

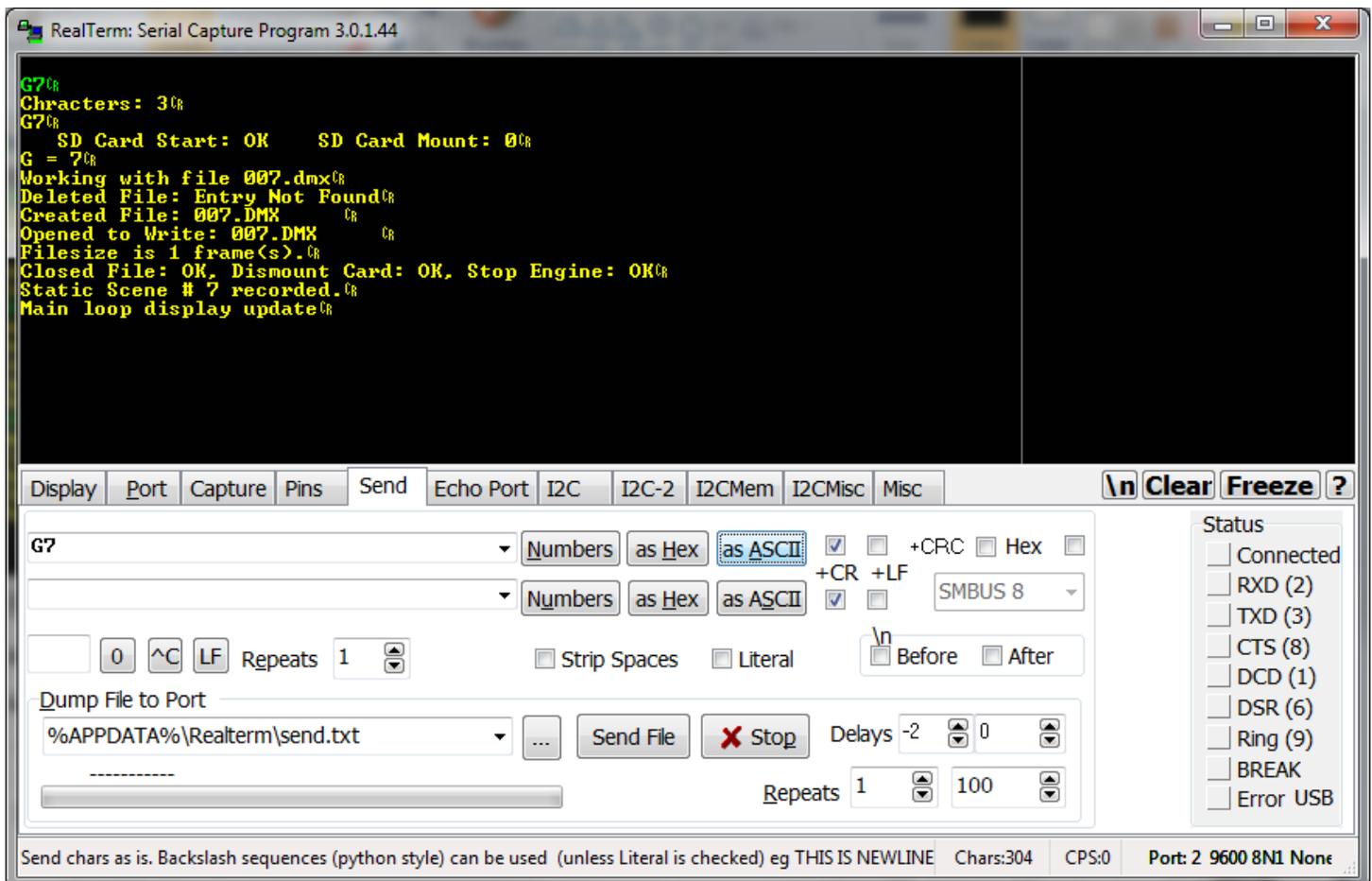
# DMX Record & Playback

The DecaBox can *grab* static (one-shot) DMX scenes or *record* continuous sequences at 44 frames per second.

To grab a scene, send the serial command

```
GN[cr]
G is a capital G and mnemonic for grab
N is a decimal number, range is [1 999][cr] is the carriage return
```

A single frame of DMX is stored on the internal memory card. Here's a screenshot of the process. Again, green commands are generated by the user, and yellow is feedback from the system.



