```
----------------------------------------------------------------
        Layer (type)          Output Shape          Param #
================================================================
          Conv2d-1        [-1, 64, 640, 480]            1,792
     BatchNorm2d-2        [-1, 64, 640, 480]              128
            ReLU-3        [-1, 64, 640, 480]                0
          Conv2d-4        [-1, 64, 640, 480]           36,928
     BatchNorm2d-5        [-1, 64, 640, 480]              128
            ReLU-6        [-1, 64, 640, 480]                0
      DoubleConv-7        [-1, 64, 640, 480]                0
       MaxPool2d-8        [-1, 64, 320, 240]                0
          Conv2d-9       [-1, 128, 320, 240]           73,856
    BatchNorm2d-10       [-1, 128, 320, 240]              256
           ReLU-11       [-1, 128, 320, 240]                0
         Conv2d-12       [-1, 128, 320, 240]          147,584
    BatchNorm2d-13       [-1, 128, 320, 240]              256
           ReLU-14       [-1, 128, 320, 240]                0
     DoubleConv-15       [-1, 128, 320, 240]                0
     DownSizing-16       [-1, 128, 320, 240]                0
      MaxPool2d-17       [-1, 128, 160, 120]                0
         Conv2d-18       [-1, 256, 160, 120]          295,168
    BatchNorm2d-19       [-1, 256, 160, 120]              512
           ReLU-20       [-1, 256, 160, 120]                0
         Conv2d-21       [-1, 256, 160, 120]          590,080
    BatchNorm2d-22       [-1, 256, 160, 120]              512
           ReLU-23       [-1, 256, 160, 120]                0
     DoubleConv-24       [-1, 256, 160, 120]                0
     DownSizing-25       [-1, 256, 160, 120]                0
      MaxPool2d-26        [-1, 256, 80, 60]                0
         Conv2d-27        [-1, 512, 80, 60]         1,180,160
    BatchNorm2d-28        [-1, 512, 80, 60]            1,024
           ReLU-29        [-1, 512, 80, 60]                0
         Conv2d-30        [-1, 512, 80, 60]         2,359,808
    BatchNorm2d-31        [-1, 512, 80, 60]            1,024
           ReLU-32        [-1, 512, 80, 60]                0
     DoubleConv-33        [-1, 512, 80, 60]                0
     DownSizing-34        [-1, 512, 80, 60]                0
      MaxPool2d-35        [-1, 512, 40, 30]                0
         Conv2d-36        [-1, 512, 40, 30]         2,359,808
    BatchNorm2d-37        [-1, 512, 40, 30]            1,024
           ReLU-38        [-1, 512, 40, 30]                0
         Conv2d-39        [-1, 512, 40, 30]         2,359,808
    BatchNorm2d-40        [-1, 512, 40, 30]            1,024
           ReLU-41        [-1, 512, 40, 30]                0
     DoubleConv-42        [-1, 512, 40, 30]                0
     DownSizing-43        [-1, 512, 40, 30]                0
       Upsample-44        [-1, 512, 80, 60]                0
         Conv2d-45        [-1, 512, 80, 60]         4,719,104
    BatchNorm2d-46        [-1, 512, 80, 60]            1,024
           ReLU-47        [-1, 512, 80, 60]                0
```

```
        Conv2d-48          [-1, 256, 80, 60]        1,179,904
   BatchNorm2d-49          [-1, 256, 80, 60]              512
          ReLU-50          [-1, 256, 80, 60]                0
    DoubleConv-51          [-1, 256, 80, 60]                0
      UpSizing-52          [-1, 256, 80, 60]                0
     Upsample-53         [-1, 256, 160, 120]                0
        Conv2d-54         [-1, 256, 160, 120]        1,179,904
   BatchNorm2d-55         [-1, 256, 160, 120]              512
          ReLU-56         [-1, 256, 160, 120]                0
        Conv2d-57         [-1, 128, 160, 120]          295,040
   BatchNorm2d-58         [-1, 128, 160, 120]              256
          ReLU-59         [-1, 128, 160, 120]                0
    DoubleConv-60         [-1, 128, 160, 120]                0
      UpSizing-61         [-1, 128, 160, 120]                0
     Upsample-62         [-1, 128, 320, 240]                0
        Conv2d-63         [-1, 128, 320, 240]          295,040
   BatchNorm2d-64         [-1, 128, 320, 240]              256
          ReLU-65         [-1, 128, 320, 240]                0
        Conv2d-66          [-1, 64, 320, 240]           73,792
   BatchNorm2d-67          [-1, 64, 320, 240]              128
          ReLU-68          [-1, 64, 320, 240]                0
    DoubleConv-69          [-1, 64, 320, 240]                0
      UpSizing-70          [-1, 64, 320, 240]                0
     Upsample-71          [-1, 64, 640, 480]                0
        Conv2d-72          [-1, 64, 640, 480]           73,792
   BatchNorm2d-73          [-1, 64, 640, 480]              128
          ReLU-74          [-1, 64, 640, 480]                0
        Conv2d-75          [-1, 64, 640, 480]           36,928
   BatchNorm2d-76          [-1, 64, 640, 480]              128
