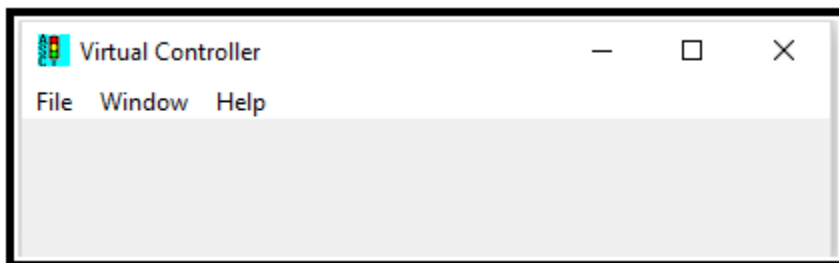# Virtual Controller

The Virtual Controller is a tool that is used to simulate and test databases.
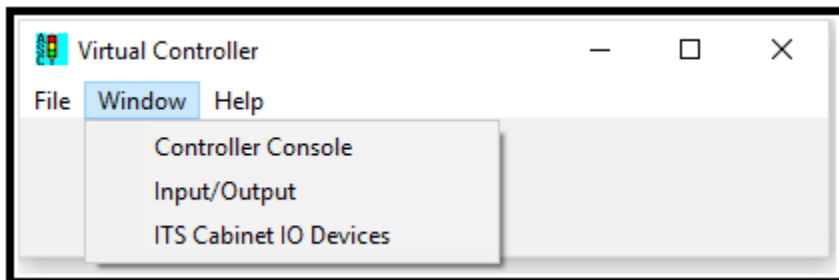
The agency needs to get a license from Trafficware. Once Licensed, The sections below will explain how to put in a STD 8 phase database and get the IO working for testing.

General Initialization

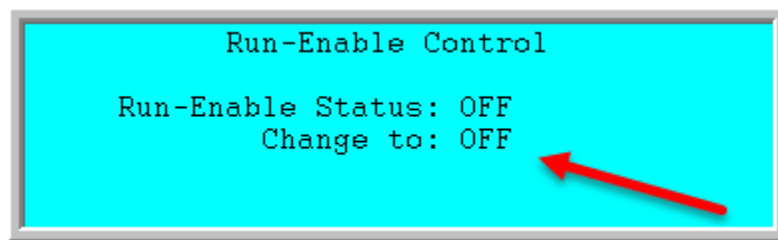When you run the VC you will see the following:

Select the window menu and open both the Control Console as well as Input/Output windows
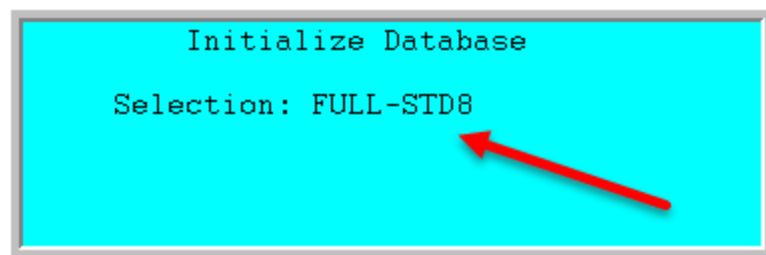
Virtual Console 1: Port 5011: DB "database1.dat" ☐ ✕

```
                    Main Menu
1.Controller  4.Scheduler  7.Status
2.Coordinate  5.Detectors  8.Login,Utils
3.Preempts    6.Comm
```

Keypad

1	2	3	A		ESC	UP	NXT
4	5	6	B		LT	*	RT
7	8	9	C		+	DN	-
0	F	E	D		YES	NO	ENT

Virtual Console

1 ▲▼

☐ SyslogOut

Snapshot

Execution

Execution Rate (% of real-time)

0 %   [+] [-]

● Record   ⏸ Pause   ▶ Step

☐ FullSpeed
☐ SimTraffic
☐ Unsync
☑ Continuous IO

Input / Output ☐ ✕

1 2 3 4 5 6 7 8   9 10 11 12 13 14 15 16   17 18 19 20 21 22 23 24   25 26 27 28 29 30 31 32