Alternately, dynamic, complicated DMX scenes may be captured at 40 frames per second. The

internal storage can hold ~ 9 hours of data.

```
RN[cr]
```

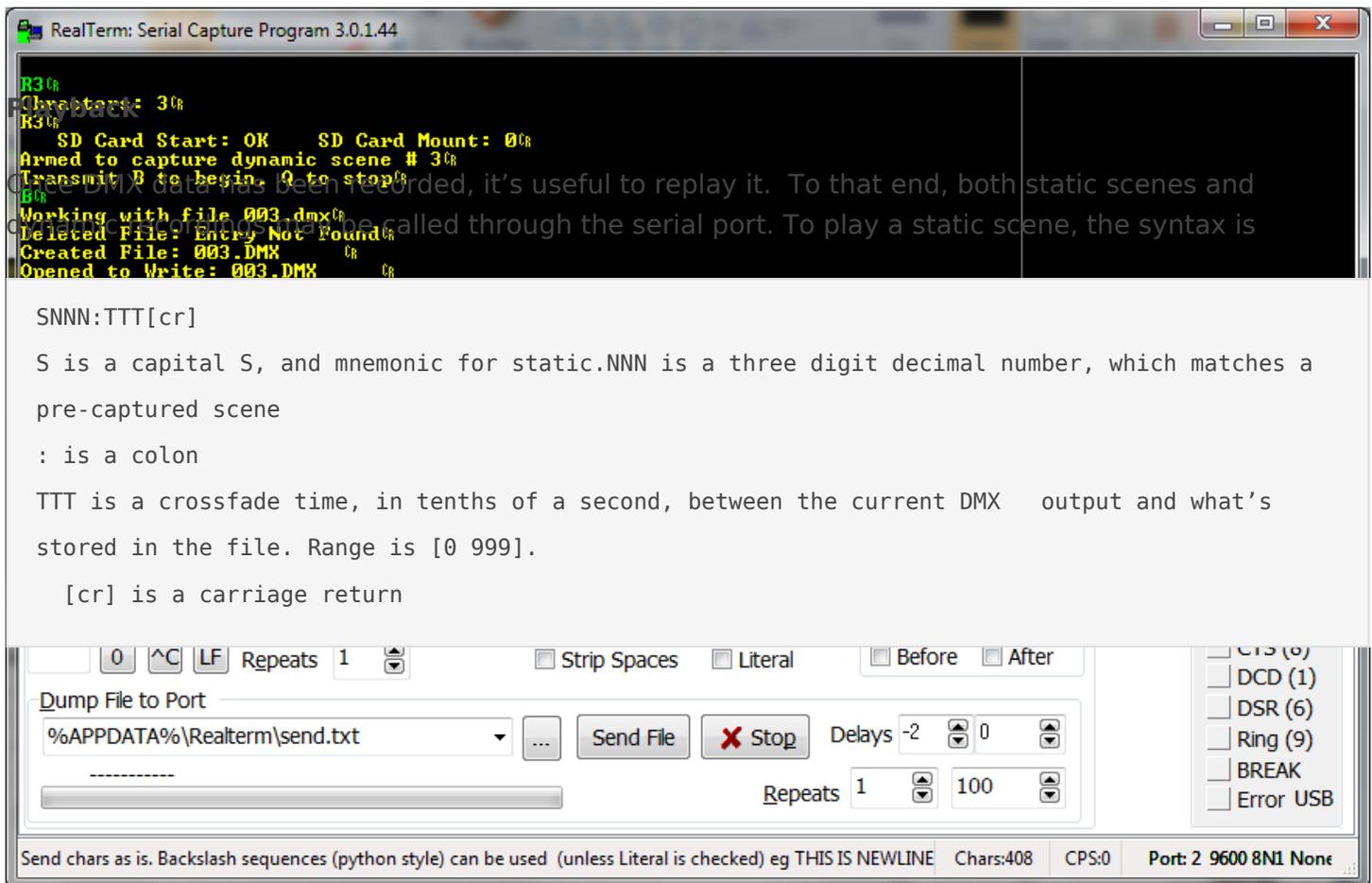
where

R is a capital R and mnemonic for record

N is a decimal number, range is [1 999]

[cr] is a carriage return  
The system creates the file for recording, and then prompts for a 'start' trigger.

B[cr] begins the capture and Q[cr] ends it, as shown below.