          ReLU-77          [-1, 64, 640, 480]                0
    DoubleConv-78          [-1, 64, 640, 480]                0
      UpSizing-79          [-1, 64, 640, 480]                0
        Conv2d-80           [-1, 9, 640, 480]              585
       OutConv-81           [-1, 9, 640, 480]                0
     Upsample-82          [-1, 512, 80, 60]                0
        Conv2d-83          [-1, 512, 80, 60]        4,719,104
   BatchNorm2d-84          [-1, 512, 80, 60]            1,024
          ReLU-85          [-1, 512, 80, 60]                0
        Conv2d-86          [-1, 256, 80, 60]        1,179,904
   BatchNorm2d-87          [-1, 256, 80, 60]              512
          ReLU-88          [-1, 256, 80, 60]                0
    DoubleConv-89          [-1, 256, 80, 60]                0
      UpSizing-90          [-1, 256, 80, 60]                0
     Upsample-91         [-1, 256, 160, 120]                0
        Conv2d-92         [-1, 256, 160, 120]        1,179,904
   BatchNorm2d-93         [-1, 256, 160, 120]              512
          ReLU-94         [-1, 256, 160, 120]                0
        Conv2d-95         [-1, 256, 160, 120]          590,080
   BatchNorm2d-96         [-1, 256, 160, 120]              512
          ReLU-97         [-1, 256, 160, 120]                0
```

```
         DoubleConv-98          [-1, 256, 160, 120]                  0
          UpSizing-99          [-1, 256, 160, 120]                  0
           Conv2d-100          [-1, 256, 160, 120]             65,792
          OutConv-101          [-1, 256, 160, 120]                  0
           Conv2d-102          [-1, 256, 160, 120]             65,792
          OutConv-103          [-1, 256, 160, 120]                  0
           Conv2d-104          [-1, 256, 160, 120]             65,792
          OutConv-105          [-1, 256, 160, 120]                  0
         Upsample-106          [-1, 256, 320, 240]                  0
         Upsample-107          [-1, 256, 640, 480]                  0
           Conv2d-108          [-1, 256, 640, 480]             65,792
          OutConv-109          [-1, 256, 640, 480]                  0
         Upsample-110           [-1, 512, 80, 60]                  0
           Conv2d-111           [-1, 512, 80, 60]          4,719,104
      BatchNorm2d-112           [-1, 512, 80, 60]              1,024
             ReLU-113           [-1, 512, 80, 60]                  0
           Conv2d-114           [-1, 256, 80, 60]          1,179,904
      BatchNorm2d-115           [-1, 256, 80, 60]                512
             ReLU-116           [-1, 256, 80, 60]                  0
       DoubleConv-117           [-1, 256, 80, 60]                  0
         UpSizing-118           [-1, 256, 80, 60]                  0
         Upsample-119          [-1, 256, 160, 120]                  0
           Conv2d-120          [-1, 256, 160, 120]          1,179,904
      BatchNorm2d-121          [-1, 256, 160, 120]                512
             ReLU-122          [-1, 256, 160, 120]                  0
           Conv2d-123          [-1, 256, 160, 120]            590,080
      BatchNorm2d-124          [-1, 256, 160, 120]                512
             ReLU-125          [-1, 256, 160, 120]                  0
       DoubleConv-126          [-1, 256, 160, 120]                  0
         UpSizing-127          [-1, 256, 160, 120]                  0
           Conv2d-128          [-1, 256, 160, 120]             65,792
          OutConv-129          [-1, 256, 160, 120]                  0
           Conv2d-130          [-1, 256, 160, 120]             65,792
          OutConv-131          [-1, 256, 160, 120]                  0
           Conv2d-132          [-1, 256, 160, 120]             65,792
          OutConv-133          [-1, 256, 160, 120]                  0
         Upsample-134          [-1, 256, 320, 240]                  0
         Upsample-135          [-1, 256, 640, 480]                  0
           Conv2d-136          [-1, 256, 640, 480]             65,792
          OutConv-137          [-1, 256, 640, 480]                  0
           Conv2d-138            [-1, 9, 640, 480]                585
          OutConv-139            [-1, 9, 640, 480]                  0
           Conv2d-140          [-1, 256, 640, 480]             65,792
          OutConv-141          [-1, 256, 640, 480]                  0
           Conv2d-142          [-1, 256, 640, 480]             65,792
          OutConv-143          [-1, 256, 640, 480]                  0
================================================================
Total params: 33,269,522
Trainable params: 33,269,522
Non-trainable params: 0
```

```
----------------------------------------------------------------
Input size (MB): 3.52
Forward/backward pass size (MB): 12164.06
Params size (MB): 126.91
Estimated Total Size (MB): 12294.49
----------------------------------------------------------------
```