

The Contra Card Project

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Contents

1	Introduction	1
1.1	About the source	2
1.2	License	2
2	Building and using <code>contracard</code>	2
3	Formatting	3
4	The Meat	3
4.1	Musical counts and phrases	4
4.2	The <code>contra</code> environment	5
4.3	The <code>\move</code> command	6
5	Lists and Indices	6
5.1	Lists	6
	List of Dances	7
6	The <code>contracard</code> class	7
6.1	Options	7
6.2	Environment setup	8
7	Examples	8
7.1	Code's Compiling by Sam Whited	8
7.2	Untitled Blues Contras by Seth Tepfer	9
Index		12
Change History		14

1 Introduction

The **Contra Card** project is designed to aid in the formatting and typesetting of caller cards for traditional square and line dances.

The project comprises a L^AT_EX package (`contracard.sty`) and a L^AT_EX class (`contracard.cls`). The package provides the core functionality of Contra Card while the class file acts as a convenience wrapper for making calling cards.

1.1 About the source

Contributions are welcome, and the latest development version of the project can always be found at <https://github.com/samwhited/contra-card>.

1.2 License

This project may be distributed and/or modified under the conditions of the L^AT_EX Project Public License, either version 1.3c of this license or (at your opinion) any later version. The latest version of this license is in:

<http://www.latex-project.org/lppl.txt>

and version 1.3c or later is part of all distributions of L^AT_EX version 2008/05/04 or later.

2 Building and using contracard

Dependencies Before building the `contracard` package you should verify that the following dependencies are installed:

```
1 {*contracard-pkg}
2 \RequirePackage{intcalc}
3 \RequirePackage{ifthen}
4 \RequirePackage{tocloft}
5 </contracard-pkg>
```

If you're using the class, you'll want the following additional dependencies:

```
6 {*contracard-cls}
7 \AtEndOfClass{\RequirePackage{geometry}}
8 \AtEndOfClass{\RequirePackage[compact]{titlesec}}
9 \AtEndOfClass{\RequirePackage{contracard}}
10 </contracard-cls>
11 {*contracard-pkg}
```

Building Once you have all the required packages, building `contracard` from source can be accomplished in multiple ways. If the Makefile is present running `make help` will tell you everything you need to know. To manually extract the files and generate the documentation simply run `pdflatex` against `contracard.dtx`:

```
$ pdflatex --shell-escape contracard.dtx
```

The `--shell-escape` option is only required if you want the output to contain version information. This will also require that you have git installed as the version is determined by running

```
$ git describe --tags
```

Using contracard Building results in two main files, a class and a package. In general, if you want to make a calling card, use the `contracard` class and if you want to print a contra dance in a book or article, use a different class and require the `contracard` package.

3 Formatting

These options determine how the dance will look.

`\defaultcontraenv` By default, all contra moves and the title block are wrapped in the `flushleft` environment. To change this you can renew the following macros:

```
12 \newcommand*{\defaultcontraenv}{\flushleft}
13 \newcommand*{\dancetitleenv}{\flushleft}
```

`\dancetitleformat` To change the formatting of a dance's title, author, or form, redefine the following macros:

```
14 \newcommand*{\dancetitleformat}{\section*}
15 \newcommand*{\danceauthorformat}{\subsection*}
16 \newcommand*{\danceformformat}{\hfill}
```

`\movedelimiter` These commands define delimiters that are used between moves, or at the midway point in a part.

`\partdelimiter`

```
17 \newcommand*{\movedelimiter}{,}
18 \newcommand*{\partdelimiter}{.}
19 \newcommand*{\midpartdelimiter}{;}
```

`\phraseseparator` The `\phraseseparator` macro is inserted between every musical phrase and — by default — inserts `phrasevspace` amount of white space.

```
20 \newlength{\phrasevspace}
21 \setlength{\phrasevspace}{1em}
22 \newcommand*{\phraseseparator}{\vspace{\phrasevspace}}
```

4 The Meat

Next we'll define the meat of the `contracard` package. These are the functions, counters, and environments that actually deal with generating a dance.

