

# ARRL International Digital Contest Rules

## Introduction and How to Operate

**Contest Objective:** For amateurs around the world to contact as many other amateurs in as many 4-digit Maidenhead grid squares as possible, using non-RTTY digital modes.

Your [ARRL membership](#) helps support the ARRL Contest Program – the world’s largest with many different events from HF through microwave. Along with your membership, you’ll get free access to the National Contest Journal, the ARRL’s online archive of QST articles, and the Technical Information Service. Contesting builds skills and understanding – come join the fun!

**Contest Period:** (All dates are maintained in the [ARRL contest calendar](#)):

First full weekend of June.

**Contest Period:** Begins 1800 UTC Saturday and runs through 2359 UTC Sunday. Single-Op stations may operate for 24 hours out of the 30-hour contest period. Multioperator stations may operate the entire 30 hours. See the Special Rules for information about off times.

**Log Deadline:** Upload your log at [contest-log-submission.arrl.org](http://contest-log-submission.arrl.org) no later than **SEVEN (7)** days after the contest is over at 2359 UTC. Only Cabrillo formatted electronic logs will be accepted, which must be uploaded via our web app. No paper logs will be accepted.

**Bands and Modes:** Use only the 1.8, 3.5, 7, 14, 21, 28, and 50 MHz bands. Use any digital mode (excluding RTTY) that supports the required contest exchange. Observation of established band plans is strongly encouraged.

**Categories:** Single Operator, Low Power and Single Operator, QRP; Multioperator, Single Transmitter, Low Power; and Multioperator Single Transmitter, QRP. There are no High-Power categories. See the Special Rules and Entry Categories sections.

**Contacts:** All stations may contact any other station. Contact stations only once per band.

**Exchange:** Send 4-digit Maidenhead grid-square locator ([www.arrl.org/grid-squares](http://www.arrl.org/grid-squares)).

This is a typical FT8 contest contact:

CQing Station: CQ TEST N1SFE FN31

Answering Station: N1SFE W9SZ EN50

CQer: W9SZ N1SFE R FN31

Answer: N1SFE W9SZ RR73

CQer: W9SZ N1SFE 73 (or any appropriate acknowledge message)

**Scoring:** Each contact counts for one (1) QSO point, plus an additional point for each 500 km of distance between the centers of the 4-digit grid squares of the two stations, rounded up to the next highest value. See the Special Rules for scoring details.

**Club Competition:** You can contribute your score to your ARRL Affiliated Club by selecting the club name when you upload your log. Club Competition rules are available at [ARRL Affiliated Club Competition Rules](#).

**Team Competition:** You may wish to form a team with fellow participants. Teams must consist of two to five single operator stations operating within a 175-mile radius whose individual scores will be combined to produce a team score. All team members must be registered prior to the start of the contest. See the Special Rules for more details.

**Feedback about the contest:**

Send us your stories and photos! Tell us what fun you had, how you did, and what challenges you faced at the ARRL Contest Program's "[Soapbox](#)" page.

**Additional Resources:**

**Suggested Band Plans for FT\* modes:**

**FT-4 Recommended Sub-bands:**

1.836-1.840  
3.580-3.590  
7.080-7.090  
14.080-14.090  
21.080-21.090  
28.080-28.090  
50.330 to 50.340

When choosing your operating frequency, set the radio dial at the bottom of the sub-band and QSO with stations on audio frequencies within the radio passband, typically 2.5-4 kHz wide. If a sub-band becomes crowded, move the radio dial frequency up in 2 kHz increments, as needed. (For example: 7.080, 7.082, 7.084, 7.086 and 7.088).

**FT-8 Recommended Sub-bands:**

1.840-1.844  
3.590-3.600 (No Digital above 3600)  
7.090-7.100  
14.090-14.100  
21.090-21.100  
28.090-28.100  
50.340 to 50.350

When choosing your operating frequency, set the radio dial at the bottom of the sub-band and QSO with stations on audio frequencies within the radio passband typically 2.5-4 kHz wide. If a sub-band becomes crowded, move the radio dial frequency up in 2 kHz increments, as needed. (For example: 7,090, 7.092, 7.094, 7.096 and 7.098).

All contest queries should be directed to [contests@arrl.org](mailto:contests@arrl.org) or 860-594-0232.

