WHAT IS CLAIMED IS:

1. A method carried out by a terminal for receiving a downlink control channel, applied in the terminal, the method comprising:

determining (101), from a plurality of receiving manners, a target receiving manner for receiving the downlink control channel according to target association information associated with the downlink control channel; wherein the target association information associated with the downlink control channel is a scrambling sequence that scrambles target information, wherein the target information is information corresponding to a channel or an information block received by the terminal before receiving the downlink control channel, wherein when the terminal attempts to demodulate the target information according to a related technology by using a plurality of pre-stored scrambling sequences, the scrambling sequence that can successfully demodulate the target information is the target association information; and

receiving (102,303,504) the downlink control channel transmitted by a base station according to the target receiving manner;

wherein the target receiving manner is configured to indicate, by possible location information, a possible search space of the downlink control channel.

2. The method according to claim 1, wherein the determining (101) the target receiving manner for receiving the downlink control channel comprises:

determining (502,101-1) target association information associated with the downlink control channel; and

adopting (503,101-2) a receiving manner corresponding to the target association information as the target receiving manner for receiving the downlink control channel according to a pre-stored corresponding relationship between receiving manners and target association information.

3. The method according to claim 1, wherein the target receiving manner comprises at least one of:

receiving information about a target location of the downlink control channel corresponding to a time domain resource and a frequency domain resource;

searching a target search space corresponding to the downlink control channel;

receiving according to a target modulation and coding manner;

receiving according to a target period; and

receiving a target beam for transmitting the downlink control channel.

4. The method according to claim 3, wherein the target location comprises:

an offset of the downlink control channel with respect to target information, wherein the target information is information corresponding to a channel or an information block received by the terminal before receiving the downlink control channel; or

a preset location corresponding to the downlink control channel.

5. A method carried out by a base station for transmitting a downlink control channel, applied in the base station, the method comprising:

transmitting (201), from a plurality of receiving manners, a target receiving manner for receiving the downlink control channel according to target association information associated with the downlink control channel; wherein the target association information associated with the downlink control channel is a scrambling sequence that scrambles target information to a terminal, wherein the target information is information corresponding to a channel or an information block received by the terminal before receiving the downlink control channel; and

transmitting (202) the downlink control channel to the terminal, so that the terminal receives the downlink control channel according to the target receiving manner;

wherein the target receiving manner is configured to indicate, by possible location information, a possible search space of the downlink control channel.

6. The method according to claim 5, wherein the transmitting (201) the target receiving manner for receiving the downlink control channel to the terminal comprises:

transmitting (401) the target receiving manner for receiving the downlink control channel to the terminal by a target signaling; and

wherein the target signaling comprises at least one of:

a radio resource control signaling, system information, a media access control address control element, and a physical layer signaling.

7. The method according to claim 5, wherein the target receiving manner comprises at least one of:

receiving information about a target location of the downlink control channel corresponding to a time domain resource and a frequency domain resource;

searching a target search space corresponding to the downlink control channel;

receiving according to a target modulation and coding manner;

receiving according to a target period; and

receiving a target beam for transmitting the downlink control channel.

8. The method according to claim 7, wherein the target location comprises:

an offset of the downlink control channel with respect to target information, wherein the target information is information corresponding to a channel or an information block received by the terminal before receiving the downlink control channel; or

a preset location corresponding to the downlink control channel.

9. An apparatus comprised in a terminal for receiving a downlink control channel, applied in the terminal, the apparatus comprising:

a processor (1409); and

a memory (1402) for storing instructions executable by the processor (1409);

wherein the processor (1409) is configured to perform the method for receiving a downlink control channel according to any one of claims 1 to 4.

10. An apparatus comprised in a base station for transmitting a downlink control channel, applied in the base station, the apparatus comprising:

a processor (1409);

a memory (1402) for storing instructions executable by the processor (1409);

wherein the processor (1409) is configured to perform the method for transmitting a downlink control channel according to any one of claims 5-8.