

Submission Format for ARFTG (Title in 18-point Times font)

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Abstract—The “abstract” format generates the IEEE standard abstract format. After the abstract, you should list a few key words from the IEEE approved “Index Terms” (send email to keywords@ieee.org for the latest list) that describe your paper. The index terms are used by automated IEEE search engines to quickly locate your paper. Typically, you should list about 4 to 6 key words, in alphabetical order. An example is shown next.

Index Terms—Ceramics, coaxial resonators, delay filters, delay-lines, power amplifiers.

I. INTRODUCTION

Please read through this entire template before you start using it to create your paper! This will save you and the ARFTG Technical Program Committee considerable time, and improve your chances for acceptance. The following information is provided to help you prepare the Initial Submission as well as the Final Paper for submission to ARFTG. (Many authors submit the same exact paper for the initial as well as the final submission. This is a common practice. See item #4 below.) A contributor should remember that:

- 1) Deadlines are *absolute*, don't even ask!
- 2) Initial Submissions may not exceed **four (4) pages**, including all figures, tables, references, etc. Additionally, there is a size limit on the electronic version of all Initial Submissions. In Adobe Portable Document Format (PDF), submissions may not exceed **2 Megabytes**.
- 3) Acceptance rates have historically run at slightly over 55%. There is not sufficient room within the Technical Program to accept all submissions.
- 4) Many submitters with previous conference publication experience realize that, if their submission is accepted, they will be required to submit a version of their Final Paper to be published in the Conference Digest. As the Digest paper will be similar in length to the Initial Submission, many contributors opt to prepare their Initial Submission in the format required for the Digest. This template contains the instructions for the proper preparation of such a document.
- 5) You should employ this format. This document is being made available as a template for your convenience. If you elect not to use this template, please remember that you must still adhere to the general guidelines embodied in this document concerning, but not limited to, font size, margin size, page limits, file size, etc.
- 6) Your Initial Submission and Final Paper are limited to **four (4) pages in length. Please do not exceed this figure, as your paper may not be reviewed.**

II. OVERVIEW OF THE DIGEST FORMAT

The details of the formatting in the following sections is for information only: the IEEE L^AT_EX Class file will automatically select the fonts, line-spacing, justification, and so forth for the document. This saves you all the tedious mucking about in Word trying to get the document to look right: L^AT_EX will do it for you.

All paragraphs of text, including the abstract, figure captions, and references, are justified at the left *and the right* edges. The Title uses 18-point Times (Roman) font. Its line spacing is single with 6-point spacing before and 6-point spacing after. The font description for the Author List and Authors' Affiliation(s) is 12-point Times, with line spacing is single with 6-point spacings before and after. Use an additional empty paragraph before the beginning of the double column section.

III. DETAILED TEXT FORMATTING

Using 8.5 x 11-inch paper, the top and bottom margins are 1.125 inches, and the left and right margins are 0.85 inches. Except for Title, Authors and Affiliations, a double column format is used, where the column width is 3.275 inches and the column spacing is 0.25 inch.

Each major section begins with a Heading in 10 point Times font centered within the column and numbered using Roman numerals (except for ACKNOWLEDGMENT and REFERENCES), followed by a period, a single space, and the title using an initial capital letter for each word. The remaining letters are in SMALL CAPITALS. The paragraph description of the section heading line is set for 18 points before, 6 points after, and the line spacing is set to exactly 12 points.

For the body of your paper, 10-point Times font is used, with a 12-point line spacing, and 0 points before and after. Each paragraph is indented by 0.125 inches on the first line.

Further details are provided in the remainder of this paper for specific situations.

A. Major Subsections

As shown, subsections are left justified 10-point Times Italic, ordered with capitalized alphabetic characters (A, B, ...). The paragraph description of the subsection heading is set to “exactly 12-point” line spacing with 6 points before and after.

B. Equations

Equations should be centered in the column and numbered sequentially. Place the equation number to the right of the

TABLE 1
Summary of Typographical Settings

Section	Font Specifics			Paragraph Description				
	(Times style)	Roman unless specified size	unless specified special	line	spacing (in points)		alignment	indent (in inches)
					before	after		
Title	plain	18	none	single	6	6	centered	none
Autohr List	plain	12	mpme	single	6	6	centered	none
Affiliations	plain	12	none	single	6	6	centered	none
Abstract	bold	9	none	exactly 10	0	0	justified	0.125 1 st line
Headings	plain	10	small caps	exactly 12	18	6	centered	none
Subheadings	italic	10	none	exactly 12	6	6	left	none
Body	plain	10	none	exactly 12	0	0	justified	0.125 1 st line
Paragrahps								
Equations	Symbol font for special characters			single	6	6	centered	none
Figures	6 to 9 point sans serif (Helvetica)			single	0	0	centered	none
Figure Captions	plain	9	none	10	0	0	justified	none, tab at 0.5
References	plain	9	none	10	0	0	justified	0.25 hanging

equation within a parenthesis, with right justification within its column. An example would be

$$\oint \mathbf{E} \cdot d\mathbf{L} = -\frac{\partial}{\partial t} \iint \mathbf{B} \cdot d\mathbf{S} \quad (1)$$

or

$$\nabla \times \mathbf{H} = \mathbf{J} + \frac{\partial \mathbf{D}}{\partial t}. \quad (2)$$

A much better way than typing the equation commands out by hand is to use MathType, so that you can prepare your equations exactly as you wish them to appear, then copy and paste into the Tex document: MathType will generate the correct L^AT_EX instructions (provided you have set it up to do so. It's quite easy, even I can do this).