## Special International Digital Contest Rules

1. Operating Period: 1800 UTC Saturday through 2359 UTC Sunday.
  - 1.1 Single Operator stations may operate up to 24 hours out of the 30-hour contest period. The operating period begins with the first contact, after which each off time must be at least 60 minutes long until 24 hours have been completed. Multioperator stations may operate the entire 30 hours.
  - 1.2 Off time must be taken in one or two breaks that are at least 60 minutes long.
  - 1.3 After 24 hours of operating time is reached, Single Operator stations may continue to make and log QSOs but they will not count toward the final score, there is no penalty for including those contacts in a submitted log, and the station contacted is eligible to receive credit for the contact. See the [ARRL International Digital Contest](#) web page for more information about the off-time rule.
2. Contacts
  - 2.1 Use only the 1.8, 3.5, 7, 14, 21, 28, and 50 MHz bands.
  - 2.2 Use any digital mode (excluding RTTY) that supports the contest's 4-digit grid square exchange.
  - 2.3 Contact each station only once per band regardless of mode.
3. Categories
  - 3.1 See the HF Categories section for power sub-categories.
  - 3.2 Single Operator, 1 Radio; and Single Operator, 2 Radio (LP and QRP) – one person (operator) performs all operating and logging functions.
  - 3.3 Multioperator, Single Transmitter (LP and QRP) – This is a true one-transmitter, multiple operator category. No multiplier transmitters or in-band transmitters are allowed.
4. Contest Exchange - the required exchange consists of:
  - 4.1 4-digit Maidenhead grid square locator ([www.arrl.org/grid-squares](http://www.arrl.org/grid-squares)).
5. Scoring
  - 5.1 QSO points: Each contact counts for one (1) point, plus an additional point for each 500 km of distance between the centers of the 4-digit grid squares of the two stations, rounded up to the next highest value. QSO point values will be determined as part of the adjudication process.
  - 5.2 Example: two stations with a center-to-center grid-square distance of 1,565 km make a contact. They receive one (1) point for the QSO, plus an additional four (4) distance points ( $1,565/500 = 3.13$  – with 3.13 rounded up to the next whole number of 4), for a total of 5 QSO points. If the distance is less than 500 km, the minimum distance point value is one (1).
  - 5.3 Final score equals the total QSO points.
6. Operating Restrictions
  - 6.1 See the Entry Categories section for band change limits.
7. Awards
  - 7.1 [Online certificates](#) will be available to all eligible participants. This includes:
    - 7.1.1 Top Low Power and QRP Single Operator, One Radio; Single Operator, Two Radio; and Multioperator station in each ARRL/RAC Section.
    - 7.1.2 Top Low Power, and QRP Single Operator, One Radio; Single Operator, Two Radio; and Multioperator station in each DXCC entity other than W/VE.
  - 7.2 Plaques (if sponsored) Top Low Power and QRP station in each category overall, each ARRL Division, Canada, and each DXCC entity other than W/VE.

- 7.2.1 Entrants who qualify for unsponsored plaques may purchase them from the ARRL Contest Program.
8. Team Competition (also see [ARRL Affiliated Club Competition Rules](#))
- 8.1 Teams must consist of two to five single operator stations operating within a 175-mile radius whose individual scores will be combined to produce a team score.
- 8.2 Clubs or other groups having more than five members may form multiple teams, the 175-mile radius limit applies to each team entry. Each team will have its own center between its team members.
- 8.3 A participant may only be a member of one team. If more than one registration contains the same participant, the registration received last will be used to determine team membership.
- 8.4 All team members must be registered prior to the start of the contest. Registration will be available from 10 days before the start of the contest, until 1 hour before the contest begins, at the following url: <http://contests.arrl.org/>. Teams may also be registered by sending an email to the ARRL Contest Program Manager at [contests@arrl.org](mailto:contests@arrl.org).
- 8.5 The team score is the sum of scores from qualified members.
- 8.6 A team member's score may also be counted for a club total in the Club Competition.
9. Log Submission
- 9.1 Logs are due SEVEN (7) days after the event is over at 2359 UTC. Only Cabrillo formatted electronic logs will be accepted, which must be uploaded via our web app at [contest-log-submission.arrl.org](http://contest-log-submission.arrl.org). No paper logs will be accepted. If an extension of the log deadline is needed, contact the ARRL Contest Program Manager. All entries received are displayed on the [Logs Received](#) page.

