

Errata

A Digital Communication Laboratory, Potter & Yang

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1. Page vii. Colombia
2. Page 16. Line 7 of code example works, but the “firls” toolbox command should be replaced by an open-source filter design script, “firlpf.m” as follows: `>> h=firlpf(49,1200,1800,Fs);`
3. Page 16: implemented via the convolution operation by the command `conv` or `filter`.
4. Page 28, Figure 2.4, top row. Missing factor of 2 at mixers in I and Q branches.
5. Page 47. Line 4 of Section 3.3. Students should be encouraged to use 1 dB steps
6. Page 66. Line 3 after Eq. (5.2) should read, “Note also the indexing syntax, (p+1:L:end), for starting at index p+1, with $0 \leq p \leq (L-1)$...”
7. Page 73, Table 5.3. in the FOR loop, replace “`p_est`” with “`kk`”
8. Page 87. Note, for the android app by LiHang_He, the character string is augmented by spaces; for the iPhone app, the underscore character is appended to achieve 50 characters. The android app is found at:
https://play.google.com/store/apps/details?id=osu.Lihang_He.digital_communication.acoustic
9. Page 158: Note that in the iPhone implementation of the length 51 Barker code, the 50th element appears to be corrupted. Thus, one could write a matched filter to use only bits 1 through 49 to avoid estimation error.
10. Page 159, lines 5-6 of code:
 - a. Replace “`pkt_len+5`” with “`pkt_len+6`”
 - b. `rx_Trim=yup(...`

Comments:

- Corrections made at Mathworks Matlab Courseware upload.
- The Android app by Philip Chen seems to crash; perhaps it can be removed from GooglePlay or repaired?