
Bangladesh	220	50	<b>B, G</b>
Barbados	115	50	<b>K, N</b>
Belgium	220-230*	50	<b>B, F</b>
Belize (Br. Hond.)	110	60	<b>K, N</b>
Benin	220	50	<b>G</b>
Bermuda	120	60	<b>C, D, K, N</b>
Bolivia	110-115/220	50	<b>A, B, K, N</b>
Bosnia-Herzegovina	220	50	<b>A, B</b>
Botswana	220	50	<b>D, G</b>
Brazil	110-220	60	<b>B, K, N</b>
Bulgaria	220	50	<b>A, B</b>
Burkina Faso	220	50	<b>B</b>
Burma (now Myanmar)	230	50	<b>D, G</b>
Burundi	220	50	<b>A, B, F</b>
<b>Cambodia</b>	120/220	50	<b>B</b>
Cameroon	220-230	50	<b>B, F</b>
Canada	120	60	<b>K, N</b>
Canary Islands (Spain)	220	50	<b>B, F</b>
Cape Verde, Rep. of	220	50	<b>A, B</b>
Cayman Islands	120	60	<b>B, F</b>
Central African Rep.	220	50	<b>B</b>
Chad	220	50	<b>A, F, G</b>
Channel Islands	240	50	<b>B, D</b>
Chile	220	50	<b>B, I</b>
China, Peoples Rep. of	220	50	<b>B, C</b>
Christmas Is. (Austral.)	240	50	<b>C</b>
Cocos Is. (Austral.)	240	50	<b>C</b>
Colombia	110-220	60	<b>B, N</b>
Congo, Rep. of	220	50	<b>B</b>
Cook Is. (N. Z.)	240	50	<b>C</b>
Costa Rica	120	60	<b>K, N</b>
Curacao Is.	110/220	60	<b>A, K, P</b>
Cyprus	240	50	<b>D</b>
Czechoslovakia (former)	220	50	<b>A, B</b>
<b>Denmark</b>	220-230*	50	<b>B, E</b>
Djibouti, Rep. of	220	50	<b>B, F</b>
Dominica	230	50	<b>D</b>
Dominican Rep.	110	60	<b>K, N</b>
<b>Egypt</b>	220	50	<b>B</b>
El Salvador	115	60	<b>K, N</b>
England	240	50	<b>D, G</b>
Ecuador	120	60	<b>B, K, N</b>
Equatorial Guinea	220	50	<b>B</b>
Estonia	220	50	<b>A, B</b>
Ethiopia	220	50	<b>A, B, F, G, I</b>

<b>Fiji</b>	240	50	<b>C</b>
Finland	220/230	50	<b>A, B</b>
France	220-230*	50	<b>B, F</b>
French Guiana	220	50	<b>B, F</b>
<b>Gabon</b>	220	50	<b>B, F</b>
Gambia	220	50	<b>D</b>
Germany	220-230*	50	<b>A, B</b>
Ghana	220	50	<b>B, D, G</b>
Gibraltar	240	50	<b>B, D</b>
Greece	220-230*	50	<b>A, B</b>
Greenland (Den.)	220	50	<b>B, E</b>
Grenada	230	50	<b>B, D, G</b>
Guadeloupe	220	50	<b>B, F</b>
Guam	110-120	60	<b>K, N</b>
Guatemala	120	60	<b>K, N</b>
Guinea	220	50	<b>B, F</b>
Guinea-Bissau	220	50	<b>A, B</b>
Buyana	110	50-60	<b>B, D, G, K, N</b>
<b>Haiti</b>	110-120	50-60	<b>K, N</b>
Honduras	110	60	<b>K, N</b>
Hong Kong	200	50	<b>D, G</b>
Hungary	220	50	<b>A</b>
<b>Iceland</b>	220	50	<b>A, B</b>
India	220-250	50	<b>B, G</b>
Indonesia	220	50	<b>A, B</b>
Iran	220	50	<b>A, B</b>
Iraq	220	50	<b>B, D, G</b>
Ireland, Rep. of (S)	220	50	<b>A, D</b>
Isle of Man	240	50	<b>B, D</b>
Israel	230	50	<b>A, H</b>
Italy	220-230*	50	<b>B, I</b>
Ivory Coast	220	50	<b>B</b>
<b>Jamaica</b>	110	50	<b>K, N</b>
Japan	100	50 & 60	<b>J, M</b>
Jordan	220	50	<b>A, B, D</b>
<b>Kenya</b>	240	50	<b>D, G</b>
Korea, S.	220	60	<b>A, N, K</b>
Kuwait	240	50	<b>B, D, G</b>
Laos	220	50	<b>B, K, N</b>
Latvia	220	50	<b>A, B</b>
Lebanon	110-220	50	<b>B</b>
Lesotho	240	50	<b>B, G</b>
Liberia	120	60	<b>D, N</b>
Libya	127-130	50	<b>G, I</b>
Liechtenstein	220	50	<b>L</b>
Lithuania	220	50	<b>A, B</b>
Luxemborg	220-230*	50	<b>A, B</b>
<b>Macao</b>	220	50	<b>B, G</b>
Madagascar	220	50	<b>B, F</b>
Madeira (Portugal)	220	50	<b>B, G</b>
Majorca	220	50	<b>A, B</b>
Malawi	230	50	<b>D</b>
Malaysia	240	50	<b>D</b>
Maldives	230	50	<b>G</b>
Mali, Rep. of	220	50	<b>B, F</b>

