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**Interactive
comment**

Interactive comment on "Multifunction waveform generator for EM receiver testing" *by* Kai Chen et al.

Kai Chen et al.

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Dear Anonymous Referee, Thank you for your comment and for valuable remarks on the manuscript! According to your advice, we revised this manuscript. All of the changes have been made using red text.

1) We have creating a new section 5 for the conclusions which combines lines 56 to 64, from the introduction, together with the text and table from section 4.5. 2) We have started a new paragraph for the sentence at line 50. 3) At the end of the introduction, a brief description of the content of each section is added. "In this paper, we describe a multifunction waveform generator. The details of the waveform generator, including both the system design and the hardware principles are discussed. Section II begins

by describing the requirement of the three types of waveforms. Next, we discuss the hardware principle design in Section III. Section IV follows, describing the result of test to confirm the function of the waveform generator. In Section V, discussion and specification comparison table are present." 4) Line 42 has corrected as "... on the surface and in tunnels" from "on the surface and tunnels". 5) Line 204-206 are revised as: In the SIP mode, an accuracy of ± 30 ppb clock signal will drift 27 μs, while the whole circulation last 15min. And the time drift error will cause 21 mrad phase error while the frequency of transmitter is set as 128 Hz. For high phase precision, the frequency error of the switching clock signal must be as low as possible. 6) Line 214 add "The switching clock is divided from the above MCXO." 7) "those in the previous" form Line 226 has been deleted.

Once again, thank you very much for your comments and suggestions. We tried our best to improve the manuscript and we made all necessary changes in the manuscript. We truly appreciate the time and efforts of the editors and reviewers, and we sincerely hope that our corrections will meet your approval.

Please also note the supplement to this comment:
https://www.geosci-instrum-method-data-syst-discuss.net/gi-2017-43/gi-2017-43-AC1-supplement.pdf

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Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss., https://doi.org/10.5194/gi-2017-43, 2017.