

# NCE Mini Panel Cmds Plan 3 – Siding – v2012-f – 7/23/2013

These notes were written Nov 2012, for the **Nov 2012** display at Toy Train Expo.

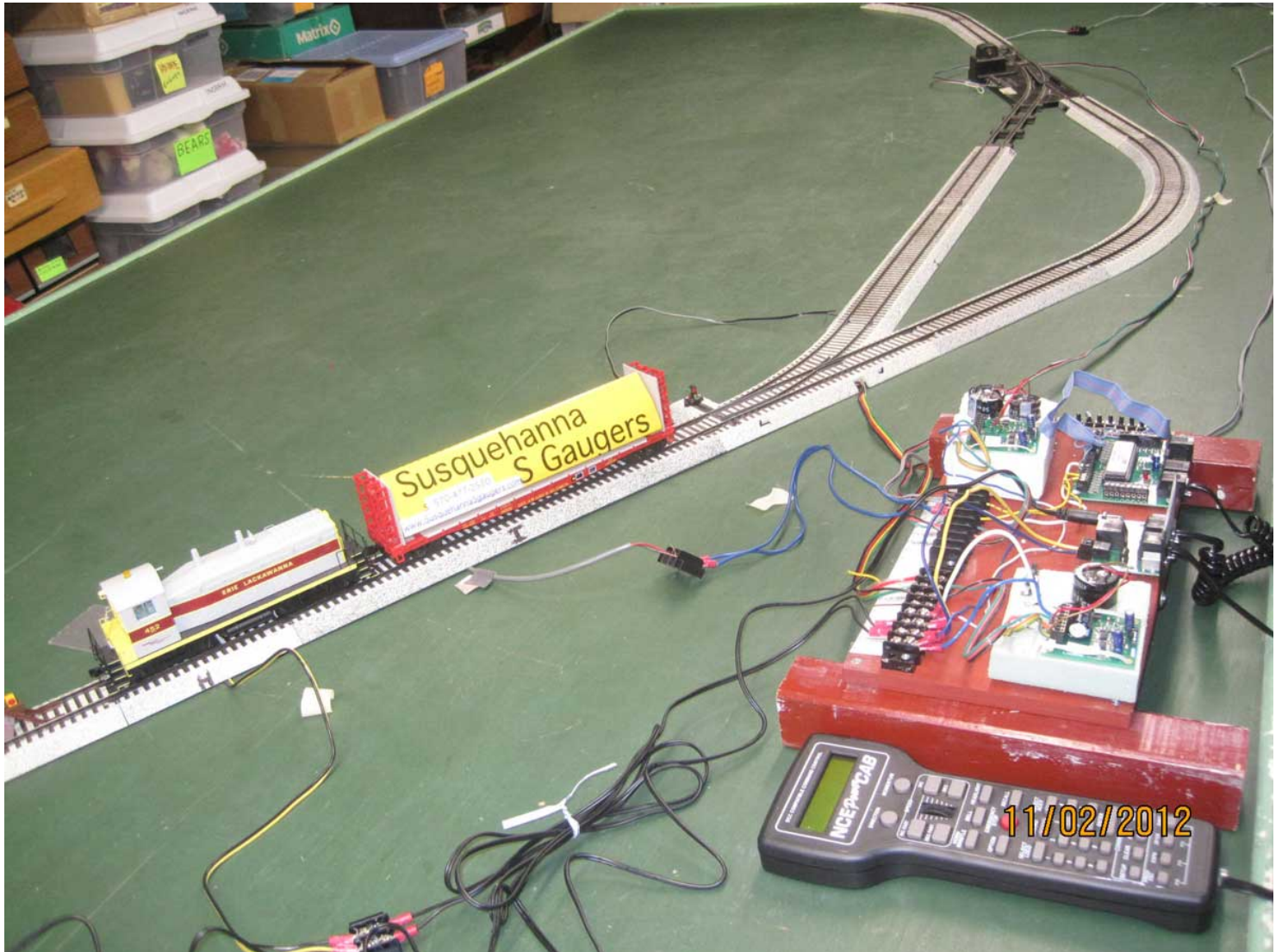
Thee following comments have been modified July 2013 -- for the Video #806 that was edited in July 2013.

