EMMS

Play & Manage Music in Emacs

lgfang

plexus platform

March 7, 2012

提纲

1 为什么是Emacs

2 基本功能

3 定制、扩展与补丁

为什么用Emacs管理音乐?

- （我觉得）简洁、实用的界面
- 跨平台
- 无限扩展
- 无限定制
- 其它各种Emacs的便利

提纲

1 为什么是Emacs

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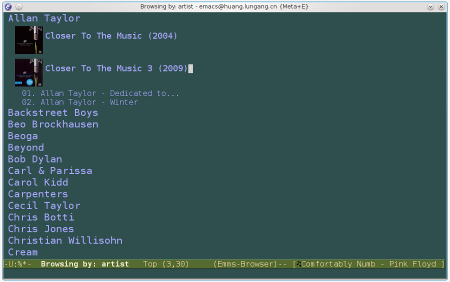
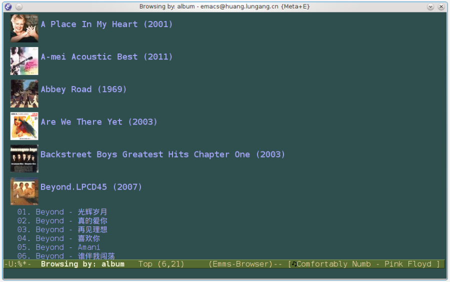
3 定制、扩展与补丁

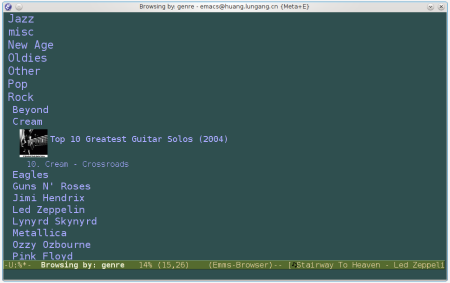
分类（专辑、流派等）浏览音乐库



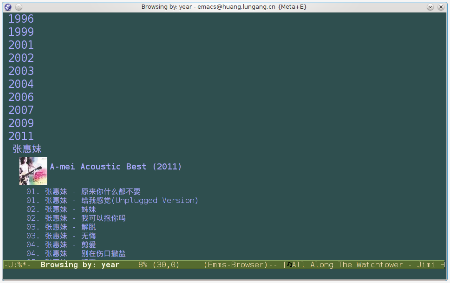
```
Browsing by: artist - emacs@huang.lungang.cn {Meta+E}
Allan Taylor
   Closer To The Music (2004)

   Closer To The Music 3 (2009)
    01. Allan Taylor - Dedicated to...
    02. Allan Taylor - Winter
Backstreet Boys
Beo Brockhausen
Beoga
Beyond
Bob Dylan
Carl & Parissa
Carol Kidd
Carpenters
Cecil Taylor
Chris Botti
Chris Jones
Christian Willisohn
Cream
-U:%*-  Browsing by: artist   Top (3,30)     (Emms-Browser)-- [♫Comfortably Numb - Pink Floyd ]
```



```
Browsing by: album - emacs@huang.lungang.cn {Meta+E}
   A Place In My Heart (2001)

   A-mei Acoustic Best (2011)

   Abbey Road (1969)

   Are We There Yet (2003)

   Backstreet Boys Greatest Hits Chapter One (2003)

   Beyond.LPCD45 (2007)
    01. Beyond - 光辉岁月
    02. Beyond - 真的爱你
    03. Beyond - 再见理想
    04. Beyond - 喜欢你
    05. Beyond - Amani
    06. Beyond - 谁伴我闯荡
-U:%*-  Browsing by: album   Top (6,21)     (Emms-Browser)-- [♫Comfortably Numb - Pink Floyd ]
```