# Categories for ARRL International Digital Contest

Version 1.1 – 08 Feb 2022

## Entry Categories for ARRL International Digital Contest

<b>Category Summary</b> <i>(See Special Rules of each contest for Mode-based Categories)</i>						
Categories	QRP <sup>1</sup>	Low Power (LP) <sup>2</sup>	High Power (HP) <sup>3</sup>	Band Change Restrictions	Spotting Assistance <sup>4</sup>	Number of Simultaneous Signals <sup>5</sup>
Single Operator, One Radio (SO1R)	Yes	Yes	No	None	Yes	One
Single Operator, Two Radios (SO2R)	Yes	Yes	No	None	Yes	One
Multioperator, Single Transmitter (MS)	Yes	Yes	No	10 per clock hour	Yes	One
Checklog	n/a		n/a		n/a	n/a

1 — 5 watts PEP output or less

2 — 100 watts PEP output or less

3 — there is no High-Power category in this event.

4 — Spotting Assistance is allowed in all categories.

5 — Multiple signals are not allowed on the same band, regardless of category or mode.

### HCAT.1. Single Operator, One Radio (SO1R)

HCAT.1.1. Use of publicly available spotting assistance is permitted.

HCAT.1.2. Entrants are permitted to use online and other non-amateur radio platforms including but not limited to the use of social media, video live streaming, and internet chat rooms. Self-spotting is allowed but asking to be spotted is prohibited.

HCAT.1.3. Only one transmitter and receiver is to be used at any given time.

HCAT.1.4. Only one transmitted signal is permitted at any time, not including transmissions on a spotting net or network.

HCAT.1.5. Power sub-categories include QRP and Low Power.

HCAT.1.6. Any Single Operator entrant who meets the requirements may also enter one of the following OVERLAY categories:

**All Enclosed Antennas Overlay** – All antennas must be enclosed within a building.

**Limited Time Overlay** – 8 hours maximum operating time. Off time must be taken in a minimum of 60-minute blocks. Time starting late or finishing early counts as off time.

**Combined All Enclosed Antennas and Limited Time Overlay.**

### HCAT.2. Single Operator, Two Radio (SO2R)

HCAT.2.1. Use of publicly available spotting assistance is permitted.

HCAT.2.2. Entrants are permitted to use online and other non-amateur radio platforms including but not limited to the use of social media, video live streaming, and internet chat rooms. Self-spotting is allowed but asking to be spotted is prohibited.

HCAT.2.3. The operator may transmit on one band while listening on another band, with the intent of finding a QSO partner on the second band, and/or interleaving QSOs on the two bands.

HCAT.2.4. Only one transmitted signal is permitted at any time, not including transmissions on a spotting net or network.

HCAT.2.5. Power sub-categories include QRP and Low Power.

HCAT.2.6. Any Single Operator entrant who meets the requirements may also enter one of the following OVERLAY categories:

**All Enclosed Antennas Overlay** – All antennas must be enclosed within a building.

**Limited Time Overlay** – 8 hours maximum operating time. Off time must be taken in a minimum of 60-minute blocks. Time starting late or finishing early counts as off time.

**Combined All Enclosed Antennas and Limited Time Overlay.**

HCAT.3. Multioperator, Single Transmitter (MS)

HCAT.3.1. Use of publicly available spotting assistance is permitted.

HCAT.3.2. Entrants are permitted to use online and other non-amateur radio platforms including but not limited to the use of social media, video live streaming, and internet chat rooms. Self-spotting is allowed but asking to be spotted is prohibited.

HCAT.3.3. This is a true one-transmitter, multiple operator category. No multiplier transmitters or in-band transmitters are allowed.

HCAT.3.4. Only one transmitted signal is allowed at any time.

HCAT.3.5. Stations are limited to a maximum of ten (10) band changes during any clock hour.

HCAT.3.6. Power sub-categories include QRP and Low Power.

## Rules for Entry

Version 1.04 – 01 Oct 2021

### Conditions of Entry

COND.1. By submitting a log, entrants agree to be bound by the contest rules. Violation of the contest rules or engaging in prohibited conduct may result in disciplinary action at the discretion of the ARRL Awards Committee up to and including disqualification.

COND.2 Multiple entries

COND.2.1 Individuals and stations may submit multiple entries per contest under different call signs. Using a call sign modifier does make the call sign unique. (Example- W1AW and W1AW/7 are treated as the same call sign.)

COND.3. Log contents used to determine final score and awards will be available to the public.

COND.4. Entrants agree to follow the regulations of their operating licenses and station licenses at all times.

COND.5. Entrants agree to be bound by the decisions of the ARRL Awards Committee.

COND.6. All entries become the property of the ARRL and are not returnable.