## Memory Locations:

The memory locations 1-13 **execute 1 memory block (4 steps) at a time** (unless you use a “link to input xx” command to continue to the next set of 4 steps).

The memory locations 14 thru 31 have been set to “**continuous memory**”, so that commands keep executing from 1 step to the next until they encounter either an “end” command or “link to input xx” command that “loops” back to the beginning of the sequence.

All this stuff is explained **BETTER** in the Instruction Manual, which you can download from the [NceDcc.com](http://NceDcc.com) website.



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## Comments:

Page 3 shows contents of memory locations 1-10. These locations are hooked up to push buttons Inputs 1 thru 10;. Buttons 1 thru 6 start up locomotives, and button 8 stops locomotives, and turns off their sound.

Page 4 shows the commands for **“Sequence 1” used in the VIDEO #806** for ALTERNATING tracks (Steps 14 thru 20)

This “Sequence 1” is sequence used to operate on the display at the Toy Train Expo, and in the video (except Part 3 of the video).

Page 5 shows the commands for “Special Sequence 2” (Steps 21 thru 30). This is a “special” sequence that takes the train “out and back” on Route 2, then “out and back” on Route 1. (I.e. the train returns on the SAME route, rather than throwing the turnouts at Point B. This “Sequence 2” is demonstrated in Part 3 of the video.

## Commands Similar to Previous Video #805:

These commands are similar to the commands from the previous Video #805. The track plan is almost the same, except Video #805 had 1 turnout, and this Video #806 has 2 turnouts.

We created the “Sequence 1” (Steps 14 thru 20) for the two-turnout display.

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We used the same set of commands in location 21 thru 30 (Sequence 2) that we had from last year, except we squeezed in the commands to throw the 2nd turnout.

Said another way, the commands to go down 1 spur (when you have 1 turnout), come back to starting point; throw the turnout, go down the 2nd spur, then come back to starting point --- these commands will work for “Sequence 2” when you have 2 turnouts; all you have to do is add the command to throw the 2nd turnout.

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|                                                                              |  |                                                                                               |
|------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------|
| Cv3=acc=100, Cv4=dec=15 (30)<br>((cont. memory, strt input 14)) (Loc 3 = 14) |  | Btn 1(4), strt. 228<br>Btn 2(5), strt. 452<br>Btn 3(6), strt. 801<br>Btn 8 stop all, 10 Reset |
|------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------|

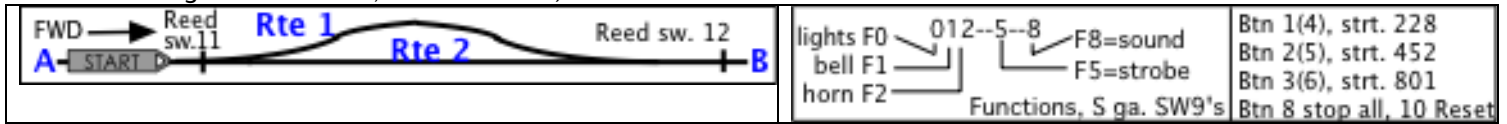
**Summary:** This page 2 of commands is used to START the desired loco, then LINK (“go to”, or “jump”) to the desired group of operating commands.