The screenshot shows the RealTerm: Serial Capture Program 3.0.1.44 interface. The terminal window displays the following text:

```
R3[cr]
Character: 3[cr]
R3[cr]
SD Card Start: OK SD Card Mount: 0[cr]
Armed to capture dynamic scene # 3[cr]
Transmit 0 to begin, Q to stop[cr]
B[cr]
Working with file 003.dmx[cr]
Deleted File: Entry Not Found[cr]
Created File: 003.DMX[cr]
Opened to Write: 003.DMX[cr]
```

Below the terminal window is a control panel with the following elements:

- Buttons: 0, ^C, LF, Repeats (dropdown set to 1), Strip Spaces, Literal, Before, After.
- Section: Dump File to Port
- File path: %APPDATA%\Realterm\send.txt (with a dropdown arrow and a file selection button)
- Buttons: Send File, Stop (with a red X icon)
- Delays: -2 (up/down arrows), 0 (up/down arrows)
- Repeats: 1 (up/down arrows), 100 (up/down arrows)
- Checkboxes: CTS (6), DCD (1), DSR (6), Ring (9), BREAK, Error USB.
- Status bar: Send chars as is. Backslash sequences (python style) can be used (unless Literal is checked) eg THIS IS NEWLINE Chars:408 CPS:0 Port: 2 9600 8N1 None

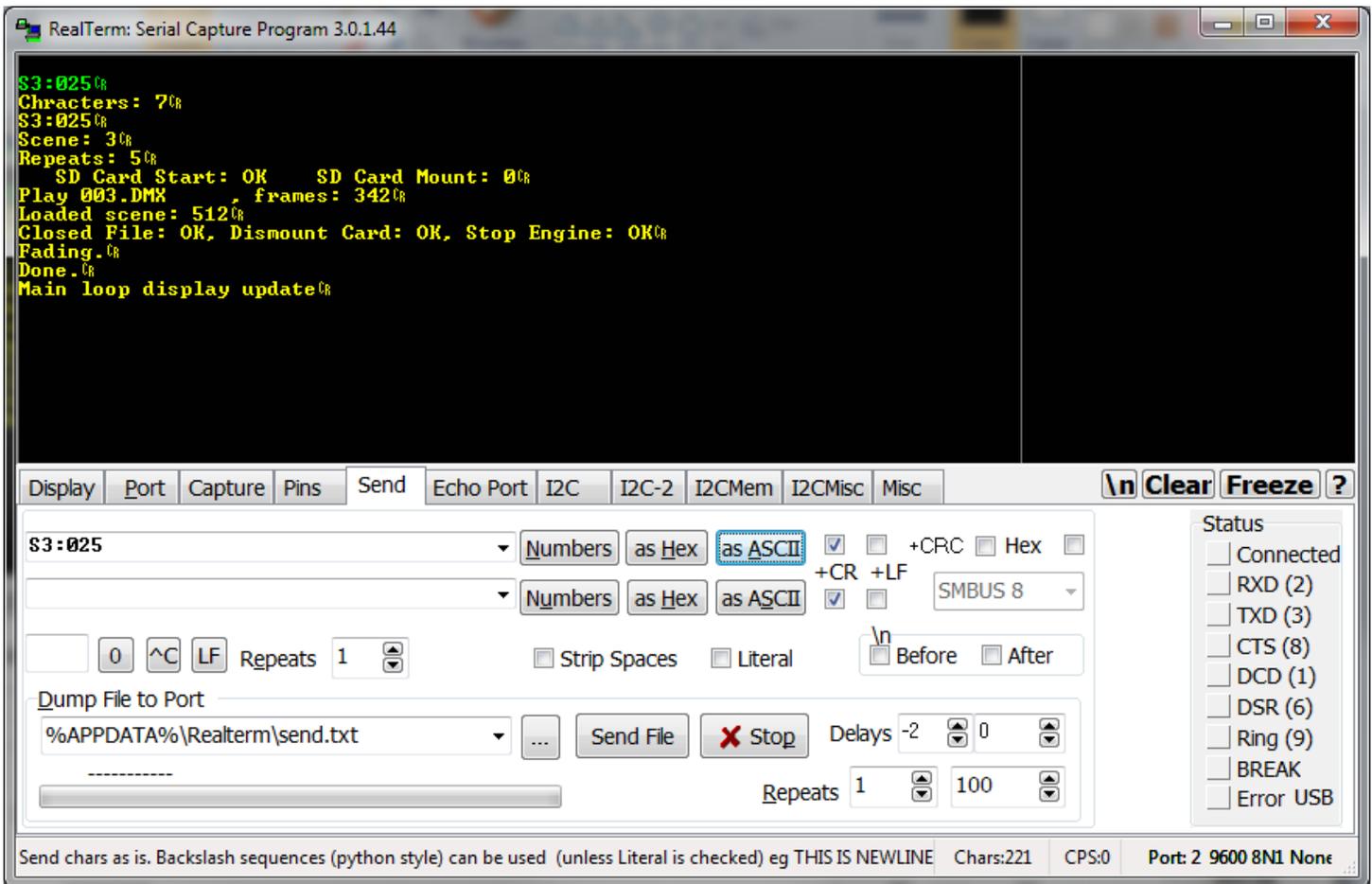
```
SNNN:TTT[cr]
```

S is a capital S, and mnemonic for static. NNN is a three digit decimal number, which matches a pre-captured scene

: is a colon

TTT is a crossfade time, in tenths of a second, between the current DMX output and what's stored in the file. Range is [0 999].

