I beg your pardon for the typographical errors in the book. It will not take long to make these corrections. I promise.

-Rick Lyons-

Page 7: In the third line below Eq. (1-7), the text:

"... indicate that \( X_{\text{sum}}(n) \) has a frequency ..."

The uppercase "\( X \)" should be lowercase "\( x \)" as:

"... indicate that \( x_{\text{sum}}(n) \) has a frequency ..."

[Found by Angela Livingstone, 3/30/08; [Production Error]

Page 37: The "\( f_s \)" labels, within the arrows, at the very bottom of Figure 2-13 should be "\( f_s/2 \)."

[Found by Author [6/20/06].][Author Error]

Page 38: In the fifth line up from the bottom of the page, the text:

"... where \( m_{\text{odd}} \) is an odd integer[14]."

should be changed to:

"... where \( m_{\text{odd}} \) is an odd integer greater than one[14]."

[Found by Jim Murphy [9/14/05] & Justin Reeves [6/20/06].][Author Error]

Page 40: In the 2nd line below Eq. (2-14), the text:

"\( m = 2 \) provide an optimum ..."

should be changed to:

"\( m_{\text{even}} = 2 \) provide an optimum ..."

[Found by Justin Reeves, 6/20/06.][Author Error]

Page 42: In the middle of Table 2-2, on the right side, the text:

"\( m_{\text{odd}} \) is any positive odd integer ..."

should be changed to:

"\( m_{\text{odd}} \) is an odd integer greater than one ...

[Found by Justin Reeves, 6/20/06.][Author Error]

Page 48: The incorrect letter "v" in the third line of Eq. (3-4d) should be replaced with a "." multiplication symbol.

[Found by Uday Padmanabhan, 11/19/08.][Author Error]
Page 93: The last term in Equ. 3-37 has a missing minus sign in its exponent. The last term should be:

\[ \ldots + e^{-jq(K-1)} \].

[Found by Stan Moore, 3/19/12.][Production Error]

Page 143: In Figure 4-10, in the middle stage there is the number 4 on the 1st and 2nd (counting down from the top) southeast-pointing arrows. Those 4s should not be there. The 4s should be on the 3rd and 4th southeast-pointing arrows of the middle stage as shown below.

![Diagram showing the corrected arrangement of numbers in Figure 4-10](image)

[Found by Antoine Trux, 1/2/07.][Author Error]

Page 196: The upper limit of the summation in Eq. (5-26) is printed as:

"P + Q - 1"

It should be:

"P + Q - 2"

[Found by Author, 5/10/08.][Author Error]

Page 244: The normalized-frequency labeling (radians/sample) on the frequency axis of Figures 6-24(b) and 6-24(c) should be changed as:

-2\pi changed to -4\pi  
-\pi changed to -2\pi  
\pi changed to 2\pi  
2\pi changed to 4\pi  

[Found by Author, 10/17/08.][Author Error]

Page 257: In the eleventh line below Eq. (6-87)

"... Figure 6-21(b). Knowing that ..."

should be changed to:

"... Figure 6-22 (b). Knowing that ..."

[Found by Yancen Li (7/14/14)]; [Author Error]

Page 264: In the 6th line of the first full paragraph, the text:
"...squeezed in toward zero Hz."

should be:

"...squeezed in toward \(f_s/2\) Hz."

[Found by VV (vanamali), 3/12/09.] [Author Error]

Page 264: In the next to the last line of the first full paragraph there's a missing "|" vertical bar character indicating "magnitude". The text:

"...in \(|H_d(f_d)| - \ldots""

should be:

"...in \(|H_d(f_d)| - \ldots"

[Found by Author, 7/14/05.] [Author Error]

Page 267: There is a missing "x(n)" factor in Equation (6-114), the first part of that equation should be:

\[ y(n) = 0.20482712 \cdot x(n) + 0.40965424 \cdot x(n-1) + \ldots \]

[Found by Kendall Castor-Perry, 5/3/09.] [Author Error]

Page 286: The feedback coefficient of the resonator in Figure 7-3, printed as:

\[ \epsilon^{j\omega r} \]

it should be changed to:

\[ \epsilon^{j\omega r} \]

[Found by Author, 7/14/09.] [Production Error]

Page 345: On the right side of Figure 8-8 the term \(e^{j2\pi f_0 t}\) should be divided by two, making it

\[ e^{j2\pi f_0 t}/2. \]

[Found by John Littig, 9/24/07.] [Author Error]

Page 353: In the sentence just before Eq. (8-17), the described notion of orthogonality of \(i(n)\) and \(q(n)\) is only conditionally true. Because this orthogonality topic was not described in sufficient detail, I suggest you strike out both the sentence just before Eq. (8-17) as well as Eq. (8-17) itself.