|    |   | Command                 | Action                                           |
|----|---|-------------------------|--------------------------------------------------|
| 1  | 1 | Select Loco: 228 FEC    | <b>228 strt single</b>                           |
| 1  | 2 | F0-F4: 0----            | F0=headlights on                                 |
| 1  | 3 | F5-F8: 5---             | F5=strobe ON (F8 should be sound, but turns off) |
| 1  | 4 | Link to Input: 14       |                                                  |
| 2  | 1 | Select Loco: 452 EL     | <b>452 strt single</b>                           |
| 2  | 2 | F0-F4: 0----            | F0=headlights on                                 |
| 2  | 3 | F5-F8: 5---             | F5=strobe ON (F8 should be sound, but turns off) |
| 2  | 4 | Link to Input: 14       |                                                  |
| 3  | 1 | ~~> Select Loco: 821 RI | <b>821 strt single</b>                           |
| 3  | 2 | F0-F4: 0----            | F0=headlights on                                 |
| 3  | 3 | F5-F8: 5---             | F5=strobe ON (F8 should be sound, but turns off) |
| 3  | 4 | Link to Input: 14       |                                                  |
| 4  | 1 | Select Loco: 228 FEC    | <b>228 strt BOTH</b>                             |
| 4  | 2 | F0-F4: 0----            | F0=headlights on                                 |
| 4  | 3 | F5-F8: 5---             | F5=strobe ON (F8 should be sound, but turns off) |
| 4  | 4 | Link to Input: 21       |                                                  |
| 5  | 1 | Select Loco: 452 EL     | <b>452 strt BOTH</b>                             |
| 5  | 2 | F0-F4: 0----            | F0=headlights on                                 |
| 5  | 3 | F5-F8: 5---             | F5=strobe ON (F8 should be sound, but turns off) |
| 5  | 4 | Link to Input: 21       |                                                  |
| 6  | 1 | ~~> Select Loco: 821 RI | <b>821 strt BOTH</b>                             |
| 6  | 2 | F0-F4: 0----            | F0=headlights on                                 |
| 6  | 3 | F5-F8: 5---             | F5=strobe ON (F8 should be sound, but turns off) |
| 6  | 4 | Link to Input: 21       |                                                  |
| 7  | 1 | ~~> Select Loco: 821 RI | <b>(btn #6 is bad??)</b>                         |
| 7  | 2 | F0-F4: 0----            |                                                  |
| 7  | 3 | F5-F8: 5---             | F5=strobe ON (F8 should be sound, but turns off) |
| 7  | 4 | Link to Input: 21       |                                                  |
|    |   |                         | <b>Stop All Locos</b>                            |
| 8  | 1 | Select Loco: 228 FEC    |                                                  |
| 8  | 2 | Speed Fwd: 0            | STOP                                             |
| 8  | 3 | F5-F8: ---8             | Sound OFF F8 =sound; toggles)                    |
| 8  | 4 | Link to Input: 9        |                                                  |
| -  | - |                         |                                                  |
| 9  | 1 | Select Loco: 452 EL     |                                                  |
| 9  | 2 | Speed Fwd: 0            | STOP                                             |
| 9  | 3 | F5-F8: ---8             | Sound OFF F8 =sound; toggles)                    |
| 9  | 4 | Link to Input: 10       |                                                  |
|    |   |                         |                                                  |
| 10 | 1 | ~~> Select Loco: 821 RI | <b>((Note: btn 10 = Reset, but cmds work))</b>   |
| 10 | 2 | Speed Fwd: 0            | STOP                                             |
| 10 | 3 | F5-F8: ---8             | Sound OFF F8 =sound; toggles) (F5=strobe)        |
| 10 | 4 | nop                     |                                                  |

## Summary

# NCE Mini Panel Cmds Plan 3 – Siding – v2012-f – 7/23/2013

Part 1 – Siding Commands 1; fwd on Rte 2, then rev on Rte 1



**Summary:** This “Sequence 1” (Steps 14 thru 20) takes the train forward (“outbound”) on the “straight path” labeled “Route 2”, then brings it back in reverse (“inbound”) on the “curved path” labeled “Route 1”.

This is the sequence used to operate on the display at the Toy Train Expo.