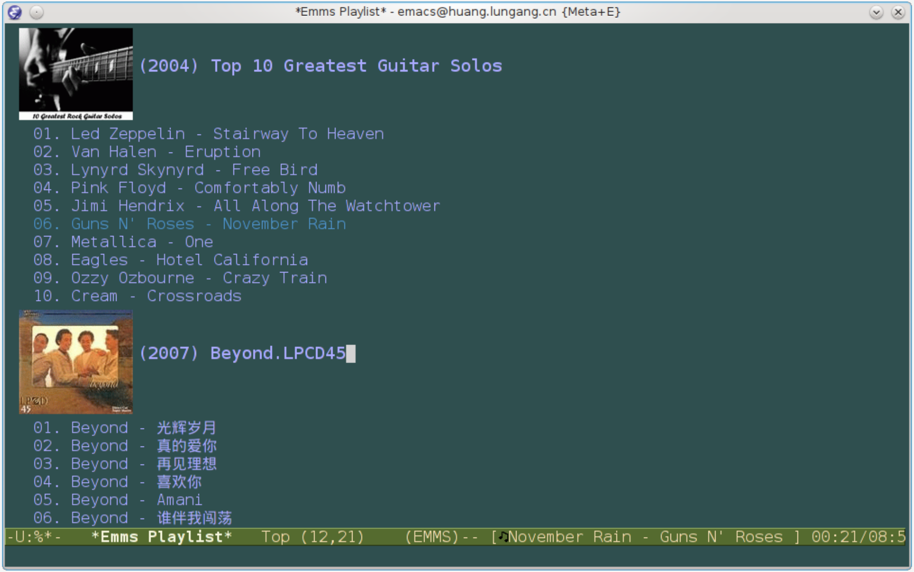


```
Browsing by: genre - emacs@huang.lungang.cn {Meta+E}
Jazz
misc
New Age
Oldies
Other
Pop
Rock
 Beyond
 Cream
    Top 10 Greatest Guitar Solos (2004)
     10. Cream - Crossroads
 Eagles
 Guns N' Roses
 Jimi Hendrix
 Led Zeppelin
 Lynyrd Skynyrd
 Metallica
 Ozzy Ozbourne
 Pink Floyd
-U:%*-  Browsing by: genre   14% (15,26)     (Emms-Browser)-- [♫Stairway To Heaven - Led Zeppeli
```



```
Browsing by: year - emacs@huang.lungang.cn {Meta+E}
1996
1999
2001
2002
2003
2004
2006
2007
2009
2011
 张惠妹
    A-mei Acoustic Best (2011)
     01. 张惠妹 - 原来你什么都不要
     01. 张惠妹 - 给我感觉(Unplugged Version)
     02. 张惠妹 - 姊妹
     02. 张惠妹 - 我可以抱你吗
     03. 张惠妹 - 解脱
     03. 张惠妹 - 无悔
     04. 张惠妹 - 剪爱
     04. 张惠妹 - 别在伤口撒盐
-U:%*-  Browsing by: year   8% (30,0)     (Emms-Browser)-- [♫All Along The Watchtower - Jimi H
```

