What is claimed is:

1. A detection channel for a CT detection device, comprising:

a base having two open ends, wherein the base is configured to allow an object to be detected to pass through the detection channel,

wherein the overall detection channel is integrally made of a carbon fiber composite material without splicing;

wherein the carbon fiber composite material comprises a carbon fiber layer, an aramid honeycomb paper layer and an aramid layer stacked in sequence, the carbon fiber layer is located on an inner side of the detection channel, and a thickness of the carbon fiber layer is 0.1-0.5mm, a thickness of the aramid honeycomb paper layer is 1-10mm, and a thickness of the aramid layer is 0.1-0.5mm; and

wherein a thickness of an aramid honeycomb paper layer in the carbon fiber composite material forming a channel bottom plate of the base is larger than a thickness of an aramid honeycomb paper layer in the carbon fiber composite material forming other portions of the base.

2. The detection channel according to claim 1, wherein the carbon fiber layer is located on an inner side of the detection channel.

3. The detection channel according to any one of claims 1-2, wherein a connecting surface is provided on at least one of two ends of the base, and the connecting surface is configured to be connected to a transmission channel so as to form a through channel assembly.

4. The detection channel according to any one of claims 1-2, wherein an outer side of the base is sleeved with at least one annular member for mounting a lead plate.

5. The detection channel according to 4, wherein the outer side of the base comprises a region where the lead plate is not installed so as to allow an incidence of a detection radiation from the region.

6. A channel assembly for a CT detection device, comprising:

the detection channel according to any one of claims 1-5; and

at least one transmission channel in connection and communication with at least one of two ends of the base of the detection channel.

7. The channel assembly according to claim 6, further comprising a transmission belt channel located at bottoms of the detection channel and the transmission channel and configured for a transmission belt to pass through.

8. A CT detection device, comprising: the detection channel according to any one of claims 1-5.

9. The CT detection device according to claim 8, further comprising:

a rotating frame provided with a radiation source and a detector;

a slip ring bearing, and

a support stand, comprising:

a main body portion comprising a bearing mounting hole, wherein the slip ring bearing is arranged in the bearing mounting hole, and the rotating frame is rotatably disposed on the slip ring bearing;

a pedestal located at a bottom portion of the main body portion and configured to support the main body portion; and

a connecting portion, wherein a width of a lower portion of a cross section of the connecting portion is greater than a width of an upper portion of the cross section of the connecting portion, an upper portion of the connecting portion is connected to the main body portion, and a lower portion of the connecting portion is connected to the pedestal,

wherein the detection channel is arranged in a mounting space of the rotating frame.