[Found by Ken Walsh, 5/9/06.] [Author Error]

Page 478: in the fifth line down, delete the text:

"...followed by another K delay..."
Page 479: In Figure 13-6(b) the superscripted "-2" characters shown by the large arrows below:

Should be changed from "-2" to "-1" making Figure 13-6(b) become:

Page 484: Equation (13-10) has suffered a series of "foul-ups" in different Printings of the book. Eq. (13-10) should be:

\[
W(m) = \sum_{n=0}^{N-1} \alpha e^{-j2\pi nm/N} - \frac{\beta}{2} \sum_{n=0}^{N-1} e^{j2\pi n/N} e^{-j2\pi nm/N} - \frac{\beta}{2} \sum_{n=0}^{N-1} e^{-j2\pi n/N} e^{j2\pi nm/N} \\
= \sum_{n=0}^{N-1} \alpha e^{-j2\pi nm/N} - \frac{\beta}{2} \sum_{n=0}^{N-1} e^{j2\pi n(m-1)/N} - \frac{\beta}{2} \sum_{n=0}^{N-1} e^{-j2\pi n(m+1)/N} .
\]

Page 518: For more accurate results, the "12/M" factor at the beginning of Eq. (13-70) should be changed to \( \sqrt{12/M} \). Thus Eq. (13-70) should be:

\[
y_{\text{desired}}(n) = \sqrt{\frac{12}{M}} \cdot \sigma' \cdot \left[ \left( \sum_{k=1}^{M} x_k(n) \right) - \frac{M}{2} \right] + \mu'.
\]

Page 548: 4th line below Eq. (13-107), change the text:
For preciseness, you might note on Figure 13-59 that the error is $-0.28^\circ$ at True $\theta = -45^\circ$, and the error is $+0.28^\circ$ at True $\theta = +45^\circ$, as shown in the following figure.

![Graph showing error as a function of True angle θ](image)

[Found by Chris Zarowski, 4/27/06.][Author Error]

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Page 549: 4th line below Eq. (13-109'), change the text:

"... error is 0.26° for ..."

to

"... error is 0.28° for ...

[Found by Chris Zarowski, 4/27/06.][Author Error]

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Page 560: In Figure 13-70(b), on the right side in the "Section 3, $r = 1$" part of the figure, there should be three stages of delay lines instead of only two stages as shown in the figure. That "Section 3, $r = 1$" part of the figure should look like the following:

![Delay line diagram](image)

[Found by Mike Totham, 8/31/07.][Author Error]

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Page 561: Equation (13-123) has a missing $1/N$ scale factor in front of the summation. That equation should be:

$$M(q) = \frac{1}{N} \sum_{k=qN}^{(q+1)N-1} x(n) \quad (13-123)$$

[Found by Author, 8/24/08.][Production Error]

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Page 569: In the right $X_{int}(m)$ column of Table 13-8, the underline character associated with row $m = 9$ should be a zero "0" value as follows:

<table>
<thead>
<tr>
<th>$m$</th>
<th>$X_{int}(m)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>
Page 607: Two corrections: In the second line of Eq. (D-7), the term:

"... –cos(ωt)] ...

should be:

"... –cos(2ωt)] ...

In the third line of Eq. (D-7), the term:

"... –1/2(sin(ωt))...

should be:

"... –1/4(sin(2ωt))...

[Found by Julian Vrbancich, 10/23/12; [Author Error]

Dear Reader, if you find any additional errors, no matter how trivial, please notify me at: R.Lyons@ieee.org
I'd sure appreciate hearing from you and I promise I'll reply to your E-mail.

Thanks,
[-Rick Lyons-]