4.1 Musical counts and phrases

dancecount First we'll create some counters that will help us keep track of the counts (or 'steps') in the dance. The **dancecount** is reset at the start of each new dance, the **partcount** is reset at the begining of each part (eg. A1 or B1), and the **phrasecount** is reset every time the part changes (eg. from A to B). The **dancepart** and **dancephrase** counters contain the number of the part of phrase in the dance (instead of the number of steps).

```
23 \newcounter{dancecount}
24 \newcounter{partcount}
25 \newcounter{phrasecount}
26 \newcounter{dancepart}
27 \newcounter{dancephrase}
```

dancepartlength Most contra dances are composed of two 32 count phrases, each with two 16 count parts, however, it's sometimes useful to change these lengths (for swung dances and the like). It's important to fully understand how the move command works before modifying these values. Changing just one or the other can have unexpected consequences.

```
28 \newcounter{dancepartlength}
29 \setcounter{dancepartlength}{16}
30 \newcounter{dancephraselength}
31 \setcounter{dancephraselength}{32}
```

\resetdancephrase The phrase will continue to increment (A, B, C) unless the user resets it by calling **\resetdancephrase**. The user can also manually reset the part. If the value of the phrase or part would be the same after resetting, no action is taken.

```
32 \newcommand*{\resetdancephrase}{%
33   \ifthenelse{\value{partcount}=16}{\newline}{%
34     \@ifstar{\@resetdancephraseStar}{\@resetdancephraseNoStar}%
35   }%
36 \newcommand*{\@resetdancephraseStar}{%
37   \setcounter{dancephrase}{1}%
38   \setcounter{phrasecount}{0}%
39   \resetdancepart*
40 }%
41 \newcommand*{\@resetdancephraseNoStar}{%
42   \ifthenelse{\value{dancephrase}=1}{%
43     \setcounter{dancephrase}{1}%
44     \setcounter{phrasecount}{0}%
45     \resetdancepart
46   }%
47 }%
48 \newcommand*{\resetdancepart}{%
49   \@ifstar{\@resetdancepartStar}{\@resetdancepartNoStar}%
50 }%
51 \newcommand*{\@resetdancepartStar}{%
52   \setcounter{dancepart}{1}%
53   \setcounter{partcount}{0}%
54 }
```

```

55 \newcommand*{\@resetdancepartNoStar}{%
56   \ifthenelse{\value{dancepart}=1}{}{%
57     \setcounter{dancepart}{1}%
58     \setcounter{partcount}{0}%
59   }%
60 }

```

- \newdancephrase The user can also manually start a new phrase or part:
\newdancepart

```

61 \newcommand*{\newdancephrase}{%
62   \ifthenelse{\not\value{phrasecount}=0}{\newline}{%
63     \addtocounter{dancephrase}{1}%
64     \setcounter{phrasecount}{0}%
65     \resetdancepart*
66   }%
67 \newcommand*{\newdancepart}{%
68   \newline
69   \addtocounter{dancepart}{1}%
70   \setcounter{partcount}{0}%
71 }

```

4.2 The contra environment

- contra** The contra environment is pretty simple. It resets the various counters, and displays some information about the dance—if it is used inside of the `contracard` class, it also clears the page and moves the dance form into the header.

```

72 \newenvironment{contra}[4][\defaultcontraenv]{%
73   \refstepcounter{dance}
74   \addcontentsline{lod}{dance}{\protect\numberline{\thedance}\#2}
75   \setcounter{dancetocount}{0}
76   \resetdancepart*
77   \resetdancephrase*
78   \ifdefined\@ccisclass\clearpage\fi%
79   \begin{\dancetitleenv}
80     \ifdefined\@ccisclass%
81       \pagestyle{myheadings}
82       \thispagestyle{myheadings}
83       \markboth{}{\danceformformat{\#4}}
84     \else%
85       {\danceformformat{\#4}}%
86     \fi%
87     {\dancetitleformat{\#2}}%
88     {\danceauthorformat{\#3}}%
89   \end{\dancetitleenv}
90   \newcommand*{\@contraenv}{\#1}
91   \begin{@contraenv}
92   }{%
93   \end{@contraenv}
94 }

