

The CW Operators Guide

Original Author Unknown

PROSIGNS FOR MORSE CODE

Prosigns are symbols formed by running together two characters into one (without the intercharacter space) to make an abbreviation for the most common procedural signals. Usually written with a BAR over the characters.

AR ----- End of message
AS ----- Stand by
BK ----- Invite receiving station to transmit
BT ----- Pause; Break For Text
CL ----- Going off the air (clear)
CQ ----- Calling any amateur radio station
K ----- Go, invite any station to transmit after calling CQ
KA ----- Beginning of message
KN ----- end of transmission, Go only, invite a specific station to transmit
R ----- All received OK
SK ----- End of contact (sent before call)
VE ----- Understood

CW ABBREVIATIONS

AA - All after AB - All before ABT - About ADEE - Addressee
ADR - Address AGN - Again AM - Amplitude Modulation
ANT - Antenna BCI - Broadcast Interference BCL - Broadcast Listener
BCNU - Be seeing you BK - Break, Break in BN - All between; Been
BT - Separation (break) between addr & text; between txt & signature
BTR - Better BUG - Semi-Automatic key B4 - Before
C - Yes, Correct CFM - Confirm; I confirm CK - Ckeck
CKT - Circuit CL - I am closing my station; Call CLBK - Callbook
CLD - Called CLG - Calling CNT - Can't CONDX - Conditions
CQ - Calling any station CU - See You CUL - See You later
CUM - Come CW - Continuous wave DA - Day DE - From, This Is
DIFF - Difference DLD - Delivered DLVD - Delivered DN - Down
DR - Dear EL - Element ES - And DX - Distance
ES - and FB - Fine Business, excellent FER - For
FM - Frequency Modulation: From GA - Go ahead; Good Afternoon
GB - Good bye, God Bless GD - Good GE - Good Evening
GESS - Guess GG - Going GM - Good morning GN - Good night
GND - Ground GUD - Good GV - Give GVG - Giving
HH - Error in sending HI or HiHi - The telegraph laugh; High
HPE - Hope HQ - Headquarters HR - Here; Hear HV - Have
HW - How, How Copy? IMI - Repeat, Say Again INFO - Info
LID - A poor operator LNG - Long LTR - Later; letter LV - Leave
LVG - Leaving MA - Millamperes MILL - Typewriter MILS - Millamperes
MSG - Message; Prefix to radiogram N - No, Negative, Incorrect, No More
NCS - Net Control Station ND - Nothing Doing NIL - Nothing; I have nothing for you
NM - No more NR - Number NW - Now; I resume transmission

OB - Old boy OC - Old chap OM - Old man OP - Operator
 OPR - Operator OT - Old timer; Old top PBL - Preamble PKG - Package
 PSE - Please PT - Point PWR - Power PX - Press
 R - Received as transmitted; Are; Decimal Point RC - Ragchew RCD - Received
 RCVR - Receiver RE - Concerning; Regarding REF - Refer to; Referring to;
 Reference RFI - Radio frequency interference RIG - Station equipment
 RPT - Repeat, Report RTTY - Radio teletype RST - Readability, strength, tone
 RX - Receive, Receiver SASE - Self-addressed, stamped envelope
 SED - Said SEZ - Says SGD - Signed SIG - Signature; Signal
 SINE - Operator's personal initials or nickname SKED - Schedule
 SRI - Sorry SS - Sweepstakes SSB - Single Side Band STN - Station
 SUM - Some SVC - Service; Prefix to service message T - Zero
 TFC - Traffic TMW - Tomorrow TKS - Thanks TNX - Thanks
 TR - Transmit T/R - Transmit/Receive TRIX - Tricks TT - That
 TTS - That is TU - Thank you TVI - Television interference
 TX - Transmitter; Transmit TXT - Text U - You UR - Your; You're
 URS - Yours VFB - Very fine business VFO - Variable Frequency Oscillator
 VY - Very W - Watts WA - Word after WB - Word before
 WD - Word WDS - Words WID - With WKD - Worked
 WKG - Working WL - Well; Will WPM - Words Per Minute WRD - Word
 WUD - Would WX - Weather XCVR - Transceiver XMTR - Transmitter
 XTAL - Crystal XYL - Wife YL - Young lady YR - Year
 30 - I have no more to send 73 - Best Regards 88 - Love and kisses
 161 - 73+88=161

The RST System

The RST System of Signal Reporting has been used for years (circa 1934) as a shorthand method of reporting Readability, Signal Strength and for CW, Tone (i.e., quality of the CW tone). For voice contacts only the R and S are used. The S component is usually not the same as your S-Meter reading as most S-Meters aren't calibrated to track the RST System. The RST is also reported on QSL Cards and must be filled in correctly -- e.g., a 569 report for a Voice Contact is invalid. Note that many DX operations and contest stations merely report 59(9) as a convenience to avoid having to log each of the real reports. A questionable practice but a fact of Dxing/Contesting.