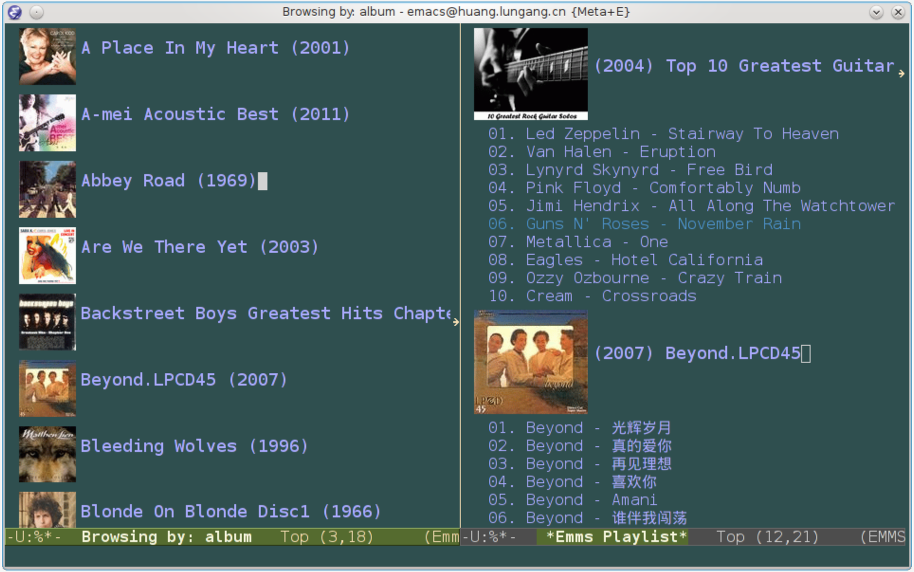
播放列表



Emms Playlist - emacs@huang.lungang.cn {Meta+E}

```
(2004) Top 10 Greatest Guitar Solos
 01. Led Zeppelin - Stairway To Heaven
 02. Van Halen - Eruption
 03. Lynyrd Skynyrd - Free Bird
 04. Pink Floyd - Comfortably Numb
 05. Jimi Hendrix - All Along The Watchtower
 06. Guns N' Roses - November Rain
 07. Metallica - One
 08. Eagles - Hotel California
 09. Ozzy Ozbourne - Crazy Train
 10. Cream - Crossroads
(2007) Beyond.LPCD45
 01. Beyond - 光辉岁月
 02. Beyond - 真的爱你
 03. Beyond - 再见理想
 04. Beyond - 喜欢你
 05. Beyond - Amani
 06. Beyond - 谁伴我闯荡
-U:%*-   *Emms Playlist*   Top (12,21)     (EMMS)-- [♫November Rain - Guns N' Roses ] 00:21/08:5
```

同时显示，选歌更方便

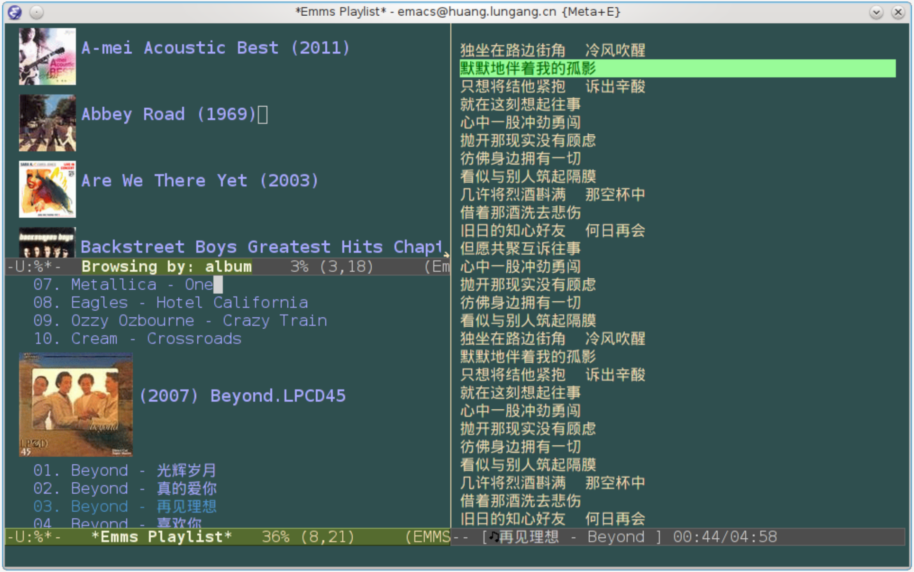


Browsing by: album - emacs@huang.lungang.cn {Meta+E}

```
A Place In My Heart (2001)
A-mei Acoustic Best (2011)
Abbey Road (1969)
Are We There Yet (2003)
Backstreet Boys Greatest Hits Chapte
Beyond.LPCD45 (2007)
Bleeding Wolves (1996)
Blonde On Blonde Disc1 (1966)
-U:%*-  Browsing by: album    Top (3,18)     (Emm
```

```
(2004) Top 10 Greatest Guitar
 01. Led Zeppelin - Stairway To Heaven
 02. Van Halen - Eruption
 03. Lynyrd Skynyrd - Free Bird
 04. Pink Floyd - Comfortably Numb
 05. Jimi Hendrix - All Along The Watchtower
 06. Guns N' Roses - November Rain
 07. Metallica - One
 08. Eagles - Hotel California
 09. Ozzy Ozbourne - Crazy Train
 10. Cream - Crossroads
(2007) Beyond.LPCD45
 01. Beyond - 光辉岁月
 02. Beyond - 真的爱你
 03. Beyond - 再见理想
 04. Beyond - 喜欢你
 05. Beyond - Amani
 06. Beyond - 谁伴我闯荡
-U:%*-  *Emms Playlist*    Top (12,21)     (EMMS
```

