

Pad : (2, 0)

필터의 이동 경로 (필터는 $4 \times 2 (=c_{out} * c_{in})$ 개)

stride : (4, 1)

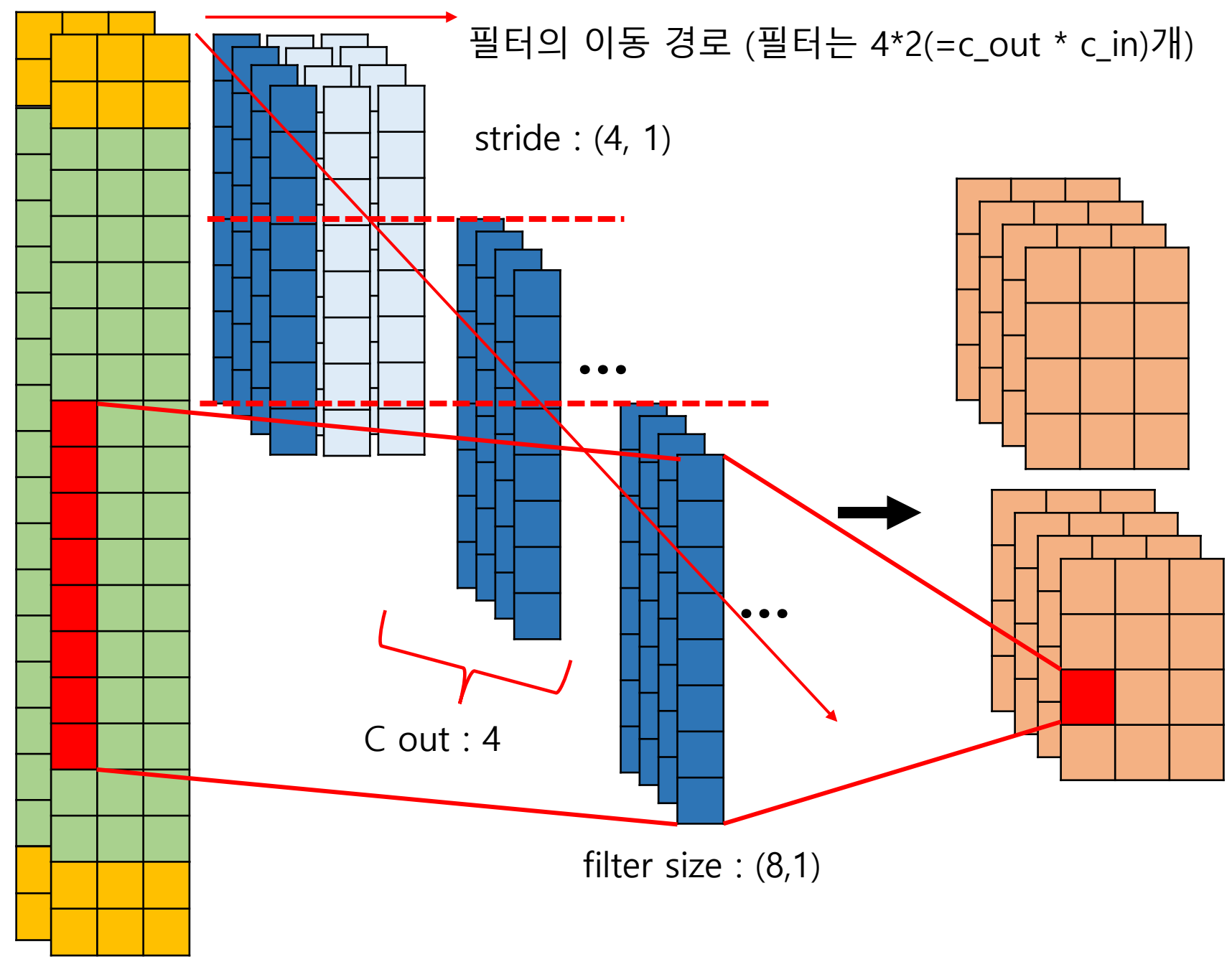
Freq.
input

freq

time

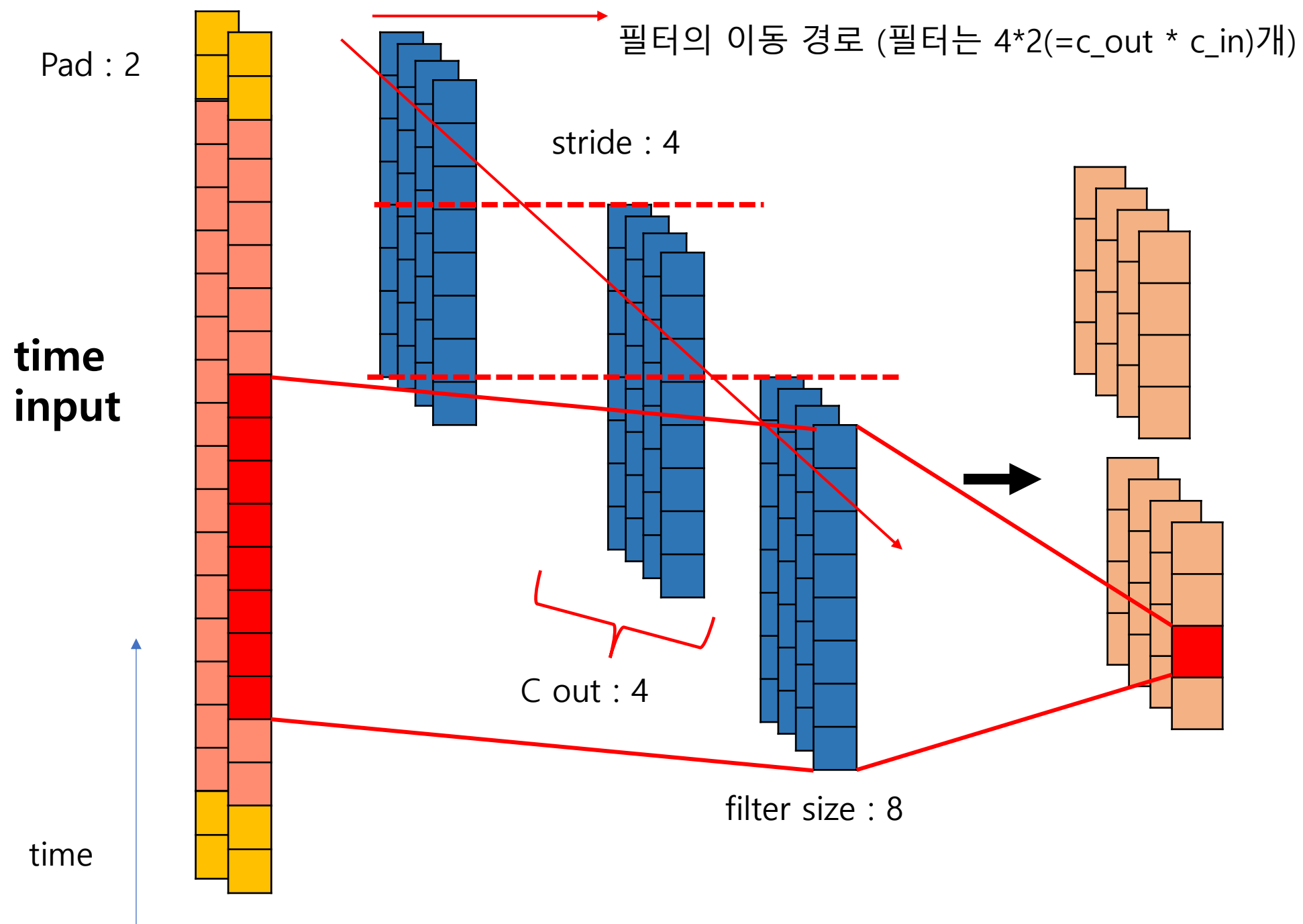
C out : 4

filter size : (8,1)



```
[12] # input : (Batch, Channel, Frequency, Time steps)
      freq = torch.randn((2, 1, 16, 3))
      # (c_in, c_out, kernel_size, stride, padding)
      conv = nn.Conv2d(1, 4, (8, 1), (4, 1), (2, 0))
      conv(freq).shape

      torch.Size([2, 4, 4, 3])
```





```
# input : (Batch, Channel, Time steps)
time = torch.randn((2, 1, 16))
# (c_in, c_out, kernel_size, stride, padding)
conv = nn.Conv1d(1, 4, 8, 4, 2)
conv(time).shape
```

```
↳ torch.Size([2, 4, 4])
```