

B-008-004-006 (A)

What causes splatter interference?

- A Overmodulating a transmitter
- B Keying a transmitter too fast
- C Signals from a transmitter's output circuit are being sent back to its input circuit
- D The transmitting antenna is the wrong length

B-008-004-007 (C)

Your amateur radio transmitter appears to be creating interference to the television on channel 3 (60-66 MHz) when you are transmitting on the 15 metre band. Other channels are not affected. The most likely cause is:

- A a bad ground at the transmitter
- B front-end overload of the TV
- C harmonic radiation from the transmitter
- D no high-pass filter on the TV

B-008-004-008 (D)

One possible cause of TV interference by harmonics from an SSB transmitter is from "flat topping" - driving the power amplifier into non-linear operation. The most appropriate remedy for this is:

- A retune transmitter output
- B use another antenna
- C reduce oscillator output
- D reduce microphone gain

B-008-004-009 (A)

In a transmitter, excessive harmonics are produced by:

- A overdriven stages
- B low SWR
- C resonant circuits
- D a linear amplifier

B-008-004-010 (A)

An interfering signal from a transmitter is found to have a frequency of 57 MHz (TV Channel 2 is 54 - 60 MHz). This signal could be the:

- A second harmonic of a 10 metre transmission
- B crystal oscillator operating on its fundamental
- C seventh harmonic of an 80 metre transmission
- D third harmonic of a 15 metre transmission

B-008-004-011 (B)

Harmonics may be produced in the RF power amplifier of a transmitter if:

- A modulation is applied to a high-level stage
- B excessive drive signal is applied to it
- C the output tank circuit is tuned to the fundamental frequency
- D the oscillator frequency is unstable

B-008-005-001 (D)

What type of filter might be connected to an amateur HF transmitter to cut down on harmonic radiation?

- A A key-click filter
- B A high pass filter
- C A CW filter
- D A low pass filter

B-008-005-002 (A)

Why do modern HF transmitters have a built-in low pass filter in their RF output circuits?

- A To reduce harmonic radiation
- B To reduce fundamental radiation
- C To reduce low frequency interference to other amateurs
- D To reduce RF energy below a cut-off point

B-008-005-003 (B)

What circuit blocks RF energy above and below a certain limit?

- A A low pass filter
- B A band pass filter
- C A high pass filter
- D An input filter

B-008-005-004 (B)

What should be the impedance of a low pass filter as compared to the impedance of the transmission line into which it is inserted?

- A Substantially higher
- B About the same
- C Substantially lower
- D Twice the transmission line impedance

B-008-005-005 (D)

In order to reduce the harmonic output of a high frequency (HF) transmitter, which of the following filters should be installed at the transmitter?

- A Key click
- B High pass
- C Rejection
- D Low pass

B-008-005-006 (B)

To reduce harmonic output from a high frequency transmitter, you would put a _____ in the transmission line as close to the transmitter as possible.

- A wave trap
- B low pass filter
- C high pass filter
- D band reject filter

B-008-005-007 (A)

To reduce energy from an HF transmitter getting into a television set, you would place a _____ as close to the TV as possible.

- A high pass filter
- B low pass filter
- C wave trap
- D band reject filter

B-008-005-008 (A)

A band pass filter will:

- A allow only certain frequencies through
- B attenuate high frequencies but not low
- C pass frequencies each side of a band
- D stop frequencies in a certain band

B-008-005-009 (A)

A band reject filter will:

- A pass frequencies each side of a band
- B allow only two frequencies through
- C pass frequencies below 100 MHz
- D stop frequencies each side of a band

B-008-005-010 (D)

A high pass filter would normally be fitted:

- A between microphone and speech amplifier
- B at the Morse key or keying relay in a transmitter
- C between transmitter output and transmission line
- D at the antenna terminals of the TV receiver

B-008-005-011 (D)

A low pass filter suitable for a high frequency transmitter would:

- A pass audio frequencies above 3 kHz
- B attenuate frequencies below 30 MHz
- C pass audio frequencies below 3 kHz
- D attenuate frequencies above 30 MHz