闲的时候会想看看同步歌词

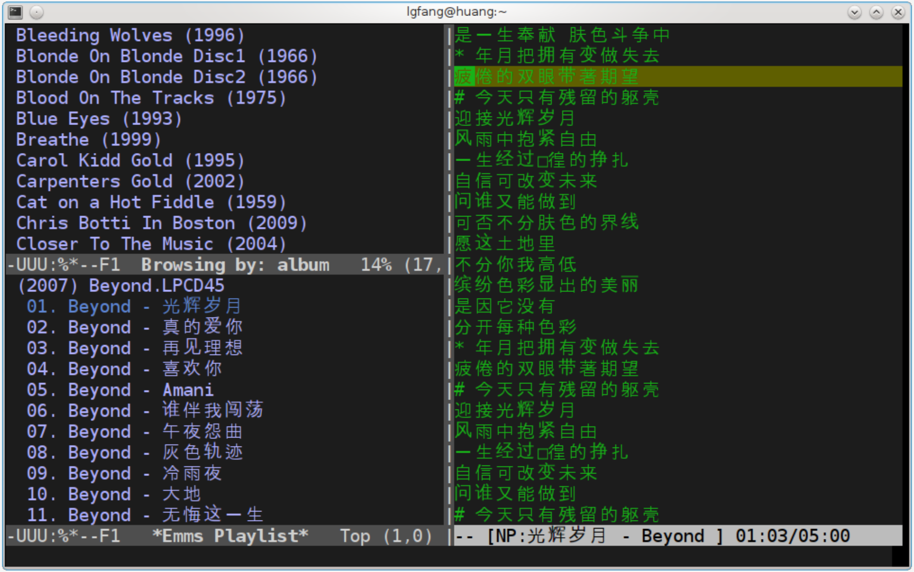


Emms Playlist - emacs@huang.lungang.cn {Meta+E}

```
A-mei Acoustic Best (2011)

Abbey Road (1969)

Are We There Yet (2003)

Backstreet Boys Greatest Hits Chapt
-U:%*-  Browsing by: album     3% (3,18)      (Em
  07. Metallica - One
  08. Eagles - Hotel California
  09. Ozzy Ozbourne - Crazy Train
  10. Cream - Crossroads

          (2007) Beyond.LPCD45

  01. Beyond - 光辉岁月
  02. Beyond - 真的爱你
  03. Beyond - 再见理想
  04. Beyond - 喜欢你
-U:%*-   *Emms Playlist*   36% (8,21)      (EMMS
```

```
独坐在路边街角   冷风吹醒
默默地伴着我的孤影
只想将结他紧抱   诉出辛酸
就在这刻想起往事
心中一股冲劲勇闯
抛开那现实没有顾虑
彷佛身边拥有一切
看似与别人筑起隔膜
几许将烈酒斟满   那空杯中
借着那酒洗去悲伤
旧日的知心好友   何日再会
但愿共聚互诉往事
心中一股冲劲勇闯
抛开那现实没有顾虑
彷佛身边拥有一切
看似与别人筑起隔膜
独坐在路边街角   冷风吹醒
默默地伴着我的孤影
只想将结他紧抱   诉出辛酸
就在这刻想起往事
心中一股冲劲勇闯
抛开那现实没有顾虑
彷佛身边拥有一切
看似与别人筑起隔膜
几许将烈酒斟满   那空杯中
借着那酒洗去悲伤
旧日的知心好友   何日再会
-- [♫再见理想 - Beyond ] 00:44/04:58
```