DET   ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐   ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐   ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐   ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
PED   ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐   ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐   ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐   ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
PREEMPT ☐ ☐ ☐ ☐   ☐ ☐ ☐ ☐
LOW-PRI ☐ ☐ ☐ ☐

Advanced Detection

USE ADV CALL ☐

CALL ON RED ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐   ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐   ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐   ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

CALL ON GRN 0 0 0 0 0 0 0 0   0 0 0 0 0 0 0 0   0 0 0 0 0 0 0 0   0 0 0 0 0 0 0 0

Initialize the VC as shown below:

MM->1->7: Turn off the run Timer

```
          Run-Enable Control

     Run-Enable Status: OFF
            Change to: OFF
```

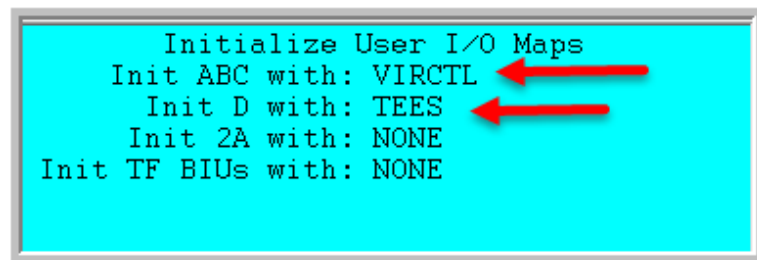MM->8->4->1: Initialize as Full STD8

```
         Initialize Database

     Selection: FULL-STD8
```
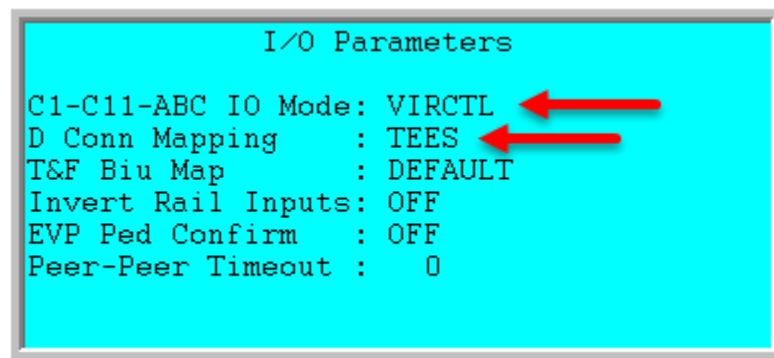
V76 I/O

To get the IO working for V76 select the following menus

MM-1-9-4-3: This will initialize the IO data in the controller

```
        Initialize User I/O Maps
      Init ABC with: VIRCTL  ⟵
        Init D with: TEES   ⟵
       Init 2A with: NONE
  Init TF BIUs with: NONE
```
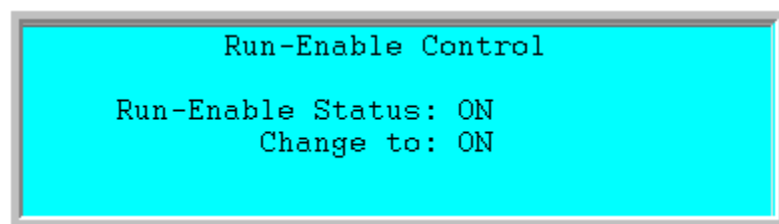
The default of *Init ABC with*: is VIRCTL so please toggle thru the list until VIRCTL Is selected again.

MM-1-9-1: This will select the IO when the controller is started.

```
              I/O Parameters

C1-C11-ABC IO Mode: VIRCTL  ⟵
D Conn Mapping    : TEES   ⟵
T&F Biu Map       : DEFAULT
Invert Rail Inputs: OFF
EVP Ped Confirm   : OFF
Peer-Peer Timeout :   0
```

The default of *C1-C-11-ABC IO Mode*: is VIRCTL so please toggle thru the list until VIRCTL Is selected again.

