Optical Engineering

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[DOI: 10.1117/1.OE.51.3.039803]

This article [*Opt. Eng.* **51**, 013203 (2012)] was originally published on 11 February 2012 with an error in Eqs. (8) and (9), where $\mathbf{rect}(\frac{x}{\Delta x})$ should have been written as $\mathbf{rect}(\frac{v}{\Delta v})$. The corrected equations appear below.

On p. 2, the equation below Eq. (8) becomes

$$\tilde{S}(v) = \left\{ G(v) \left[\sum_{k=-\infty}^{\infty} \delta(v - kp) \otimes \mathrm{rect}\left(\frac{v}{\Delta v}\right) \right] \right\} \otimes \sum_{n=-\infty}^{\infty} \delta(v - n\Delta V).$$

Equation (9) has been corrected to read:

$$\begin{aligned}
\tilde{S}(v) &= \sum_{n=-\infty}^{\infty} \{G(v) \otimes \delta(v - n\Delta V)\} \left\{ \left[\sum_{k=-\infty}^{\infty} \delta(v - kp) \otimes \mathrm{rect}\left(\frac{v}{\Delta v}\right) \right] \otimes \delta(v - n\Delta V) \right\} \\
\tilde{S}(v) &= \sum_{n=-\infty}^{\infty} \{G(v) \otimes \delta(v - n\Delta V)\} \left\{ \left[\sum_{k=-\infty}^{\infty} \delta(v - kp) \otimes \delta(v - n\Delta V) \right] \otimes \mathrm{rect}\left(\frac{v}{\Delta v}\right) \right\} \\
\tilde{S}(v) &= \sum_{n=-\infty}^{\infty} G(v - n\Delta V) \left\{ \left[\sum_{k=-\infty}^{\infty} \delta(v - kp - n\Delta V) \right] \otimes \mathrm{rect}\left(\frac{v}{\Delta v}\right) \right\} \\
\tilde{S}(v) &= \sum_{n=-\infty}^{\infty} G(v - n\Delta V) \mathrm{rect}\left(\frac{v - kp - n\Delta V}{\Delta v}\right).
\end{aligned} \tag{9}$$

The sentence following Eq. (9) has been changed from "Equation (11)" to "Equation (9)." The corrected sentence reads, "Equation (9) is multiplied by the decoding mask . . . "

Moreover, errors in equation numbers, reference numbers, and equation values were corrected in the first two paragraphs of Sec. 3. The corrected text appears as follows:

3 Simulation Results

We did the simulation for this work using Mathematica software (Wolfram Research, Inc., Champaign, IL). In this simulation we take a Gaussian function as input object with width $X = 73$ points in one dimension, shown in Fig. 1(a). The Fourier transform of the input object in one dimension in Fig. 1(b) is multiplied with the optical rectangular mask [period of two point pixels, shown in Fig. 1(c)] to encode the spectrum of the input object of width $2\Delta V = 51$ points in the Fourier domain, shown in Fig. 1(d). The mask in Ref. 1 consists of three different regions that require certain conditions be satisfied, that is, the mask is a three-region mask and all the three regions have different properties. The mask reported in this paper is a simple mask and may be called a single-region mask.

The inverse Fourier of this encoded spectrum gives an image with three copies of the input object of different amplitudes, shown in Fig. 1(e). The pixels of the CCD have the separation of 10 points. This image is undersampled by CCD as shown in Fig. 1(f) and Fourier transform gives 16 replicas of the spectrum, each of width $2\Delta V = 51$ points overlapped in the Fourier domain, as shown in Fig. 1(g). The decoding mask (the same as the encoding mask) is multiplied in the frequency domain to the overlapped replicas and yields a series of completely separated copies of the object spectrum, as shown in Fig. 1(h), giving a single copy by suitable filtering, as shown in Fig. 1(i). Then we used interpolation to recover the spectrum data that was lost due to the multiplication of the spectrum with the optical masks, as shown in Fig. 1(j). We recovered the image of the object by taking the inverse of the interpolated spectrum shown in Fig. 1(k), which is similar to the input object.

The manuscript was corrected online on 4 April 2012.