Note that a period is used to properly punctuate the previous sentence. It is placed at the end of the second equation. *Make sure that any subscripts in your equations are legible and are not too small to read!* When referring to an equation, use the number within parenthesis. For example, you would usually refer to the second equation as (2) rather than equation (2).

IV. FIGURES

Within L^AT_EX there is basically only one option for placing figures within your paper. Often the easiest way is to insert them into the top of the next column, but you can control the location using the “[htbp]” parameters, or “[!h]” if you want the figure to appear exactly where you want it in the text, or at least, very nearly so. The parameters are: h = here t = top b = bottom p = page used only for figures; try and avoid this option, do not lump all figures at the end of the paper! An example figure is shown in Fig. 1, where we have used the figure label to identify this figure uniquely. Here it is Fig.1, but if we were to insert another figure before this one, the figure number would automatically increment to Fig.2 in the text and in the figure caption.

L^AT_EX accepts encapsulated post script files as figures. Standard post script figures will not expand and contract to fill the designate area on the page. Encapsulated post script files will. Thus, encapsulated post script files must obviously be only one page long. It is often easy to convert a post script file to encapsulated post script. In Linux this can be done with the command, “ps2epsi.”

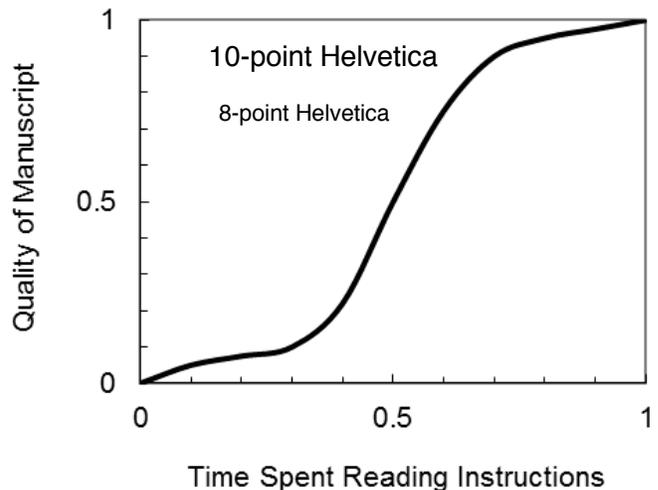


Fig. 1: Estimated relationship between the time an author spends reading these instructions and the quality of the author's digest article.

L^AT_EX also accepts figures previously created as PDF files, as shown in the example. When creating the PDF figures, use high resolution capture or export from your drawing package.

If you decide to use color traces in your graphical data, be absolutely certain that there is no ambiguity about your graphical information when printed on a B&W printer.

The table summarizing the typographical setting was inserted using the “begin{table}” command. This is quite a complicated table with varying column sizes. Simpler tables can be constructed more easily: the “&” command moves you to the next column, and the “cr” (or double slash) take you to the next line.

Certain figures and tables will require the full-page width to display. It is usually best to place these figures and tables at the top, rather than in the middle or bottom of a page. Tables should be entered within a single column if this can be done cleanly, without the entry becoming too crowded.

V. CITING PREVIOUS WORK

When referencing other work, you can use a bibliography generated by BibTeX as a .bbl file standard IEEE bibliography style.

NOTE: BibTeX documentation can be easily obtained at: <http://www.ctan.org/tex-archive/biblio/bibtex/contrib/doc/>

Alternatively, you have to generate the appropriate citation styles for a journal article [1], a conference digest article [2] or a book [3]. Use the examples provided [1] - [3] as a guide.

Further information on LaTeX and TeX can be found in [4]–[6].

VI. CREATION OF THE PDF FILE

Your final submission must be IEEE Xplore Compatible, or your paper will be rejected. The L^AT_EX typesetter will automatically generate the PDF file you in an IEEE-compatible form, when using the IEEE Class file.

The IEEE PDF eXpress web site will be available to aid you in this process. IEEE PDF eXpress is an online tool that can be used to check that your PDF document complies with IEEE Xplore[®] standards. Authors should check the ARFTG web site (http://www.arftg.org/index.php/upcoming_conference/author_instructions) for the most up-to-date instructions. As always with a conversion to PDF, authors should *very carefully* check a printed copy.

VII. CONCLUSION

Following these instructions will improve the quality of your paper and the ARFTG Digest. If you have comments, please contact one of the Technical Program Committee chairs.

ACKNOWLEDGMENT

Please keep your Acknowledgment short. You should include your funding sources, anyone who provided guidance or advice, but otherwise has no direct contribution to the paper. If they do, they should appear in the author list. Please check the IEEE Guidelines on authorship.

REFERENCES

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