```

4.3 The \move command

- \move The next thing we need to define is the \move command. This command takes in a move to display, and (optionally) the number of counts the move takes. If the count is not specified, 16 is used as the default.

```
95 \newcommand*{\move}[2][16]{%
96   \ifthenelse{\value{phrasecount}=\value{dancephraselength}}{%
97     \newdancephrase%
98   }{%
99     \ifthenelse{\value{partcount}=\value{dancepartlength}}{%
100       \newdancepart%
101     }{}%
102   }%
103 \ifthenelse{\intcalcMod{\value{dancecount}}{\value{dancepartlength}}=0}{%
104   \Alph{dancephrase}\arabic{dancepart}\partdelimter\ %
105 }{}%
106 \addtocounter{dancecount}{#1}%
107 \addtocounter{phrasecount}{#1}%
108 \addtocounter{partcount}{#1}%
109 #2%
110 \ifthenelse{\value{phrasecount}=\value{dancephraselength}}{%
111   \pagebreak[1]\phraseseparator%
112 }{}%
113 \ifthenelse{\value{partcount}=\intcalcDiv{\value{dancepartlength}}{2}}{\midpartdelimter\nopagebreak\nolimits}{%
114   \ifthenelse{\not\value{partcount}=\value{dancepartlength}}{\movedelimter\nopagebreak\nolimits}{%
115 }}
```

5 Lists and Indices

5.1 Lists

Just as many classes allow you to build a table of contents, or a list of figures, contracard allows you to create a list of dances.

- \listofdances The list of dances is created by a call to \listofdance by default, however, we define an alias: \listofdances to prevent confusion.

```
116 \newlistof{dance}{lod}{\lodtitle}
117 \newcommand*{\listofdances}{\listofdance}
```

- \lodtitle The title of the list of dances will be:

```
118 \newcommand*{\lodtitle}{List of Dances}
```

When printed, the list of dances looks something like this:

List of Dances

1	Code's Compiling	9
2	Untitled Blues № 1	10
3	Untitled Blues № 2	11

```
119 </contracard-pkg>
120 <*contracard-cls>
```

6 The **contracard** class

The Contra Card project also provides a class (**contracard.cls**) which acts as a convenience wrapper around the core functionality provided by the package. This is useful for generating calling cards, and saves you the trouble of looking up standard card sizes and figuring out margins and where to put headings and the like.

6.1 Options

small The class can be loaded with any of the following options:

```
medium
large
a7paper
121 \DeclareOption{small}{%
122   \AtBeginDocument{%
123     \titleformat{\section}{\normalsize\bfseries}{\thesection}{1em}{}
124     \titleformat{\subsection}{\normalsize}{\thesection}{1em}{}
125   }
126   \PassOptionsToPackage{%
127     margin=0.25in,top=0.75in,paperwidth=5in,paperheight=3in%
128   }{geometry}%
129 }
130 \DeclareOption{medium}{%
131   \AtBeginDocument{\large}
132   \PassOptionsToPackage{%
133     margin=0.5in,top=0.75in,paperwidth=6in,paperheight=4in%
134   }{geometry}%
135 }
136 \DeclareOption{large}{%
137   \AtBeginDocument{\Large}
138   \PassOptionsToPackage{%
139     margin=0.75in,top=1in,paperwidth=8in,paperheight=5in%
140   }{geometry}%
141 }
142 \DeclareOption{a7paper}{%
143   \AtBeginDocument{%
144     \titleformat{\section}{\normalsize\bfseries}{\thesection}{1em}{}
145     \titleformat{\subsection}{\normalsize}{\thesection}{1em}{}
146   }
147 }
```

```

146 }
147 \PassOptionsToPackage{%
148   margin=5mm,top=15mm,paperwidth=105mm,paperheight=74mm%
149 }{geometry}%
150 }
151 \DeclareOption*{%
152   \PassOptionsToClass{\CurrentOption}{article}%
153 }

```

The `small` option creates a 127.0 by 76.2 mm (5 by 3 in) card. The `medium` option creates a 152.4 by 101.6 mm (6 by 4 in) card. The `large` option creates a 203.2 by 27.0 mm (8 by 5 in) card. The `a7paper` option creates a 105 by 74 mm (4.1 by 2.9 in) card. Any unrecognized options are passed to the `article` class.

6.2 Environment setup

The `contracard` class does a little extra work to turn off headers, and prevent page numbering:

```

154 \AtBeginDocument{\pagestyle{empty}}
155 \AtBeginDocument{\pagenumbering{gobble}}

```

It also defines a command `\@ccisclass` to let the `contracard` package know that it was called via the class:

```

156 \newcommand*{\@ccisclass}{}%
157 \ProcessOptions\relax
158 {/contracard-cls}

```

7 Examples

A few examples are contained below. Note that the output is wrapped in a frame for clarity; no attempt has been made to make the frame match the size, margins, etc. that a calling card would have (these examples don't use `contracard.cls`, just the package).