|      | <b>Command</b>     | <b>Action</b>                            |
|------|--------------------|------------------------------------------|
| 14 1 | Accy: 9 Norm       | left end (Pt A) turnout <b>STRAIGHT</b>  |
| 14 2 | Accy: 8 Norm       | right end (Pt B) turnout <b>STRAIGHT</b> |
| 14 3 | nop                |                                          |
| 14 4 | nop                |                                          |
| - -  |                    |                                          |
| 15 1 | Speed Fwd: 6       | <b>1. Forward -- → Pt. A to Pt. B</b>    |
| 15 2 | Delay 4 sec: 2     | delay 8 second (silence)                 |
| 15 3 | F0-F4: 0-2--       | (F0 headlights on) F4 horn ON            |
| 15 4 | Delay 4 sec: 001   | delay 4 second (blow HORN 4 sec)         |
| - -  |                    |                                          |
| 16 1 | F0-F4: 0----       | (F0 headlights on) F4 horn OFF           |
| 16 2 | Wait Inp: 12 Close | wait to cross reed Sw. #12 on Right end  |
| 16 3 | Speed Fwd: 0       | STOP speed 00                            |
| 16 4 | F0-F4: 01---       | (F0 headlights on) F1 bell ON            |
| - -  |                    |                                          |
| 17 1 | Accy: 9 Rev        | left end (Pt A) turnout <b>CURVED</b>    |
| 17 2 | Accy: 8 Ref        | right end (Pt B) turnout <b>CURVED</b>   |
| 17 3 | Delay 4 sec: 001   | delay 4 second to ring bell              |
| 17 4 | F0-F4: 0----       | (F0 headlights on) F1 bell OFF           |
| - -  |                    |                                          |
| 18 1 | Delay 4 sec: 001   | delay at R end (Pnt B) for <u>4</u> sec  |
| 18 2 | Speed Rev: 6       | <b>2. ←--Reverse - Pt. B to Pt. A</b>    |
| 18 3 | Wait Inp: 11 Close | wait to cross reed Sw. #11 on Left end   |
| 18 4 | F0-F4: 01---       | (F0 headlights on) F1 bell ON            |
| - -  |                    |                                          |
| 19 1 | Speed Fwd: 0       | STOP speed 00                            |
| 19 2 | Delay 4 sec: 001   | delay 4 second to ring bell              |
| 19 3 | F0-F4: 0----       | (F0 headlights on) F1 bell OFF           |
| 19 4 | Delay 4 sec: 001   | delay at L end (Pnt A) for <u>4</u> sec  |
| - -  |                    |                                          |
| 20 1 | Link to Input: 14  | Go back and repeat sequence              |
| 20 2 | nop                |                                          |
| 20 3 | nop                |                                          |
| 20 4 | nop                |                                          |

## Summary

**Str. Rte**

**Forward →**

Horn ON  
(horn blow)

(horn off)

**Sensor →**

Bell ON

**Cur. Rte**

(bell ring)

(bell off)

**←--Reverse**

**← Sensor**

Bell ON

(bell ring)

(bell off)

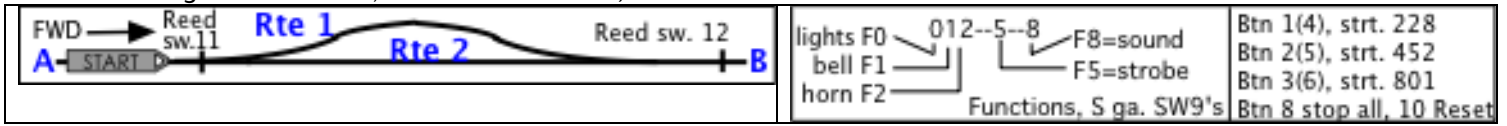
Repeat the sequence

## NOTES:

1. Loco MUST sitting at left end (Pt A) when started
2. To stop, push 10 (reset) then 8 (stop). Manually back loco to left end (Pt A) before restarting.

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Part 2 - Siding Commands 2; fwd & rev on Rte 2, then fwd & rev on Rte 1



This "Sequence 2" (Steps 21 thru 30) go "out and back" on Rte 2, then "out and back" on Rte 1; see Pg 1 for comments