MM-1-7: Turn on the Run timer

```
           Run-Enable Control

      Run-Enable Status: ON
              Change to: ON
```
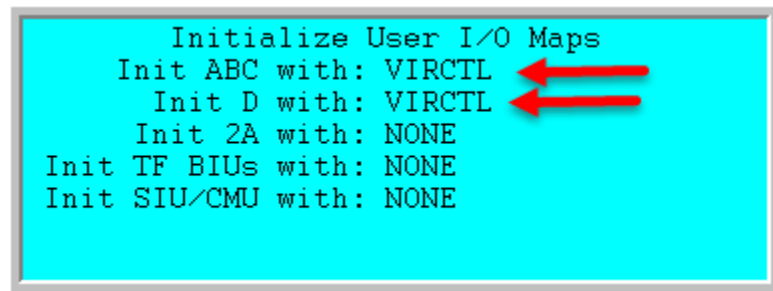
V80/V85 Scout I/O
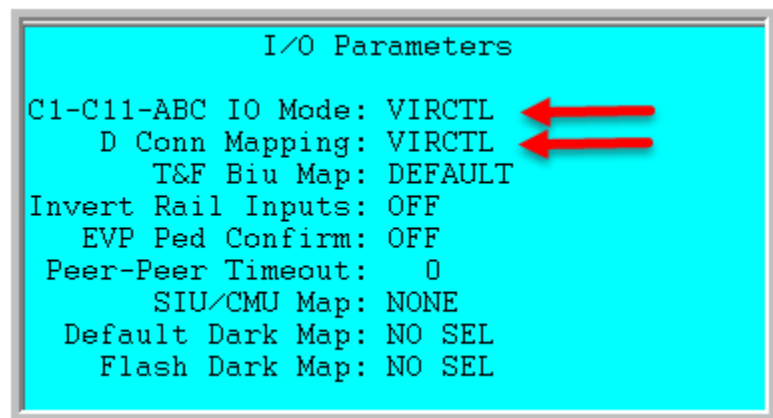
To get the IO working for V80/V85 Scout select the following menus

MM-1-9-4-3: This will initialize the IO data in the controller

```
          Initialize User I/O Maps
       Init ABC with: VIRCTL  ⬅
         Init D with: VIRCTL  ⬅
        Init 2A with: NONE
    Init TF BIUs with: NONE
    Init SIU/CMU with: NONE
```
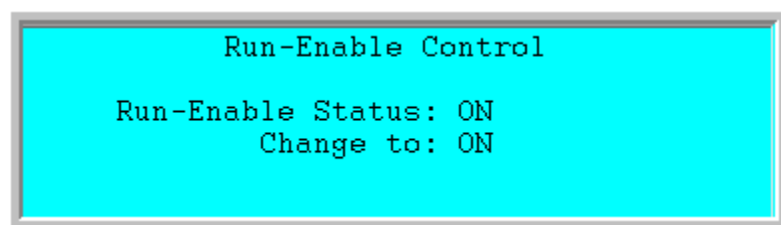
The default of *Init ABC with*: is VIRCTL so please toggle thru the list until VIRCTL Is selected again.

MM-1-9-1: This will select the IO when the controller is started.

```
              I/O Parameters

C1-C11-ABC IO Mode: VIRCTL  ⬅
     D Conn Mapping: VIRCTL  ⬅
        T&F Biu Map: DEFAULT
  Invert Rail Inputs: OFF
     EVP Ped Confirm: OFF
  Peer-Peer Timeout:    0
        SIU/CMU Map: NONE
   Default Dark Map: NO SEL
     Flash Dark Map: NO SEL
```

The default of *C1-C-11-ABC IO Mode*: is VIRCTL so please toggle thru the list until VIRCTL Is selected again.

MM-1-7: Turn on the Run timer

```
          Run-Enable Control

      Run-Enable Status: ON
              Change to: ON
```

MM-1-3-7: set Up ITS devices as shown below:

```
 ITS Device: SIU Swpk/Inpt  CMU  FIO
      Dev                1111  111  2
      Addr  : 134567  90123  567  0
DevActive  : ......  .....  ...  X
SIUCritical: XXXXXX  XXXXX  XXX
FIO Type   : 2070-8
CMU Type   : 212 (ITS)
CMU FS Amp : 10.0 A
Local Conflict Check: OFF
```

MM-1-7: Turn on the Run timer

```
            Run-Enable Control

      Run-Enable Status: ON
            Change to: ON
```