



Correction to: “A new multilevel buck-boost inverter structure using six active switches” [Journal of Mechatronics, Electrical Power, and Vehicular Technology, Volume 17(1) (2026), 155-167]

Leonardus Heru Pratomo ^{a, *}, Florentinus Budi Setiawan ^a, Sushil Paudel ^b

^a Electrical Engineering Department, Soegijapranata Catholic University
Jl. Pawiyatan Luhur IV/1 Bendan Duwur, Semarang, 50234, Indonesia

^b Research Training and Consultancy Division, Kantipur Engineering College
Dhapakhel, Lalitpur, Nepal

Correction to: L. H. Pratomo, F. B. Setiawan, and S. Paudel, “A new multilevel buck-boost inverter structure using six active switches,” *Journal of Mechatronics, Electrical Power, and Vehicular Technology*, vol. 17, no. 1, pp. 155-167, 2026.

<https://doi.org/10.55981/j.mev.2026.1262>

Following publication of the article, several errors were identified in the title, Abstract, textual descriptions, cross-references, figure captions, and selected figures. The corrections are provided below.

1. Article Title and Abstract

The title of the article:

A new multilevel buck-boost inverter structure using six active switches
should read:

A new multilevel buck-boost inverter structure using seven active switches

In the Abstract, the phrase:

“five-level and seven-level designs that use six active switches”

should read:

“five-level and seven-level designs that use seven active switches”.

The article title and associated bibliographic metadata have been corrected accordingly.

* Corresponding Author. leonardus@unika.ac.id (L. H. Pratomo)

<https://doi.org/10.55981/j.mev.2026.1629>

Available online 5 October 2026

2088-6985 / 2087-3379 ©2026 The Authors. Published by BRIN Publishing. MEV is a [Scopus indexed](#) Journal and is accredited as a [Sinta 1](#) Journal. This is an open access article distributed under the CC BY-NC-SA 4.0 license (<https://creativecommons.org/licenses/by-nc-sa/4.0/>).

How to Cite: L. H. Pratomo *et al.*, “Correction to: A new multilevel buck-boost inverter structure using six active switches,” *Journal of Mechatronics, Electrical Power, and Vehicular Technology*, vol. 17, no. 2, e2026-01, 2026.

2. Corrections in the Introduction and Materials and Methods

On page 157, the phrase:

“the symmetric five-level buck-boost inverter and the asymmetric five-level buck-boost inverter”

should read:

“the symmetric five-level buck-boost inverter and the asymmetric seven-level buck-boost inverter”.

On the same page, the switch notation:

“IGBTs (IG_3 - IG_B6)”

should read:

“IGBTs (IG_3–IG_6)”.

On page 158, the sentence:

“A summary of the operating modes that occur in the five-level buck-boost inverter is presented in Table 3.”

should read:

“A summary of the operating modes that occur in the seven-level buck-boost inverter is presented in Table 3.”

On page 159, the phrase:

“based on Table 1 and Table 2”

should read:

“based on Table 2 and Table 3”.

3. Figures 9 and 10

The originally published Figures 9 and 10 did not correctly represent the intended buck and boost simulation results for the five-level buck-boost inverter. They have been replaced with the corrected figures shown below.

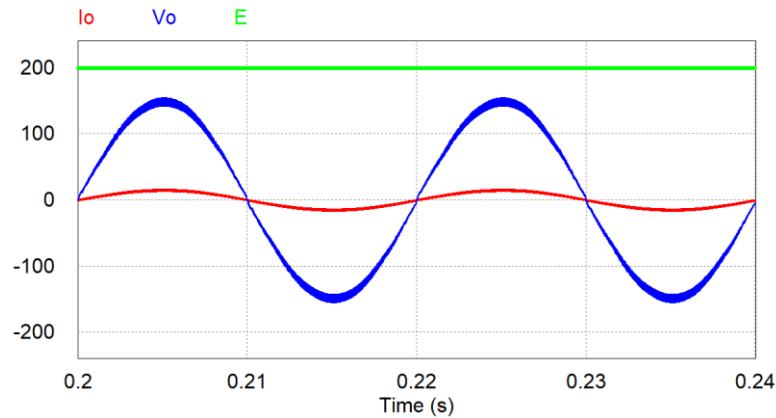


Figure 9. Five-level buck-boost inverter under buck condition.