没有图形环境照用不误



lgfang@huang:~

```
Bleeding Wolves (1996)
Blonde On Blonde Disc1 (1966)
Blonde On Blonde Disc2 (1966)
Blood On The Tracks (1975)
Blue Eyes (1993)
Breathe (1999)
Carol Kidd Gold (1995)
Carpenters Gold (2002)
Cat on a Hot Fiddle (1959)
Chris Botti In Boston (2009)
Closer To The Music (2004)
-UUU:%*--F1  Browsing by: album   14% (17,
(2007) Beyond.LPCD45
  01. Beyond - 光辉岁月
  02. Beyond - 真的爱你
  03. Beyond - 再见理想
  04. Beyond - 喜欢你
  05. Beyond - Amani
  06. Beyond - 谁伴我闯荡
  07. Beyond - 午夜怨曲
  08. Beyond - 灰色轨迹
  09. Beyond - 冷雨夜
  10. Beyond - 大地
  11. Beyond - 无悔这一生
-UUU:%*--F1   *Emms Playlist*   Top (1,0)
```

```
是一生奉献 肤色斗争中
* 年月把拥有变做失去
疲倦的双眼带著期望
# 今天只有残留的躯壳
迎接光辉岁月
风雨中抱紧自由
一生经过□徨的挣扎
自信可改变未来
问谁又能做到
可否不分肤色的界线
愿这土地里
不分你我高低
缤纷色彩显出的美丽
是因它没有
分开每种色彩
* 年月把拥有变做失去
疲倦的双眼带著期望
# 今天只有残留的躯壳
迎接光辉岁月
风雨中抱紧自由
一生经过□徨的挣扎
自信可改变未来
问谁又能做到
# 今天只有残留的躯壳
-- [NP:光辉岁月 - Beyond ] 01:03/05:00
```

提纲

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专辑视图里把年份放在最后（参见前图）

这样专辑视图里专辑就按名称排序，而不是“先年份再名称”排序。

```
(defun lgfang-emms-browser-album-and-year-fmt (bdata fmt)
  (concat
   "%i%cS%n"
   (let ((year (emms-browser-format-elem fmt "y")))
     (if (and year (not (string= year "0")))
         " (%y)"
       ""))))
```

自动下载歌词

```
(when (require 'emms-lyrics-download nil t) (ad-activate 'emms-lyrics-find-lyric))
```

歌名、歌手名中带单引号打这个补丁:

```
*** lgfang/emms-lyrics-download.el~     2010-06-09 23:37:03.000000000 +0800
--- lgfang/emms-lyrics-download.el      2012-01-01 11:42:55.000000000 +0800
***************
*** 36,42 ****
    (let* ((itrack (emms-playlist-current-selected-track))
         (artist (emms-track-get itrack 'info-artist))
         (title (emms-track-get itrack 'info-title))
!        (iartist (replace-regexp-in-string "[ ,]" "" artist))
!        (ititle (replace-regexp-in-string "[ ,]" "" title))
         (uartist (http-url-encode iartist 'gb2312))
         (utitle (http-url-encode ititle 'gb2312))
--- 36,42 ----
    (let* ((itrack (emms-playlist-current-selected-track))
         (artist (emms-track-get itrack 'info-artist))
         (title (emms-track-get itrack 'info-title))
!        (iartist (replace-regexp-in-string "[ ,']" "" artist))
!        (ititle (replace-regexp-in-string "[ ,']" "" title))
         (uartist (http-url-encode iartist 'gb2312))
         (utitle (http-url-encode ititle 'gb2312))
```

中文的哈希好像有点问题

经常出现专辑不显示的情况，打上这个patch就好了（貌似armarok也有这个问题，不过还是emacs改起来简单）。

```
(when (require 'emms-lyrics-download nil t) (ad-activate 'emms-lyrics-find-lyric))
```

歌名、歌手名中带单引号打这个补丁：

```
*** lgfang/emms-lyrics-download.el~     2010-06-09 23:37:03.000000000 +0800
--- lgfang/emms-lyrics-download.el      2012-01-01 11:42:55.000000000 +0800
***************
*** 36,42 ****
    (let* ((itrack (emms-playlist-current-selected-track))
         (artist (emms-track-get itrack 'info-artist))
         (title (emms-track-get itrack 'info-title))
!        (iartist (replace-regexp-in-string "[ ,]" "" artist))
!        (ititle (replace-regexp-in-string "[ ,]" "" title))
         (uartist (http-url-encode iartist 'gb2312))
         (utitle (http-url-encode ititle 'gb2312))
--- 36,42 ----
    (let* ((itrack (emms-playlist-current-selected-track))
         (artist (emms-track-get itrack 'info-artist))
         (title (emms-track-get itrack 'info-title))
!        (iartist (replace-regexp-in-string "[ ,']" "" artist))
!        (ititle (replace-regexp-in-string "[ ,']" "" title))
         (uartist (http-url-encode iartist 'gb2312))
         (utitle (http-url-encode ititle 'gb2312))
```