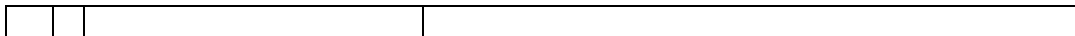
|    |   | Pt. 2 - Two Spurs  | Summary                                                 |
|----|---|--------------------|---------------------------------------------------------|
| 21 | 1 | nop                |                                                         |
| 21 | 3 | (Accy: 8 Norm)     | add for 2 <sup>nd</sup> turnout at far end              |
| 21 | 4 | Accy: 9 Norm       | turnout str <b style="color: magenta;">Straight Rte</b> |
| -  | - |                    | (would like a TOGGLE TURNOUT command here)              |
| 22 | 1 | Speed Fwd: 6       | <b>1. Forward - - → Pt. A to Pt. B</b>                  |
| 22 | 2 | Delay 4 sec: 2     | delay 8 second (silence)                                |
| 22 | 3 | F0-F4: 0-2--       | headlights on, horn ON                                  |
| 22 | 4 | Delay 4 sec: 001   | delay 4 second (blow HORN 4 sec)                        |
| -  | - |                    |                                                         |
| 23 | 1 | F0-F4: 0----       | headlights on, horn OFF (F0 lights, F2 horn)            |
| 23 | 2 | Wait Inp: 12 Close | wait to cross reed Sw. #12 on Right end                 |
| 23 | 3 | F0-F4: 01---       | F0 headlights on, F1 bell ON                            |
| 23 | 4 | Speed Fwd: 0       | STOP speed 00                                           |
| -  | - |                    |                                                         |
| 24 | 1 | Delay 4 sec: 2     | delay 8 second to ring bell                             |
| 24 | 2 | F0-F4: 0----       | F0 headlights on, F1 bell OFF                           |
| 24 | 3 | Delay 4 sec: 001   | delay at R end for <u>4</u> sec                         |
| 24 | 4 | Speed Rev: 6       | <b>2. ←--Reverse - Pt. B to Pt. A</b>                   |
| -  | - |                    |                                                         |
| 25 | 1 | Wait Inp: 11 Close | wait to cross reed Sw. #11 on Left end                  |
| 25 | 2 | F0-F4: 01---       | F0 headlights on, F1 bell ON                            |
| 25 | 3 | Speed Fwd: 0       | STOP speed 00                                           |
| 25 | 4 | Delay 4 sec: 2     | delay 8 second to ring bell                             |
| -  | - |                    |                                                         |
| 26 | 1 | F0-F4: 0----       | F0 headlights on, F1 bell OFF                           |
| 26 | 2 | Delay 4 sec: 001   | delay at L end for <u>4</u> sec                         |
| 26 | 3 | nop                |                                                         |
| 26 | 4 | (Accy: 8 Rev)      | add for 2 <sup>nd</sup> turnout at far end              |
| -  | - |                    | <b style="color: magenta;">===Curved Spur</b>           |
| 27 | 1 | Accy: 9 REV        | Set turnout CURVED                                      |
| 27 | 2 | Speed Fwd: 6       | <b>3. Forward - - → Pt. A to Pt. B</b>                  |
| 27 | 3 | Wait Inp: 12 Close | wait to cross reed Sw. #12 on Right end                 |
| 27 | 4 | F0-F4: 01---       | F0 headlights on, F1 bell ON                            |
| -  | - |                    |                                                         |
| 28 | 1 | Speed Fwd: 0       | STOP speed 00                                           |
| 28 | 2 | Delay 4 sec: 2     | delay 8 second to ring bell                             |
| 28 | 3 | F0-F4: 0----       | F0 headlights on, F1 bell OFF                           |
| 28 | 4 | Delay 4 sec: 001   | delay at R end for <u>4</u> sec                         |
| -  | - |                    |                                                         |
| 29 | 1 | Speed Rev: 6       | <b>4. ←--Reverse - Pt. B to Pt. A</b>                   |
| 29 | 2 | Wait Inp: 11 Close | wait to cross reed Sw. #11 on Left end                  |
| 29 | 3 | F0-F4: 01---       | F0 headlights on, F1 bell ON                            |
| 29 | 4 | Speed Fwd: 0       | STOP speed 00                                           |
| -  | - |                    |                                                         |
| 30 | 1 | Delay 4 sec: 2     | delay 8 second to ring bell                             |
| 30 | 2 | F0-F4: 0----       | F0 headlights on, F1 bell OFF                           |
| 30 | 3 | Delay 4 sec: 001   | delay at L end for <u>4</u> sec                         |
| 30 | 4 | Link to Input: 21  | Go back and repeat sequence                             |

# NCE Mini Panel Cmds Plan 3 - Siding - v2012-f — 7/23/2013

---  
CV3=accel  
CV4=deaccel.

+-- turnout wires (yellow wire is light, don't connect it)

|  
G Y R B  
o o o o



## Notes 1

Summary: This "sequence" is being written to control an S-gauge, Sountraxx-equipped diesel in forward and reverse directions on a point-to-point layout.

Technical assistance courtesy of FRED CUPP

Note Eng. #452: F5-F8: -5—turns strobe & sound on; F5-F8: ---8 turns strobe & sound off



Forward