



12-Meter Band Information

The **12-meter band** spans **24.89 MHz to 24.99 MHz**, with the following details:

- At **24.89 MHz**, the wavelength is approximately **39.2 feet**.
- At **24.94 MHz** (center frequency), the wavelength is approximately **39.0 feet**, with each element (half-wave dipole) approximately **19.5 feet** in length.
- At **24.99 MHz**, the wavelength is approximately **38.8 feet**.

Note: Operational modes (e.g., CW, SSB, Digital Modes) typically occupy specific sub-bands within this range.

Additional Information

Typical Uses

- **SSB/CW**: Common for DX communication during favorable propagation conditions.
- **Digital Modes**: FT8, PSK31, and other digital modes are widely used for weak-signal contacts.

Best Time for Reception/Transmission:

- The 12-meter band is generally active during daylight hours, especially when solar activity is moderate to high.
- It serves as a transitional band, functioning effectively during low and medium sunspot activity, making it a reliable option in most conditions.

Propagation Insights

- **F-Layer Propagation**: Supports long-distance communication, particularly during moderate solar activity.
- **Sporadic-E Propagation**: Occurs occasionally, especially in late spring and early summer, providing short to medium-range communication opportunities.

Antenna Design Tips

- A half-wave dipole for 12 meters is straightforward to build, with each element approximately **19.5 feet** in length.
- For more gain, directional antennas such as 2- or 3-element Yagis are effective options for this band.