## **Training phase**

Step 1: Train Base KalmanNet on

 $Q_0, R_0$ 

Base

KalmanNet

CM

Gain

Shift

Modulation

Output

Step 2: Freeze Base KalmanNet weights

Step 3: Train Hypernet on multiple datasets inside the varying range of noise

SoW

Hypernet

Inference phase

Noise Estimator

Step 1: Estimate SoW

Step 2: Plug in new SoW to pre-trained model