## Operating and Entry Restrictions

OPRG.1. Call signs and exchange information must be sent, received, acknowledged and logged correctly during the contest period to be considered a complete contact.

OPRG.2. An operator may not use more than one call sign from any given location during the contest period.

OPRG.3. Alternating CQs on two or more frequencies using the same band is prohibited. Example: an operator calling CQ on FT8 during even periods, then calling CQ on FT4 during odd periods, or an operator calling CQ on FT8 on 14.074 during odd periods, then calling CQ on FT8 at 14.094 during even periods, is not permitted.

OPRG.4. Each contact must include contemporaneous direct initiation by both operators making a contact. Initiation of a contact may be by either local or remote control. Fully automated contacts are prohibited.

OPRG.5. Aeronautical and Maritime/Marine Mobile stations

OPRG.5.1. In contests in which DX stations may be worked by W/VE stations, contacts with aeronautical mobile and maritime mobile stations outside the US and Canada count for contact credit only.

OPRG.6. Only one transmitted signal per band is permitted at any time.

## Station and Equipment Restrictions

STTN.1. A transmitter used to contact one or more stations may not be subsequently used under any other call sign during the contest period, except

- a) for family stations where more than one call sign has been issued, and then only if the second call sign is used by a different operator.
- b) for remote stations used by individual amateurs that have limited or no access to their own stations.

This rule does not permit any operator to use multiple call signs at the same station to manufacture contacts to another station in the contest.

STTN.2. All transmitters and receivers must be located within a 500-meter diameter circle, excluding antennas.

STTN.3. Remote receiving installations outside the 500-meter circle are prohibited. Stations remotely controlled by radio link may use necessary equipment at the control point. This does not allow using the control point as another receiving location.

STTN.4. While no minimum distance is specified for contacts, equipment should be capable of communications at a range of at least 1 km.

## Prohibited Conduct

Examples of prohibited conduct include, but are not limited to:

PROH.1. Claiming cross-band contacts.

PROH.2. Use of systems such as repeaters, gateways, or digipeaters to relay on-the-air signals. Satellites may be used only if permitted by the contest rules. This does not apply to the remote control of a station.

PROH.3. Confirmation of any contacts during or after the contest by use of any non-amateur radio means such as telephone, text messaging, websites, email, or social media.

PROH.4. Asking to be spotted by another station.

- PROH.5. Misrepresenting contact times (“rubber clocking”) to meet band change or off time rules.
- PROH.6. Claiming excessive unverifiable contacts or multipliers (“log padding”).
- PROH.7. Transmitting signals with excessive bandwidth (e.g., spurious emissions) or harmonics.
- PROH.8. Failure to identify transmissions in a timely manner (i.e., for longer periods than 1 minute).
- PROH.9. Repeater input or output frequencies may not be used without the permission of the repeater owner.

### Log Checking Penalties

Logs are cross-checked using custom software and human judgment.

- LGCK.1. Duplicate contacts are removed with no additional scoring penalty.
- LGCK.2. Contacts with call sign errors ("Busted") or that are not found in the corresponding log ("NIL") are removed from the log and an additional scoring penalty of the QSO point value of that contact is assessed.
- LGCK.3. Contacts with an incorrectly received exchange are removed with no additional scoring penalty.

### Disciplinary Actions

- DSCP.1. Disqualified entries will be listed in the published results, are not eligible for an award, and are not eligible to submit an entry in the next running of that contest.
- DSCP.2. Notification of Award Committee actions will be sent by email to the address provided with the log submission. The entrant has five days to appeal the decision to the Contest Program Manager. If there is no response, after that time the decision is final.
- DSCP.3. The Awards Committee reserves the right to change the category of any entry based on its examination of the log or other information.

## Log Submission Rules

Version 1.01 – 30 April 2020

### Electronic Log Submission

- ELOG.1. The official ARRL format for electronic logs is the Cabrillo format ([wwwrof.org/cabrillo](http://wwwrof.org/cabrillo)).
  - ELOG 1.1. A paper printout of an electronic log file is not an acceptable substitute. A utility for converting log files in non-Cabrillo format to Cabrillo is available at [www.b4h.net/cabforms](http://www.b4h.net/cabforms).
- ELOG.2. Electronic logs must be submitted via [contest-log-submission.arrl.org](http://contest-log-submission.arrl.org) with the exception of Field Day, Straight Key Night, 10 GHz and Up, ARRL EME, Rookie Roundup, and School Club Roundup.
- ELOG.3. Electronic logs are assumed to be signed as complying with all contest rules and conditions when they are submitted.
- ELOG.4. Multioperator logs must include the complete list of operators in the Cabrillo OPERATORS: field.