7.1 Code's Compiling by Sam Whited

This is a simple dance from the caller's perspective (not so for the dancers!) and doesn't do much to show off Contra Card's features. Each move is 8 counts, and it uses standard phrasing. Teaching it may be more difficult; at first glance it appears not to flow, but by adding a few turns and making sure that dancers know they don't have to stop and face forward before doing the see saw (almost as if it were a mad robin) it will flow smoothly. Overall it's a bit busy, and probably needs revision.

```
\begin{contra}{Code's Compiling}{Sam Whited}{Duple becket}
  \move[8]{Neighbor dosido}
  \move[8]{Partner see saw}
```

```

\move{Shadow swing}
\move[8]{Balance and petronella}
\move[8]{Balance and petronella}
\move[8]{Partner swing}
\move[8]{Left diagonal: Right and left through}
\begin{flushleft}
    {\footnotesize \textbf{Notes} The Neighbor dosido into a partner see saw should be one fluid motion. Resist spinning in the dosido, and start revolving slowly over your right shoulder as you enter the see saw and everything will flow. Make sure lines have \textbf{lots} of space for the dosido.}
\end{flushleft}
\vspace*{\fill}
\begin{flushright}
\href{http://creativecommons.org/licenses/by/3.0/}{%
\IfFileExists{by.png}{%
\includegraphics[width=40px]{by.png}}%
}{\cc{by}}%
\end{flushright}
\end{contra}

```

Duple becket

Code's Compiling

Sam Whited

A1. Neighbor dosido; Partner see saw

A2. Shadow swing

B1. Balance and petronella; Balance and petronella

B2. Partner swing; Left diagonal: Right and left through

Notes The Neighbor dosido into a partner see saw should be one fluid motion. Resist spinning in the dosido, and start revolving slowly over your right shoulder as you enter the see saw and everything will flow. Make sure lines have **lots** of space for the dosido.



7.2 Untitled Blues Contras by Seth Tepfer

These blues contras consist of three, 16 count phrases (A1, B1, and C1). The first employs the `\newdancephrase` command to reset the phrase every 16 counts, the second changes the `dancephraselength` and lets `contracard` handle figuring out how to break up the phrases.

Untitled Blues № 1

```
\renewcommand*\{\partdelimter}{:}
\begin{contra}{Untitled Blues \textnumero\ 1}{Seth Tepfer}{Duple Minor Im.}
    \move[8]{Neighbor gypsy}
    \move[8]{Ladies gypsy}
    \newdancephrase
    \move[16]{Partner balance and swing}
    \newdancephrase
    \move[8]{Ladies chain}
    \move[8]{Left hand star}
    \vspace*\{\fill}
    \begin{flushright}
        \href{http://creativecommons.org/licenses/by-nc/3.0/}{%
            \IfFileExists{by-nc.png}{%
                \includegraphics[width=40px]{by-nc.png}%
            }{\cc{bync}}%
        }
    \end{flushright}
\end{contra}
```

Duple Minor Im.

Untitled Blues № 1

Seth Tepfer

A1: Neighbor gypsy; Ladies gypsy

B1: Partner balance and swing

C1: Ladies chain; Left hand star



Untitled Blues № 2

```
\setlength{\phrasevspace}{0em}
\setcounter{dancephraselength}{16}
\begin{contra}{Untitled Blues \textnumero\ 2}{Seth Tepfer}{Duple Minor Im.}
    \move[8]{Neighbor gypsy}
    \move[8]{Gents allemande left 1\textonehalf}
```

```
\move[16]{Partner balance and swing}
\move[8]{\textonehalf\ promenade across set}
\move[8]{Ladies chain}
\vspace*\{\fill}
\begin{flushright}
    \href{http://creativecommons.org/licenses/by-nc/3.0/}{%
        \IfFileExists{by-nc.png}{%
            \includegraphics[width=40px]{by-nc.png}%
        }{\cc{bync}}%
    }
\end{flushright}
\end{contra}
```

Duple Minor Im.

