Symbol	Meaning
$X^{\text{ref}} = \{x_i\}_{i=1}^{N}$ $K^{\text{ref}} = \{k_i\}_{i=1}^{N}$	Reference images
$K^{\text{ref}} = \{k_i\}_{i=1}^{N}$	Intrinsics of X^{ref}
\hat{K}^{ref}	Estimated intrinsics of X^{ref}
\hat{K}	Estimated shared intrinsics of X^{ref}
$\Pi^{\text{ref}} = \{\pi_i\}_{i=1}^N$	Extrinsics of X^{ref}
Π^{nov}	Extrinsics of viewpoints in repair path
$\hat{\Pi}^{ ext{ref}}$	Estimated extrinsics of X^{ref}
$M^{\text{ref}} = \{m_i\}_{i=1}^N$	Masks of X^{ref}
μ	Center location of Gaussian
q	Rotation quaternion of Gaussian
S	Scale vector of Gaussian
σ	Opacity of Gaussian
sh	Spherical harmonic coefficients of Gaussian
\mathcal{G}_c	Coarse 3D Gaussians
$\mathcal R$	Diffusion based Gaussian repair model
3	Latent diffusion encoder of ${\mathcal R}$
${\mathcal D}$	Latent diffusion decoder of ${\mathcal R}$
x'	Degraded rendering
\hat{x}	Image repaired by ${\cal R}$
ϵ_{s}	3D Noise added to attributes of \mathcal{G}_c
ϵ	2D Gaussian noise for fine-tuning
$\epsilon_{ heta}$	2D Noise predicted by ${\cal R}$
$c^{ m tex}$	Object-specific language prompt
${\cal P}$	Coarse point cloud predicted by DUSt3R