### Log Submission Deadline

- LGDL.1. Entries must be sent to the ARRL by the log deadline published in the rules for each contest. For electronic submissions, the submission date and time is determined by the app confirmation.
- LGDL.2. Submitted entries will be listed on the [Logs Received](#) page until final results are published.
- LGDL.3. Logs not submitted by the contest deadline are not eligible for awards.



LGDL.4. Entries received at the ARRL after the contest submission deadline may not be included in the contest results.

## Definitions and Glossary

Version 1.05 – 10 Feb 2022

**Automated Multi-Channel Decoder:** Device such as *CW Skimmer* software that provides information about the identity and frequency of contest station transmissions while functioning independently of the operator's direct control and participation. Software that displays multiple decoded signals at the same time is considered to be a multi-channel decoder.

**Band Changes:** A band change consists of two consecutive contacts on different bands. For example, making a contact on 20 meters then on 40 meters and then on 20 meters counts as two band changes.

**Clock Hour:** A clock hour is from zero to 59 minutes on the clock, not any 60 consecutive minutes.

**Digital (mode):** Any mode defined as "data" in the FCC Part 97 rules (§97.3(c)(2)).

**Dupe Sheet:** An alphanumerically sorted list of all contacts made during the contest, sorted by band and mode as appropriate. A list of duplicate contacts does not meet this requirement.

**DX Stations:** Any non-W/VE station. This includes US possessions and territories in the Caribbean and Pacific and St. Paul Island (CY9) and Sable Island (CYØ). Exceptions such as the status of Hawaii (KH6) and Alaska (KL7) are stated in the Special Rules for each contest.

**DXCC Entities:** defined by ARRL DXCC List

**Electronic Log or Entry:** consists of any log submitted by electronic means.

**High Power (HP):** 1500 watts PEP output or the maximum allowable power level established by the national licensing authority issuing the operator and/or station license, whichever is less.

**Low Power (LP):**

Below 30 MHz- 100 watts PEP output or less

**Maritime Mobile:** For the purposes of ARRL contests, maritime mobile is defined as shipboard operation, outside of the territorial waters of the country (defined for these purposes as 12 miles offshore).

**Maximum Number of Signals:** This Maximum Number does not include a signal necessary to provide spotting assistance, i.e. 2m packet connection. Other than that exception, it is the maximum number of signals that a station may emit at any time.

**Multioperator:** More than one person performs all transmitting, receiving, and logging functions as well as equipment and antenna adjustments.

**Off Time:** A period during which no contacts are logged. Unless otherwise specified, to count as off time, there must be at least 30 consecutive minutes in the log without a contact. During off time, operators may not listen to contest activity.

**QRP:** 5 watts PEP output or less

**QSO Finding Assistance:** The use of any technology or other source that provides call sign or multiplier identification of a signal to the operator. Examples include, but are not limited to PSKReporter, Telnet, DX Spotting websites, and other chat rooms. Such assistance may NOT be used to convey receipt or non-receipt of any required element of a contact or to request a repeat of any required element of a contact. See also “Spotting Assistance”.

**RTTY (mode):** Any mode defined as “RTTY” in the FCC Part 97 rules (§97.3(c)(7)).

**Single Operator:** One person performs all transmitting, receiving, and logging functions as well as equipment and antenna adjustments.

**Single Operator, One Radio (SO1R):** The operator utilizes a single transmitter and single receiver, always on the same band at any given time.

**Single Operator, Two Radios (SO2R):** The operator transmits on one band while listening on another band, with the intent of finding a QSO partner on the second band, and/or interleaving QSOs on the two bands. SO2R generally requires two transceivers but may be accomplished in a single SDR-based transceiver. No more than one transmitted signal at a time is permitted.

**Spotting Assistance:** Use of any operating arrangements involving other individuals, DX-alerting nets, packet, Internet, automated multi-channel recorders, chat rooms, etc. Generating spotting information for use by other stations is not considered to be spotting assistance.

**W/VE stations:** stations operating in the United States and District of Columbia with the exception of Alaska and Hawaii, and stations operating within the Canadian provinces and territories with the exception of the DXCC entities St Paul Island and Sable Island. (Exception – See the Special Rules for Sweepstakes and the 160 Meter Contest regarding US possessions and territories.)