WHAT IS CLAIMED IS:

1. An information transmission method, applied to a base station, comprising:

sending a physical downlink control channel (PDCCH) signaling corresponding to a type of a user equipment (UE) according to the type of the UE;

wherein the PDCCH signaling carries random access response control information for the UE;

wherein different types of UEs correspond to different PDCCH signalings, and the random access response control information is configured to indicate scheduling information associated with a random access response;

wherein search spaces of the different PDCCH signalings corresponding to the different types of UEs belong to different control resource sets (CORESETs).

2. The method according to claim 1, wherein the search spaces of the different PDCCH signalings corresponding to the different types of UEs are different.

3. The method according to claim 2, wherein sending the PDCCH signaling corresponding to the type of the UE comprises:

sending the PDCCH signaling on a candidate control channel element (CCE) resource determined according to a resource determination rule;

wherein the resource determination rules corresponding to the different types of UEs are different.

4. The method according to claim 3, wherein rule parameters of the resource determination rules corresponding to the different types of UEs are different;

the rule parameters comprise offset parameters and/or random parameters.

5. The method according to claim 2, wherein

aggregation levels of PDCCH resources of the different PDCCH signalings corresponding to the different types of UEs are different; and/or

the numbers of candidate transmission positions of the PDCCH resources of the different PDCCH signalings corresponding to the different types of UEs are different; and/or

candidate repeated transmission positions of the different PDCCH signalings corresponding to the different types of UEs are different.

6. The method according to claim 1, wherein sending the PDCCH signaling corresponding to the type of the UE comprises:

sending the PDCCH signaling within a random access response window corresponding to the type of the UE;

wherein the random access response windows corresponding to the different types of UEs are different.

7. The method according to claim 6, wherein time intervals between the random access response windows corresponding to the different types of UEs and random access preambles are different; and/or

durations of the random access response windows corresponding to the different types of UEs are different.

8. The method according to claim 1, wherein scrambling sequences of the different PDCCH signalings corresponding to the different types of UEs are different.

9. The method according to claim 8, wherein the scrambling sequence is a random access radio network temporary identifier (RA-RNTI), wherein the RA-RNTIs of the different types of UEs are different.

10. The method according to any one of claims 1 to 9, wherein PDSCH resources corresponding to the different types of UEs scheduled by the random access response control information are different; the PDSCH resources are configured to transmit the random access response.

11. The method according to any one of claims 1 to 9, further comprising:

carrying random access response control information of a first type of UE with a PDCCH signaling corresponding to a second type of UE in response to a bandwidth of an initial broadband part (BWP) of the first type of UE being equal to a bandwidth of CORESET#0.

12. The method according to any one of claims 1 to 9, further comprising:

sending a configuration signaling;

wherein the configuration signaling is configured to indicate that random access response control information of a first type of UE is carried by a PDCCH signaling corresponding to the first type of UE or by a PDCCH signaling corresponding to a second type of UE.

13. The method according to any one of claims 1 to 9, further comprising:

receiving a random access preamble sent by the UE;

determining the type of the UE according to type indication information carried in the random access preamble.

14. An information transmission method, applied to a user equipment (UE), comprising:

receiving a physical downlink control channel (PDCCH) signaling with receiving parameters corresponding to a type of the UE;

wherein the PDCCH signaling carries random access response control information of the UE;

wherein different types of UEs correspond to different PDCCH signalings, and the random access response control information is configured to indicate scheduling information associated with a random access response;

wherein search spaces of the different PDCCH signalings corresponding to the different types of UEs belong to different control resource sets (CORESETs).

15. The method according to claim 14, wherein the receiving parameters comprise control resource set (CORESET) parameters;

receiving the PDCCH signaling with the receiving parameters corresponding to the type of the UE comprises:

receiving the PDCCH signaling on the CORESET of a search space of the PDCCH signaling corresponding to the type of the UE.

16. The method according to claim 14, wherein the receiving parameters comprise resource parameters;

receiving the PDCCH signaling with the receiving parameters corresponding to the type of the UE comprises:

receiving the PDCCH signaling in a search space of the PDCCH signaling corresponding to the type of the UE with the resource parameter corresponding to the type of the UE; wherein

search spaces of the different PDCCH signalings corresponding to the different types of UEs are different.

17. The method according to claim 16, wherein the resource parameters comprise rule parameters of a resource determination rule;

receiving the PDCCH signaling with the receiving parameters corresponding to the type of the UE comprises:

receiving the PDCCH signaling on a candidate control channel element (CCE) resource determined according to the resource determination rule of the PDCCH signaling corresponding to the type of the UE;

wherein the resource determination rules corresponding to the different types of UEs are different.

18. The method according to claim 17, wherein rule parameters of the resource determination rules corresponding to the different types of UEs are different;

the rule parameters comprise offset parameters and/or random parameters.

19. A communication device, comprising:

a processor;

a transceiver;

a memory; and

an executable program stored in the memory and capable of being run by the processor,

wherein the processor is configured to execute steps of the information transmission method according to any one of claims 1 to 13 or claims 14 to 18 when running the executable program.