# WORLD VIDEO SIGNAL GUIDE

## The table below lists broadcast standards by country.

There are three main television standards used throughout the world.

### NTSC - National Television Standards Committee

Developed in the US and first used in 1954, NTSC is the oldest existing broadcast standard. It consists of 525 horizontal lines of display and 60 vertical lines. Only one type exists, known as NTSC M. It is sometimes irreverently referred to as "Never Twice the Same Color."

### SECAM - Système Électronique pour Couleur avec Mèmoire.

Developed in France and first used in 1967. It uses a 625-line vertical, 50-line horizontal display. Different types use different video bandwidth and audio carrier specifications. Types B and D are usually used for VHF. Types G, H, and K are used for UHF. Types I, N, M, K1 and L are used for both VHF and UHF. These different types are generally not compatible with one another. SECAM is sometimes irreverently referred to as "Something Essentially Contrary to the American Method" or "SEcond Color Always Magenta."

#### **PAL - Phase Alternating Line**

Developed in Germany and first used in 1967. A variant of NTSC, PAL uses a 625/50-line display. Different types use different video bandwidth and audio carrier specifications. Common types are B, G, and H. Less common types include D, I, K, N, and M. These different types are generally not compatible with one another. Proponents of PAL irreverently call it "Perfection At Last," while critics of its enormous circuit complexity call it "Pay A Lot" or "Picture Always Lousy."

# **Video Display Standards by Country**

Country Signal Type

Afghanistan PAL B, SECAM B

Albania PAL B/G Algeria PAL B/G Angola PAL I Antarctica NTSC M NTSC M Antigua & Barbuda Argentina PAL N Armenia SECAM D/K Aruba NTSC M PAL B/G Australia Austria PAL B/G Azerbaijan SECAM D/K Azores PAL B Bahamas NTSC M Bahrain PAL B/G Bangladesh PAL B Barbados NTSC M Belarus SECAM D/K Belgium PAL B/H Belgium (Armed Forces Network) NTSC M **Belize** NTSC M Benin SECAM K Bermuda NTSC M Bolivia NTSC M

Botswana SECAM K, PAL I

PAL B/H

Brazil PAL M
British Indian Ocean Territory NTSC M
Brunei Darussalam PAL B
Bulgaria PAL
Burkina Faso SECAM K

Bosnia/Herzegovina

Burundi SECAM K

Cambodia PAL B/G, NTSC M

Cameroon PAL B/G Canada NTSC M Canary Islands PAL B/G Central African Republic SECAM K Chad SECAM D Chile NTSC M China (People'S Republic) PAL D Colombia NTSC M Congo (People'S Republic) SECAM K Congo, Dem. Rep. (Zaire) SECAM K Cook Islands PAL B Costa Rica NTSC M Cote D'Ivoire (Ivory Coast) SECAM K/D Croatia PAL B/H Cuba NTSC M Cyprus PAL B/G

Czech Republic PAL B/G (cable), PAL D/K (broadcast)

Denmark PAL B/G Diego Garcia NTSC M Djibouti SECAM K Dominica NTSC M Dominican Republic NTSC M East Timor PAL B Easter Island PAL B Ecuador NTSC M

Egypt PAL B/G, SECAM B/G

El Salvador NTSC M **Equitorial Guinea** SECAM B Estonia PAL B/G Ethiopia PAL B Falkland Islands (Las Malvinas) PAL I Fiji NTSC M Finland PAL B/G SECAM L France France (French Forces Tv) SECAM G SECAM K Galapagos Islands NTSC M Gambia PAL B Georgia SECAM D/K Germany PAL B/G

Germany (Armed Forces Tv

Iran

Iraq

Germany) NTSC M

Ghana PAL B/G Gibraltar PAL B/G Greece PAL B/G Greenland PAL B Grenada NTSC M Guam NTSC M Guadeloupe SECAM K Guatemala NTSC M Guiana (French) SECAM K Guinea PAL K Guyana NTSC M Haiti **SECAM** Honduras NTSC M Hong Kong PAL I Hungary PAL K/K Iceland PAL B/G India PAL B Indonesia PAL B

