

## MSK144

### Meteorscatter MSK144 (WSJT)

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Der Artikel über MSK144 ist noch in Arbeit.

Seit WSJT-X Version 1.7.0 gibt es die neue Betriebsart MSK144. Diese ersetzt die frühere Betriebsart [FSK441](#).

MSK144 wurde entwickelt für Streuverbindungen an Meteoritenleuchtspuren at 50 MHz and higher. It uses a low-density parity check code (LDPC) designed by Steve Franke, K9AN. The mode is a direct descendant of the now-defunct experimental mode JTMSK, with a number of improvements for better performance on weak and short meteor pings. The effective character transmission rate is about 250 cps, compared with 147 cps for FSK441. Like JT4, JT9, JT65, and QRA64, MSK144 uses strong forward error correction. Message decoding is "all or nothing": partial decodes do not occur, and you will see little or no garbage on your screen.

Standard MSK144 message frames are 72 ms long, compared with about 120 ms for an equivalent FSK441 message. The MSK144 waveform allows coherent demodulation, allowing up to 3 dB better sensitivity. After QSO partners have exchanged callsigns, MSK144 can use even shorter messages with frames only 20 ms long. As in all the fast modes in WSJT-X, the 72 ms (or 20 ms) messages are repeated without gaps for the duration of a transmission cycle. For most purposes we recommend a T/R cycle duration of 15 s, but 5 s and 10 s sequences are also supported.

Short ("Sh") messages in MSK144 are intended primarily for 144 MHz and higher frequencies, where most underdense pings are very short. These messages do not contain full callsigns; instead, they contain a hash of the two callsigns along with a report, acknowledgement, or 73. Short messages are fully decodable only by the station to whom they are addressed, as part of an ongoing QSO, because only then will the received hash match that calculated using the known strings for "My Call" and "DX Call". If you are monitoring someone else's QSO, you will not be able to decode its Sh messages.

MSK144 includes a "Contest Mode" in which grid locators replace signal reports in the standard QSO exchange.

An MSK144 signal occupies the full bandwidth of a typical SSB transmitter, so transmissions are always centered at an offset of 1500Hz. For best results, selectable or adjustable Rx and Tx filters should be set to provide the flattest possible response over at least 300 - 2700 Hz. The maximum permissible frequency offset between you and your QSO partner is 200 Hz, and less is better.

Weitere Informationen: [WSJT-X](#), [WSJT \(Wikipedia\)](#), [WSJT](#), [AC4M Digital Radio Site](#) und [Signal Identification Wiki](#)..

Siehe auch: [FSK441](#), [JT6M](#), [JT65](#), [JT4](#), [JT9](#), [QRA64](#) und [WSPR](#).