[cr] is a carriage return



To replay a complicated dynamic scene, much like a video clip, the syntax is

```
DNNN:RRR[cr]
```

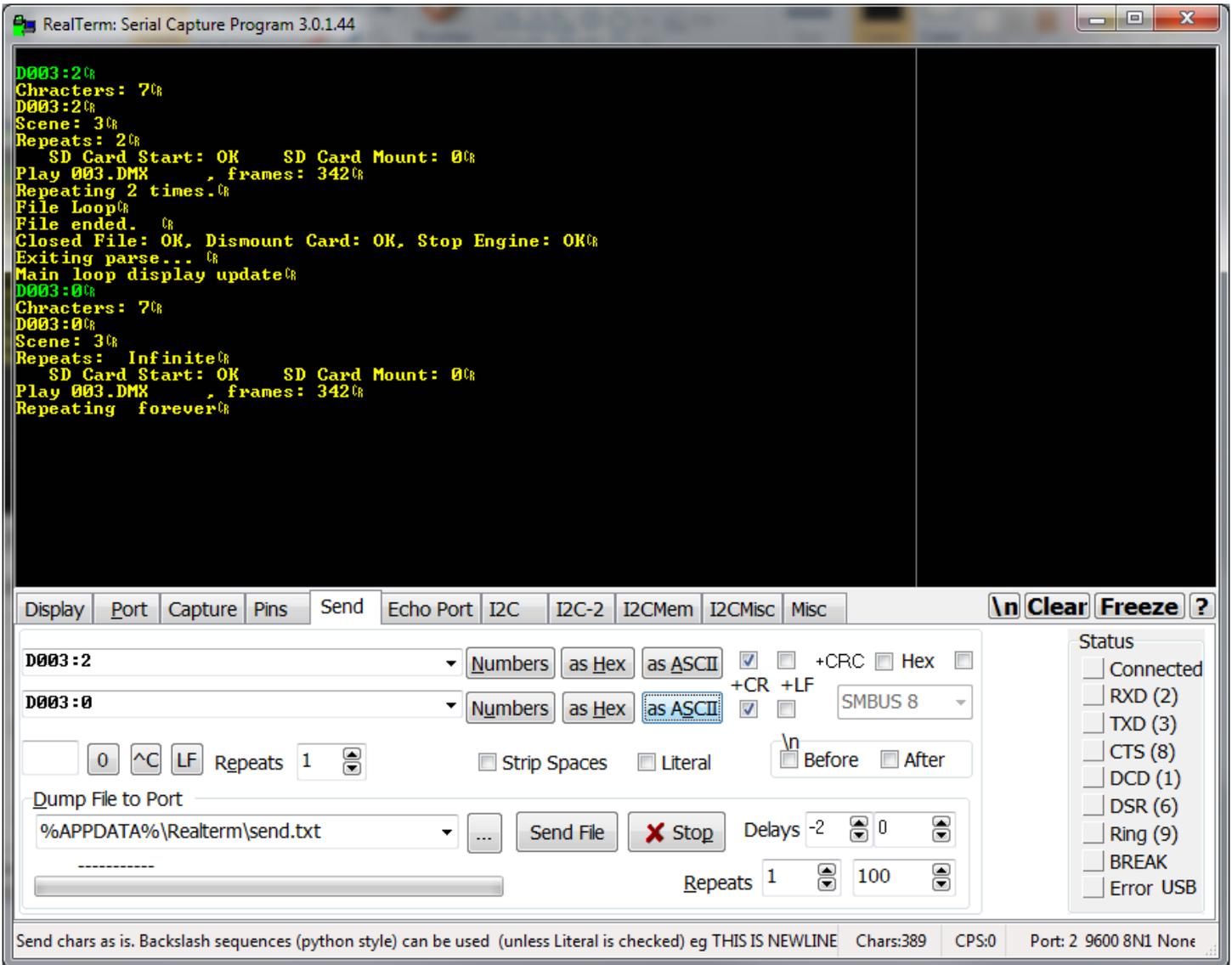
where

D is a capital D and mnemonic for dynamic. NNN is a pre-recorded scene number, three digits, LEADING ZEROS REQUIRED.

: is a colon

RRR is the number of times a file repeats. Use 000 for infinite loop.

[cr] is a carriage return. Decimal 13 or 0x0D



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