PAL B/G

**PAL** 

Ireland, Republic Of PAL I Isle Of Man **PAL** Israel PAL B/G Italy PAL B/G Jamaica NTSC M Japan NTSC M Johnstone Island NTSC M Jordan PAL B/G Kazakhstan SECAM D/K Kenya PAL B/G

Korea (North) SECAM D, PAL D/K

Korea (South)

Kuwait

PAL B/G

Kyrgyz Republic

SECAM D/K

Laos PAL B
Latvia PAL B/G
Lebanon PAL B/G
Lesotho PAL K
Liberia PAL B/H
Libya PAL B/G
Liechtenstein PAL B/G

Lithuania PAL B/G, SECAM D/K Luxembourg PAL B/G, SECAM L

Macau PAL I Macedonia PAL B/H SECAM K Madagascar Madeira PAL B Malaysia PAL B Maldives PAL B Mali SECAM K Malta PAL B Marshall Islands NTSC M Martinique SECAM K Mauritania SECAM B Mauritius SECAM B Mayotte SECAM K Mexico NTSC M Micronesia NTSC M Midway Island NTSC M Moldova (Moldavia) SECAM D/K

MongoliaSECAM DMontenegroPAL B/GMontserratNTSC MMoroccoSECAM BMozambiquePAL B

SECAM L, PAL G

Monaco

Myanmar (Burma) NTSC M Namibia PAL I Nepal В

Netherlands PAL B/G Netherlands (Armed Forces Network) NTSC M **Netherlands Antilles** NTSC M New Caledonia SECAM K New Zealand PAL B/G Nicaragua NTSC M Niger SECAM K Nigeria PAL B/G Norfolk Island PAL B North Mariana Islands NTSC M PAL B/G Norway Oman PAL B/G Pakistan PAL B Palau NTSC M Panama NTSC M Papua New Guinea PAL B/G Paraguay PAL N Peru NTSC M Philippines NTSC M Poland PAL D/K Polynesia (French) SECAM K Portugal PAL B/G NTSC M Puerto Rico PAL B SECAM K PAL D/G SECAM D/K

Qatar Reunion Romania Russia St. Kitts & Nevis NTSC M St. Lucia NTSC M St. Pierre Et Miquelon SECAM K St. Vincent NTSC M Sao Tomé E Principe PAL B/G Samoa, American **NTSC** Saudi Arabia

SECAM B/G, PAL B

Samoa NTSC M Senegal SECAM K Serbia PAL B/G Seychelles PAL B/G Sierra Leone PAL B/G Singapore PAL B/G Slovakia PAL B/G Slovenia PAL B/H Somalia PAL B/G

South Africa PAL I
Spain PAL B/G
Sri Lanka PAL
Sudan PAL B
Suriname NTSC M
Swaziland PAL B/G
Sweden PAL B/G

Switzerland PAL B/G (GERMAN ZONE, SECAM L (FRENCH

**ZONE** 

Syria SECAM B, PAL G

Tahiti **SECAM** Taiwan **NTSC** Tajikistan SECAM D/K Tanzania PAL B Thailand PAL B/M Togo SECAM K Trinidad & Tobago NTSC M Tunisia SECAM B/G

Turkey PAL B
Turkmenistan SECAM D/K
Turks & Caicos Islands NTSC M
Uganda PAL B/G
Ukraine SECAM D/K

Uruguay PAL N
United Arab Emirates PAL B/G
United States NTSC M
United Kingdom PAL I

Uzbekistan SECAM D/K Venezuela NTSC M

Vietnam NTSC M, SECAM D

Virgin Islands (Us & British)

Wallis & Futuna

Yemen

NTSC M

SECAM K

PAL B/NTSC M

Zambia PAL B/G Zimbabwe PAL B/G