flac歌曲的标签信息不对

```
*** /home/lgfang/tmp/emms/lisp/emms-info-metaflac.el    2011-01-09 21:53:40.904903408
     +0800
--- /home/storage/daily/my-notes/emacs/extensions/emms/emms-info-metaflac.el
     2011-01-10 20:56:29.000000000 +0800
***************
*** 62,68 ****
      "--show-tag=ARTIST"
      "--show-tag=ALBUM"
      "--show-tag=NOTE"
!     "--show-tag=YEAR"
      "--show-tag=TRACKNUMBER"
      "--show-tag=GENRE")
    "The argument to pass to ‘emms-info-metaflac-program-name’."
--- 62,68 ----
      "--show-tag=ARTIST"
      "--show-tag=ALBUM"
      "--show-tag=NOTE"
!     "--show-tag=DATE"
      "--show-tag=TRACKNUMBER"
      "--show-tag=GENRE")
    "The argument to pass to ‘emms-info-metaflac-program-name’."
***************
*** 91,97 ****
                               (string-to-number (buffer-substring (point)
                                    (line-end-position))))))
          (forward-line 1)
          (while (looking-at "^\\([^=\n]+\\)=\\(.*\\)$")
!           (let ((name (intern (concat "info-" (downcase (match-string 1)))))
                  (value (match-string 2)))
```

flac歌曲的标签信息不对 (cont'd)

```
              (when (> (length value)
                       0)
--- 91,98 ----
                               (string-to-number (buffer-substring (point)
                                    (line-end-position))))))
          (forward-line 1)
          (while (looking-at "^\\([^=\n]+\\)=\\(.*\\)$")
!           (let ((name (intern (concat "info-" (if (string-equal "DATE" (match-string
     1)) "year"
!                                          (downcase (match-string 1))))))
                  (value (match-string 2)))
              (when (> (length value)
                       0)
```

恢复缓存（emms cache）时清掉现有的

默认是不清除的。我觉得用处不大，于是改了改。

```
*** /home/lgfang/.emacs.d/extensions/emms/emms-cache.el~        2011-01-10
     20:56:29.000000000 +0800
--- /home/lgfang/.emacs.d/extensions/emms/emms-cache.el 2011-01-20 22:50:14.000000000
     +0800
***************
*** 148,153 ****
--- 148,154 ----
  (defun emms-cache-restore ()
    "Restore the track cache from a file."
    (interactive)
+   (clrhash emms-cache-db)
    (load emms-cache-file t nil t)
    (setq emms-cache-dirty nil))
```

同步显示歌词的补丁

同步显示歌词的功能其实用处不大，不过没有好像又有点被人鄙 视 :)，所以我稍微改了改emms源码实现了这个功能:

```
*** /tmp/ediff2397pPj   2010-07-11 23:09:51.000000000 +0800
--- /home/lgfang/homepage/source/emacs/extensions/emms/emms-lyrics.el   2010-07-11
     23:09:02.000000000 +0800
***************
*** 41,47 ****
  ;; 3. Search .lrc format lyrics from internet ?

  ;;; Code:
!
  (require ’emms)
  (require ’emms-player-simple)
  (require ’emms-source-file)
--- 41,47 ----
  ;; 3. Search .lrc format lyrics from internet ?

  ;;; Code:
! (require ’hl-line)
  (require ’emms)
  (require ’emms-player-simple)
  (require ’emms-source-file)
***************
*** 116,121 ****
--- 116,124 ----
  (defvar emms-lyrics-mode-line-string ""
    "Current lyric.")
```