\*These countries are changing over to a 230V mains system by 1995 per CENELEC Memo No. 14

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I



Malta	240	50	<b>D</b>
Martinique	220	50	<b>B, F</b>
Mauritania	220	50	B
Mauritius	230	50	B, D, G
Mexico	127	60	<b>K, N</b>
Monaco	220	50	<b>B, F</b>
Mongolia	220	50	B
Montseurat	230	60	<b>D, K, N</b>
Mozambique	220	50	<b>A, B</b>
Morocco	220	50	A, B, F, G

J



<b>Namibia (W. S. Africa)</b>	220-250	50	G
Nepal	220	50	G
Netherlands	220-230*	50	A, B
Neth. Antilles	120-127	50/60	A, B, K, N
	220		
New Caledonia	220	50	<b>B, F</b>
New Zealand	230	50	C
Nicaragua	120	60	<b>K, N</b>
Niger	220	50	B
Nigeria	230	50	<b>D, G</b>
Norfolk Is. (Aust)	240	50	C
No. Mariana Is. (US)	115	60	<b>K, N</b>
No. Ireland	220	50	<b>D</b>
Norway	220-230*	50	<b>A, B</b>

L



<b>Okinawa</b>	100-120	60	N
Oman	240	50	<b>D, G</b>

M



<b>Pakistan</b>	230	50	B, G
Panama	110-120	60	<b>K, N</b>
Papua New Guinea	240	50	C, P
Paraguay	220	50	B
Peru	110/220	50/60	<b>K, N</b>
Philippines	115	60	B, K, N
Pitcairn Is. (U.K.)	240	50	G
Poland	220	50	<b>A, B</b>
Portugal	220-230*	50	<b>A, B, G</b>
Puerto Rico	120	60	<b>K, N</b>

N



<b>Qatar</b>	240	50	<b>D, G</b>
<b>Romania</b>	220	50	<b>A, B</b>
Russia	220	50	<b>A, B</b>
Rwanda	220	50	B

P



<b>Saudia Arabia</b>	127/220	50/60	A, F, K, N
Scotland	220	50	<b>D</b>
Senegal	220	50	F
Seychelles	240	50	D, G
Sierra Leone	230	50	D, G
Singapore	230	50	B, D, G
Somalia	110/220	50	<b>B, F</b>

South Africa	220-250	50	<b>G, O</b>
Spain	220-230*	50	<b>B, F</b>
Sri Lanka	230	50	<b>G</b>
St. Pierre & Miquelon (Fr)	115	60	K, N
St. Kitts & Nevis	230	60	<b>D, G</b>
St. Lucia	240	50	<b>D</b>
St. Vincent	230	50	<b>D</b>
Sudan	240	50	A, B, D
Surinam	115	60	A, B
Swalbard (Norway)	220	50	A, B
Swaziland	230	50	<b>G</b>
Sweden	220-230*	50	<b>A, B (O)</b>
Switzerland	220-230*	50	B, L
Syria	220	50	B

<b>Tahiti</b>	220	50	<b>F</b>
Taiwan	110	60	<b>K, N</b>
Tanzania	230	50	<b>D, G</b>
Thailand	220	50	<b>B, K, N</b>
Togo	220	50	<b>B, F</b>
Tonga	115	60	<b>C, G</b>
Trinidad & Tobago	115/230	60	<b>D, G, K, N</b>
Tunisia	220	50	B
Turkey	220	50	<b>A, B</b>

<b>Uganda</b>	240	50	<b>G</b>
United Arab Emir.	220	50	<b>D, G</b>
United Kingdom & Ire.	240	50	<b>D, G</b>
United States	120	60	<b>K</b>
Uruguay	220	50	B, C
U.S.S.R.	220	50	<b>A, B</b>

<b>Venezuela</b>	120	60	<b>K, N</b>
Vietnam	120/220	50	<b>B, F, K, N</b>
Virgin Islands	120	60	<b>K, N</b>

<b>Wales</b>	220	50	<b>D</b>
Western Samoa	230	50	No Info.
<b>Yemen</b>	220	50	<b>B, D, G</b>
Yugoslavia (former)	220	50	<b>A, B</b>

<b>Zaire, Rep. of</b>	220	50	<b>F</b>
Zambia	220	50	<b>D</b>
Zimbabwe	220	50	<b>D, G</b>

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