READABILITY

- 1 -- Unreadable
- 2 -- Barely readable, occasional words distinguishable
- 3 -- Readable with considerable difficulty
- 4 -- Readable with practically no difficulty
- 5 -- Perfectly readable

SIGNAL STRENGTH

- 1 -- Faint signals, barely perceptible
- 2 -- Very weak signals
- 3 -- Weak signals
- 4 -- Fair signals
- 5 -- Fairly good signals
- 6 -- Good signals

- 7 -- Moderately strong signals
- 8 -- Strong signals
- 9 -- Extremely strong signals (50mV across 50Ω)

TONE

- 1 -- Sixty cycle a.c. or less, very rough and broad
- 2 -- Very rough a.c. , very harsh and broad
- 3 -- Rough a.c. tone, rectified but not filtered
- 4 -- Rough note, some trace of filtering
- 5 -- Filtered rectified a.c. but strongly ripple-modulated
- 6 -- Filtered tone, definite trace of ripple modulation
- 7 -- Near pure tone, trace of ripple modulation
- 8 -- Near perfect tone, slight trace of modulation
- 9 -- Perfect tone, no trace of ripple or modulation of any kind

Infrequently used is the addition of a letter to the end of the 3 numbers. These are: X = the signal is rock steady like a crystal controlled signal; C = the signal is chirpy as the frequency varies slightly with keying; and K = the signal has key clicks.

X is from the early days of radio when such steady signals were rare. Today most all signals could be given an X but it is hardly ever used. It is helpful to report a chirpy or clicky signal by using the C or K, e.g. 579C or 579K.

Often signals are stronger than S9 (50mV across 50Ω) and are given in decibels above S9 according to the receiver S meter. Eg: "You are 25dB above S9"

Q-Signals For Amateur Radio Operators In Bold indicates frequent use.

- | | |
|------------|---|
| Q-Sig | Message |
| QRA | What is the name of your station? The name of my station is ____. |
| QRB | How far are you from my station? I am ____ km from your station. |
| QRD | Where are you bound and where are you coming from? I am bound ____ from ____. |
| QRG | Will you tell me my exact frequency? Your exact frequency is ____ kHz. |
| QRH | Does my frequency vary? Your frequency varies. |
| QRI | How is the tone of my transmission? The tone of your transmission is: (1-Good, 2-Variable, 3-Bad.) |
| QRJ | Are you receiving me badly? I cannot receive you, your signal is too weak. |
| QRK | What is the intelligibility of my signals? The intelligibility of your signals is: (1-Bad, 2-Poor, 3-Fair, 4-Good, 5-Excellent.) |
| QRL | Are you busy? I am busy, please do not interfere. |
| QRM | Is my transmission being interfered with? Your transmission is being interfered with: (1-Nil, 2- Slightly, 3-Moderately, 4-Severly, 5-Extremely.) |
| QRN | Are you troubled by static? I am troubled by static: (1-5 as under QRM.) |
| QRO | Shall I increase power? Increase power. |
| QRP | Shall I decrease power? Decrease power. |
| QRQ | Shall I send faster? Send faster (____ WPM.) |
| QRR | Are you ready for automatic operation? I am ready for automatic operation. Send at ____ WPM. |