同步显示歌词的补丁 (cont'd)

```
+ (defvar emms-lyrics-lyrics-buffer nil
+   "Buffer to show lyrics, create/updated by emms-lyrics-start")
+
  ;;;###autoload
  (defun emms-lyrics-enable ()
    "Enable displaying emms lyrics."
***************
*** 281,286 ****
--- 284,305 ----
                (sort emms-lyrics-alist (lambda (a b) (< (car a) (car b))))))
        t)))

+ (defun emms-lyrics-create-buffer ()
+   "Create a buffer dedicated to lyrics"
+   ;; leading white space in buffer name to hide the buffer
+   (setq emms-lyrics-lyrics-buffer (get-buffer-create " *Emms Lyrics*"))
+   (set-buffer emms-lyrics-lyrics-buffer)
+   (setq buffer-read-only nil
+         cursor-type nil)
+   (erase-buffer)
+   (when (window-system) (hl-line-mode 1)) ; hl-line-face for terminal too ugly
+   (let* ((lyrics-alist emms-lyrics-alist))
+     (while lyrics-alist
+       (insert (cdar lyrics-alist) "\n")
+       (setq lyrics-alist (cdr lyrics-alist))))
+   (goto-char 1)
+   (setq buffer-read-only t))
+
```

同步显示歌词的补丁 (cont'd)

```
  (defun emms-lyrics-start ()
    "Start displaying lryics."
    (setq emms-lyrics-start-time (current-time)
***************
*** 295,300 ****
--- 314,320 ----
            (concat "\\." (file-name-extension file) "\\'")
              ".lrc"
              (file-name-nondirectory file))))
+     (emms-lyrics-create-buffer)
      (emms-lyrics-set-timer)))

  (defun emms-lyrics-catchup (lrc)
***************
*** 362,368 ****
  (defun emms-lyrics-set-timer ()
    "Set timers for displaying lyrics."
    (setq emms-lyrics-timers '())
!   (let ((lyrics-alist emms-lyrics-alist))
      (while lyrics-alist
        (let ((time (- (caar lyrics-alist) emms-lyrics-elapsed-time))
              (lyric (cdar lyrics-alist))
--- 382,388 ----
  (defun emms-lyrics-set-timer ()
    "Set timers for displaying lyrics."
    (setq emms-lyrics-timers '())
!   (let ((lyrics-alist emms-lyrics-alist) (line 0))
      (while lyrics-alist
        (let ((time (- (caar lyrics-alist) emms-lyrics-elapsed-time))
```

同步显示歌词的补丁 (cont'd)

```
              (lyric (cdar lyrics-alist))
***************
*** 371,376 ****
--- 391,397 ----
                                 emms-lyrics-elapsed-time)))
              (next-lyric (and (cdr lyrics-alist)
                               (cdr (cadr lyrics-alist)))))
+         (setq line (1+ line))
          (setq emms-lyrics-timers
                (append emms-lyrics-timers
                        (list
***************
*** 379,384 ****
--- 400,406 ----
                                      'emms-lyrics-display-handler
                                      lyric
                                      next-lyric
+                                     line
                                      (and next-time (- next-time time)))))))
        (setq lyrics-alist (cdr lyrics-alist)))))

***************
*** 397,410 ****
        (remove 'emms-lyrics-mode-line-string global-mode-string))
    (force-mode-line-update))

! (defun emms-lyrics-display-handler (lyric next-lyric diff)
    "DIFF is the timestamp differences between current LYRIC and
  NEXT-LYRIC."
```

同步显示歌词的补丁 (cont’d)

```
!   (emms-lyrics-display (format emms-lyrics-display-format lyric))
    (when emms-lyrics-scroll-p
      (emms-lyrics-scroll lyric next-lyric diff)))

! (defun emms-lyrics-display (lyric)
    "Display LYRIC now.
  See ‘emms-lyrics-display-on-modeline’ and
  ‘emms-lyrics-display-on-minibuffer’ on how to config where to
--- 419,432 ----
        (remove ’emms-lyrics-mode-line-string global-mode-string))
    (force-mode-line-update))

! (defun emms-lyrics-display-handler (lyric next-lyric line diff)
    "DIFF is the timestamp differences between current LYRIC and
  NEXT-LYRIC."
!   (emms-lyrics-display (format emms-lyrics-display-format lyric) line)
    (when emms-lyrics-scroll-p
      (emms-lyrics-scroll lyric next-lyric diff)))

! (defun emms-lyrics-display (lyric line)
    "Display LYRIC now.
  See ‘emms-lyrics-display-on-modeline’ and
  ‘emms-lyrics-display-on-minibuffer’ on how to config where to
***************
*** 421,427 ****
        (force-mode-line-update))
      (when emms-lyrics-display-on-minibuffer
        (unless (minibuffer-window-active-p (selected-window))
!         (message lyric)))))
```

