Related works

Frequency domain methods

1. Directly mapping: $|\hat{S}| = f(|X|;\Theta), \hat{S} = |\hat{S}|e^{j\angle X}$
2. Ideal Binary Mask: $|\hat{S}| = |\hat{M}| \odot |X|, |\hat{M}| \in \{0,1\}$
3. Ideal Ratio Mask: $|\hat{S}| = |\hat{M}| \odot |X|, |\hat{M}| \in [0,1]$
4. Complex Ideal Ratio Mask: $S = MX = |M||X|e^{j(\angle M+\angle X)}$

S: source estimation; X: mixture; M: mask estimation.

Related works

Frequency domain methods

- What’s the difference between image and spectrogram (spec)?
  - Overlapping pixel.
    - Ignore: Ideal binary mask (IBM) estimation.
    - Otherwise: Ideal ratio mask (IRM) estimation.
  - Spectrogram has complexed value
    - Ignore: Estimate IRM on magnitude spec, reuse mixture phase.
    - Otherwise: Estimate complex Ideal ratio mask (cIRM)