QRS Shall I send more slowly? Send more slowly (___ WPM.)
QRT Shall I stop sending? Stop sending.
QRU Have you anything for me? I have nothing for you.
QRV Are you ready? I am ready.
QRW Shall I inform ___ that you are calling? Please inform ___ that I am calling.
QRX When will you call me again? I will call you again at ___ hours.
QRY What is my turn? Your turn is numbered ____.
QRZ Who is calling me? You are being called by ____.
QSA What is the strength of my signals? The strength of your signals is: (1-Scarcely perceptible, 2-Weak, 3-Fairly Good, 4-Good, 5-Very Good.)
QSB Are my signals fading? Your signals are fading.
QSD Is my keying defective? Your keying is defective.
QSG Shall I send ___ messages at a time? Send ___ messages at a time.
QSJ What is the charge to be collected per word to ___ including your international telegraph charge? The charge to be collected per word is ___ including my international telegraph charge.
QSK Can you hear me between your signals and if so can I break in on your transmission? I can hear you between my signals, break in on my transmission.
QSL Can you acknowledge receipt? I am acknowledging receipt.
QSM Shall I repeat the last message which I sent you? Repeat the last message.
QSN Did you hear me on ___ kHz? I did hear you on ___ kHz.
QSO Can you communicate with ___ direct or by relay? I can communicate with ___ direct (or by relay through ____.)
QSP Will you relay to ___? I will relay to ____.
QSQ Have you a doctor on board? (or is ___ on board?) I have a doctor on board (or ___ is on board.)
QSU Shall I send or reply on this frequency? Send a series of Vs on this frequency.
QSV Shall I send a series of Vs on this frequency? Send a series of Vs on this frequency.
QSW Will you send on this frequency? I am going to send on this frequency.
QSY Shall I change to another frequency? Change to another frequency.
QSZ Shall I send each word or group more than once? Send each word or group twice (or ___ times.)
QTA Shall I cancel message number ___? Cancel message number ____.
QTB Do you agree with my counting of words? I do not agree with your counting of words. I will repeat the first letter or digit of each word or group.
QTC How many messages have you to send? I have ___ messages for you.
QTE What is my true bearing from you? Your true bearing from me is ___ degrees.
QTG Will you send two dashes of 10 seconds each followed by your call sign? I am going to send two dashes of 10 seconds each followed by my call sign.
QTH What is your location? My location is ____.
QTI What is your true track? My true track is ___ degrees.
QTJ What is your speed? My speed is ___ km/h.
QTL What is your true heading? My true heading is ___ degrees.
QTN At what time did you depart from ___? I departed from ___ at ___ hours.
QTO Have you left dock (or port)? I have left dock (or port).
QTP Are you going to enter dock (or port)? I am going to enter dock (or port.)
QTQ Can you communicate with my station by means of the International Code of Signals? I am going to communicate with your station by means of the International Code of Signals.

- QTR What is the correct time? The time is ____.
- QTS Will you send your call sign for ____ minutes so that your frequency can be measured? I will send my call sign for ____ minutes so that my frequency may be measured.
- QTU What are the hours during which your station is open? My station is open from ____ hours to ____ hours.
- QTV Shall I stand guard for you on the frequency of ____ kHz? Stand guard for me on the frequency of ____ kHz.
- QTX Will you keep your station open for further communication with me? I will keep my station open for further communication with you.
- QUA Have you news of ____? I have news of ____.
- QUB Can you give me information concerning visibility, height of clouds, direction and velocity of ground wind at ____? Here is the information you requested...
- QUC What is the number of the last message you received from me? The number of the last message I received from you is ____.
- QUD Have you received the urgency signal sent by ____? I have received the urgency signal sent by ____.
- QUF Have you received the distress signal sent by ____? I have received the distress signal sent by ____.
- QUG Will you be forced to land? I am forced to land immediately.
- QUH Will you give me the present barometric pressure? The present barometric pressure is ____ (units). and...
- QLF Are you sending with your left foot? I am sending with my left foot.

THE INTERNATIONAL MORSE CODE

A ·—	F ····	K —··	P ·—·	U ···	Z —··	1 ·——	6 —···
B —···	G —·	L ····	Q —··	V ····		2 ·—·	7 —···
C —···	H ····	M —	R ···	W —		3 ···—	8 —···
D —·	I ··	N ··	S ···	X —··		4 ···—	9 —···
E ·	J ·——	O —	T —	Y —··		5 ····	0 ———

Period . ···—	Underscore _ ···—	Comma , —··—
Single Quote ' ·——·	Slash / —···	Colon : (1) —···
Plus + ····	Semicolon ; —···	Equal = —···
Dollar Sign \$ ···—	Question ? ····	Warning ····
Open Paren (—···	Error ·····	Close Paren) —···
Repetition (ii ii) ····	Dash —···	Exclamation ! —···
Quote " ····		

INTERNATIONAL EXTENSIONS

`A acute ·—·	A-corona ·—·	Ä umlaut (1) ····	`E acute ····	~N tilde —···
Ü umlaut (1) ···	Ö umlaut (1) —··	CH (2) ———	OR BAR	

ABBREVIATED NUMBERS

1 ··	2 ··	3 —	4 ···	5 ···	6 —··	7 —·	8 —·	9 —·	0 —
------	------	-----	-------	-------	-------	------	------	------	-----