同步显示歌词的补丁 (cont'd)

```
  (defun emms-lyrics-find-lyric (file)
    "Return full path of found lrc FILE, or nil if not found.
--- 443,466 ----
        (force-mode-line-update))
      (when emms-lyrics-display-on-minibuffer
        (unless (minibuffer-window-active-p (selected-window))
!         (message lyric)))
!
!     ;; update lyrics buffer
!     (set-buffer emms-lyrics-lyrics-buffer)
!     (goto-char 1)
!     (forward-line (1- line))          ;goto-line push-mark to many
!     (hl-line-highlight)
! ))
!
! (defun emms-lyrics-toggle-window ()
!   "Show lyrics in a dedicated window"
!   (interactive)
!   (let ((window (get-buffer-window emms-lyrics-lyrics-buffer)))
!     (if window
!         (delete-window window)
!       (pop-to-buffer emms-lyrics-lyrics-buffer)
!       (set-window-dedicated-p
!        (get-buffer-window emms-lyrics-lyrics-buffer) t) )))

  (defun emms-lyrics-find-lyric (file)
    "Return full path of found lrc FILE, or nil if not found.
```

同步显示歌词的补丁 (cont'd)

用了一阵子后又做了点改动:

```
*** /home/lgfang/tmp/emms/lisp/emms-lyrics.el   2011-10-05 17:03:23.000000000 +0800
--- /home/lgfang/.emacs.d/extensions/emms/emms-lyrics.el         2011-10-05
     17:28:36.000000000 +0800
***************
*** 309,315 ****
    (setq emms-lyrics-buffer (get-buffer-create " *EMMS Lyrics*"))
    (set-buffer emms-lyrics-buffer)
    (setq buffer-read-only nil
!         cursor-type nil)
    (erase-buffer)
    (mapc (lambda (time-lyric) (insert (cdr time-lyric) "\n"))
          emms-lyrics-alist)
--- 309,320 ----
    (setq emms-lyrics-buffer (get-buffer-create " *EMMS Lyrics*"))
    (set-buffer emms-lyrics-buffer)
    (setq buffer-read-only nil
!         cursor-type nil
!         mode-line-format '(global-mode-string
!                            (#("--" 0 2
!                               (help-echo "Buffer dedicated to EMMS lyrics"))
!                             global-mode-string)))
!
    (erase-buffer)
    (mapc (lambda (time-lyric) (insert (cdr time-lyric) "\n"))
          emms-lyrics-alist)
***************
*** 465,476 ****
```

同步显示歌词的补丁 (cont'd)

```
        (unless (minibuffer-window-active-p (selected-window))
          (message lyric)))

!     (when emms-lyrics-display-buffer
!       (with-current-buffer emms-lyrics-buffer
!         (when line
!           (goto-char (point-min))
!           (forward-line (1- line))
!           (hl-line-highlight)))))

  (defun emms-lyrics-find-lyric (file)
    "Return full path of found lrc FILE, or nil if not found.
--- 470,484 ----
        (unless (minibuffer-window-active-p (selected-window))
          (message lyric)))

!     (let ((cur-win (selected-window))
!           (lyric-win (get-buffer-window emms-lyrics-buffer)))
!       (when (and line lyric-win)
!         (select-window lyric-win)
!         (goto-char (point-min))
!         (forward-line (1- line))
!         (hl-line-highlight)
!         (recenter 2)
!         (select-window cur-win)))))

  (defun emms-lyrics-find-lyric (file)
    "Return full path of found lrc FILE, or nil if not found.
```