Untitled Blues № 2

Seth Tepfer

- A1. Neighbor gypsy; Gents allemande left 1 $\frac{1}{2}$
- B1. Partner balance and swing
- C1. $\frac{1}{2}$ promenade across set; Ladies chain



Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

Symbols	F
\@ccisclass 78, 80, 156	\fi 78, 86
\@contraenv 90, 91, 93	
\@ifstar 34, 49	
\@resetdancepartNoStar 49, 55	\hfill 16
\@resetdancepartStar 49, 51	
\@resetdancephraseNoStar 34, 41	
\@resetdancephraseStar 34, 36	\ifdefined 78, 80
\□ 104	\ifthenelse 33, 42, 56, 62, 96, 99, 103, 110, 113, 114
	\intcalcDiv 113
	\intcalcMod 103
A	L
\a7paper 121	\Large 137
\addcontentsline 74	\large 121, 131
\addtocounter 63, 69, 106–108	\listofdance 117
\Alph 104	\listofdances 116
\arabic 104	\lodtitle 116, 118
\AtBeginDocument 122, 131, 137, 143, 154, 155	
\AtEndOfClass 7–9	
B	M
\begin 79, 91	\markboth 83
\bfseries 123, 144	\medium 121
	\midpartdelimiter 17, 113
	\move 95
	\movedelimiter 17, 114
C	N
\clearpage 78	\newcommand 12–19, 22, 32, 36, 41, 48, 51, 55, 61, 67, 90, 95, 117, 118, 156
\contra 72	\newcounter 23–28, 30
\CurrentOption 152	\newdancepart 61, 100
	\newdancephrase 61, 97
	\newenvironment 72
D	\newline 33, 62, 68
\danceauthorformat 14, 88	\newlistof 116
\dancecount 23	\nolinebreak 114
\danceformformat 14, 83, 85	\nopagebreak 113, 114
\dancepart 23	\normalsize 123, 124, 144, 145
\dancepartlength 28	\not 62, 114
\dancephrase 23	\numberline 74
\dancephraselength 28	
\dancetitleenv 12, 79, 89	
\dancetitleformat 14, 87	
\DeclareOption 121, 130, 136, 142, 151	
\defaultcontraenv 12, 72	
E	P
\else 84	\pagebreak 111
\end 89, 93	\pagenumbering 155
	\pagestyle 81, 154
	\partcount 23

\partdelimiter	17, 104	S	
\PassOptionsToClass	152	\section	14, 123, 144
\PassOptionsToPackage	126, 132, 138, 147	\setcounter	29, 31, 37, 38, 43, 44, 52, 53, 57, 58, 64, 70, 75
\phrasetcount	23	\setlength	21
\phraseseparator	20, 111	\small	121
\phrasevspace	20, 20, 21, 22	\subsection	15, 124, 145
\ProcessOptions	157	T	
\protect	74	\thedance	74
R		\thesection	123, 124, 144, 145
\refstepcounter	73	\thispagestyle	82
\relax	157	\titleformat	123, 124, 144, 145
\RequirePackage	2–4, 7–9	V	
\resetdancepart	32, 65, 76	\value	33, 42, 56, 62, 96, 99, 103, 110, 113, 114
\resetdancephrase	32, 77	\vspace	22

Change History

0.1	General: Created boilerplate for class	2
	\dancetitleenv: Allow user to format moves	3
	\move: Add move command	6
	\contra: Create contra environment	5
0.2	\partcount: Create a counter for the current musical part	4
	\phrasetcount: Create a counter for the current musical phrase	4
	\resetdancepart: Allow the user to reset the phrase	4
0.3	General: Split core functionality out into package	2
	\dancepart: Create a new counter for the current phrase	4
	\dancephrase: Create a new counter for the current phrase	4
	\partcount: Change to contain the count, not the part itself	4
	\danceformformat: Allow the user to change the dance form format	3
	Allow the user to change the dance title format	3
	\dancetitleenv: Allow user to format dance title block	3
	\phrasetcount: Change to contain the count, not the phrase itself	4
	\midpartdelimiter: Allow customizing the mid-part delimiter	3
	\move: Simplify dance logic using new counters	6
	\movedelimiter: Allow customizing the move delimiter character	3
	\newdancepart: Allow user to manually start a new part	5
	\newdancephrase: Allow user to manually start a new phrase	5
	\partdelimiter: Allow customizing the part delimiter	3
	\resetdancepart: Change name of \progressed	4
0.4	General: Add tocloft package to requirements	2
	Add list of dances	2
	Support swung dances	2
	\dancepartlength: Create a new counter for the part length	4
	\dancephraselength: Create a new counter for the phrase length	4
	\phraseseparator: Allow custom phrase separator character	3
	\phrasevspace: Allow custom phrase separation length	3