CLAIMS

What is claimed is:

1. A method for transmitting a physical layer protocol data unit, comprising:

generating a physical layer protocol data unit PPDU, wherein the PPDU comprises a long training field, a length of a frequency-domain sequence of the long training field is greater than a first length, and the first length is a length of a frequency-domain sequence of a long training field of a PPDU transmitted over a channel whose bandwidth is 160 MHz; and

sending the PPDU over a target channel, wherein a bandwidth of the target channel is greater than 160 MHz;

wherein the bandwidth of the target channel is 320 MHz, and the frequency-domain sequence of the long training field is any one of the following:

[LTF1x80M 0_{23} LTF1x80M 0_{23} –LTF1x80M 0_{23} –LTF1x80M]; or

[LTF1x80MHz$_{left}$ 0 LTF1x80MHz$_{right}$ 0_{23} LTF1x80MHz$_{left}$ 0 LTF1x80MHz$_{right}$ 0_{23} –LTF1x80MHz$_{left}$ 0 –LTF1x80MHz$_{right}$ 0_{23} –LTF1x80MHz$_{left}$ 0 –LTF1x80MHz$_{right}$], wherein LTF1x80MHz$_{left}$ is an 80MHz$_{left}$ 1x LTF sequence in 802.11ax standard, LTF1x80MHz$_{right}$ is an 80MHz$_{right}$ 1x LTF sequence in the 802.11ax standard.

2. A method for receiving a physical layer protocol data unit, comprising:

receiving a physical layer protocol data unit PPDU over a target channel, wherein the PPDU comprises a long training field, a length of a frequency-domain sequence of the long training field is greater than a first length, the first length is a length of a frequency-domain sequence of a long training field of a PPDU transmitted over a channel whose bandwidth is 160 MHz, and a bandwidth of the target channel is greater than 160 MHz; and

parsing the PPDU; wherein the bandwidth of the target channel is 320 MHz, and the frequency-domain sequence of the long training field is any one of the following:

[LTF1x80M 0_{23} LTF1x80M 0_{23} –LTF1x80M 0_{23} –LTF1x80M]; or

[LTF1x80MHz$_{left}$ 0 LTF1x80MHz$_{right}$ 0_{23} LTF1x80MHz$_{left}$ 0 LTF1x80MHz$_{right}$ 0_{23} –LTF1x80MHz$_{left}$ 0 –LTF1x80MHz$_{right}$ 0_{23} –LTF1x80MHz$_{left}$ 0 –LTF1x80MHz$_{right}$], wherein LTF1x80MHz$_{left}$ is an 80MHz$_{left}$ 1x LTF sequence in 802.11ax standard, LTF1x80MHz$_{right}$ is an 80MHz$_{right}$ 1x LTF sequence in the 802.11ax standard.

3. An apparatus for transmitting a physical layer protocol data unit, comprising:

a processing unit, configured to generate a physical layer protocol data unit PPDU, wherein the PPDU comprises a long training field, a length of a frequency-domain sequence of the long training field is greater than a first length, and the first length is a length of a frequency-domain sequence of a long training field of a PPDU transmitted over a channel whose bandwidth is 160 MHz; and

a sending unit, configured to send the PPDU over a target channel, where a bandwidth of the target channel is greater than 160 MHz;

wherein the bandwidth of the target channel is 320 MHz, and the frequency-domain sequence of the long training field is any one of the following:

[LTF1x80M 0_{23} LTF1x80M 0_{23} –LTF1x80M 0_{23} –LTF1x80M]; or

[$LTF1x80MHz_{left}$ 0 $LTF1x80MHz_{right}$ 0_{23} $LTF1x80MHz_{left}$ 0 $LTF1x80MHz_{right}$ 0_{23} – $LTF1x80MHz_{left}$ 0 –$LTF1x80MHz_{right}$ 0_{23} –$LTF1x80MHz_{left}$ 0 –$LTF1x80MHz_{right}$], wherein $LTF1x80MHz_{left}$ is an $80MHz_{left}$ 1x LTF sequence in 802.11ax standard, $LTF1x80MHz_{right}$ is an $80MHz_{right}$ 1x LTF sequence in the 802.11ax standard.

4. An apparatus for receiving a physical layer protocol data unit, comprising:

a receiving unit, configured to receive a physical layer protocol data unit PPDU over a target channel, wherein the PPDU comprises a long training field, a length of a frequency-domain sequence of the long training field is greater than a first length, the first length is a length of a frequency-domain sequence of a long training field of a PPDU transmitted over a channel whose bandwidth is 160 MHz, and a bandwidth of the target channel is greater than 160 MHz; and

a processing unit, configured to parse the PPDU;

wherein the bandwidth of the target channel is 320 MHz, and a frequency-domain sequence of the long training field is any one of the following:

[LTF1x80M 0_{23} LTF1x80M 0_{23} –LTF1x80M 0_{23} –LTF1x80M]; or

[$LTF1x80MHz_{left}$ 0 $LTF1x80MHz_{right}$ 0_{23} $LTF1x80MHz_{left}$ 0 $LTF1x80MHz_{right}$ 0_{23} – $LTF1x80MHz_{left}$ 0 –$LTF1x80MHz_{right}$ 0_{23} –$LTF1x80MHz_{left}$ 0 –$LTF1x80MHz_{right}$], wherein $LTF1x80MHz_{left}$ is an $80MHz_{left}$ 1x LTF sequence in 802.11ax standard, $LTF1x80MHz_{right}$ is an $80MHz_{right}$ 1x LTF sequence in the 802.11ax standard.

5. A computer-readable storage medium, configured to store a computer program, wherein the computer program comprises instructions used to perform the method according to any one of claims 1 to 2.

6. A computer product, wherein the computer product comprises instructions for implementing the method according to any one of claims 1 to 2.