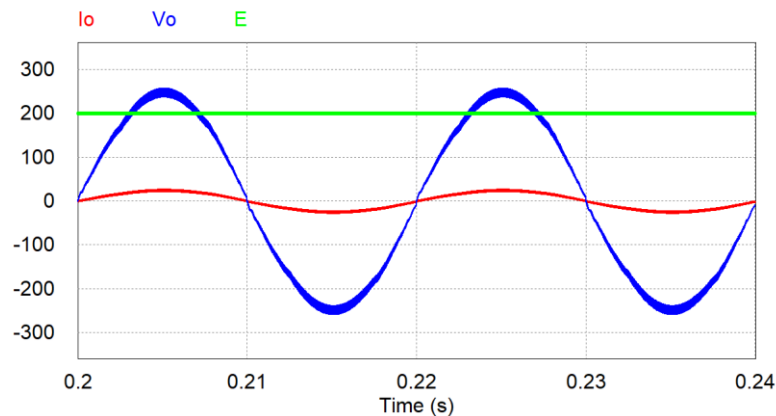


Figure 10. Five-level buck-boost inverter under boost condition.

4. Figure 12

On page 163, the caption of Figure 12:

“Figure 12. Switching Pattern IG_1; IG_2; and three-level DC.”

should read:

“Figure 12. Switching Pattern IG_1; IG_2; and four-level DC.”

5. Figure 14

On page 163, in the paragraph associated with Figure 14, the phrase:

“the output voltage of the five-level buck-boost inverter”

should read:

“the output voltage of the seven-level buck-boost inverter”.

The originally published Figure 14 did not correctly represent the buck condition of the seven-level buck-boost inverter and has been replaced with the corrected figure shown below.

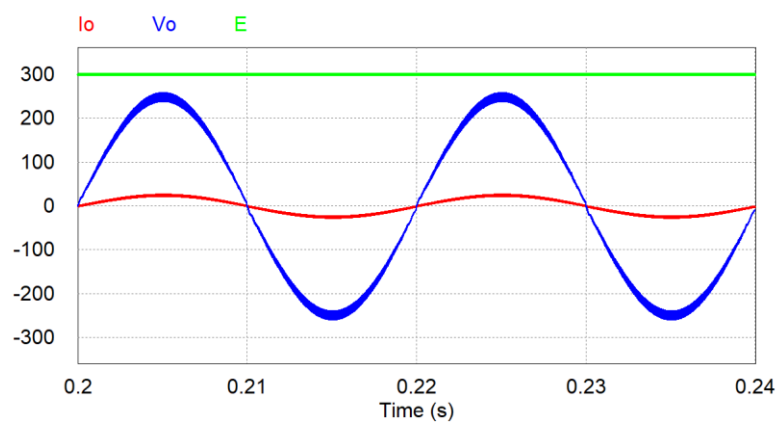


Figure 14. Seven-level buck-boost inverter under buck condition.

6. Figure 15

On page 163, in the paragraph associated with Figure 15, the phrase:

“the output voltage of the five-level buck-boost inverter”

should read:

“the output voltage of the seven-level buck-boost inverter”.

In the same paragraph, the phrase:

“functions effectively as a buck inverter”

should read:

“functions effectively as a boost inverter”.

The caption:

“Figure 15. Five-level buck-boost inverter under boost condition.”

should read:

“Figure 15. Seven-level buck-boost inverter under boost condition.”

7. Figure 16

On page 163, in the paragraph associated with Figure 16, the phrase:

“the five-level buck-boost inverter that has been analyzed and simulated”

should read:

“the seven-level buck-boost inverter that has been analyzed and simulated”.

The caption of Figure 16, “Output voltage response of the seven-level buck-boost inverter,” remains unchanged.

8. Correction in the Conclusion

On page 165, the phrase:

“ $E + E$ for the symmetric five-level and $2E - E$ for the asymmetric seven-level”

should read:

“ $E + E$ for the symmetric five-level and $2E + E$ for the asymmetric seven-level”.

These corrections address errors in the identification, description, and presentation of the inverter configurations and simulation results. These corrections do not affect the underlying simulation data, overall analysis, or conclusions of the article.

The original article has been corrected accordingly.