TechNote 1013 - Backing up and Restoring User databases to the ATC

The purpose of this TechNote is to assist the user in backing up and restoring the V76 or V80 database that a user has programmed in a Naztec ATC Controller or on a 2070-1C CPU Module.

The user can backup/restore the user database to the controllers Flash Memory or to a USB 2.0 device as shown above.

When a user programs the ATC with intersection control data, it is stored on the high speed Ram drvie.
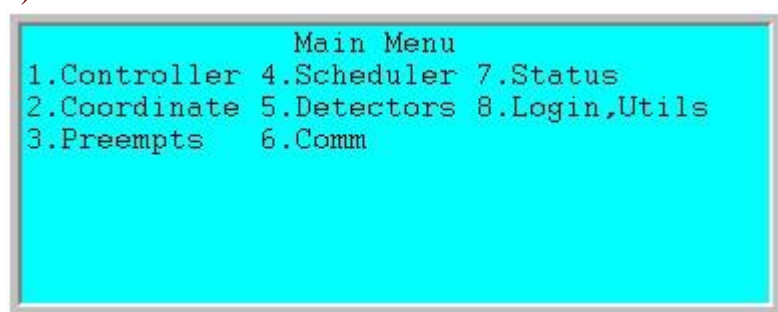
This drive has a built-in capacitor back-up that will hold stored data for up to two weeks before clearing.

It is therefore important that the user backs up their intersection control data to the internal flash memory or to a USB drive.

Accessing the Disk Utilities menu

1) The disk utilities menu is accessed via MM->8->3 as shown below

```
            Login and Utilities
    1.Login       4.Init DBase 7.Clear Fault
    2.SetAccess 5.ImageUtils 8.Reserved
    3.Disk Util 6.Register    9. Remove Softwr
```

```
            Disk Utilities
  #.Backup Database   4.Backup to USB
  2.Restore Database 5.Restore from USB
  3.Erase Ram Drive   6.Test USB Drive
```

NOTE: All disk utilities require that the user turn off the run timer. <mark>The only exception is Backup to USB on V80.x</mark>

2) Go To MM->1->7 and Turn off the Run Timer.

```
            Controller
  1.Phases      4.Flash      7.Enable Run
  2.Unit,Ring   5.Overlaps   8.Channel,I/O
  3.SDLC        6.Alarms
```

```
         Run-Enable Control

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

USB Considerations

ONLY USB 2.0 Devices can be used.

Users are cautioned to wait a few seconds after mounting the USB device to give it time to mount in the ATC.

In addition the user **MUST** set up a directory named <mark>naztec</mark> (lowercase) on the USB root directory. Under the naztec directory the user must also create a directory called <mark>databases</mark> (lowercase).

NOTE: USB devices vary by manufacturer. Some valid USB drives tested by Trafficware include Kingston DT101 G2 8GB USB and Toshiba U2M 8GB USB and LEXAR 8GB and 16GB.

Flash Utilities

1) Choose Utility # 1: Backup Database to copy your programmed database to the internal **Flash** memory on the ATC.

The following message appears:

```
          Backup Database to Flash
WARNING: The current backup will
          be overwritten
          ENTER-Continue ESC-Return
```

Hit Enter and you should see the following screen after the backup:

```
          Backup Database to Flash
     Database Successfully Backed Up
               ESC-Return
```

2) Choose Utility # 2: Restore Database to copy your stored database on the internal **Flash** memory on the ATC to the high-speed Ram drive on the ATC.

The following Message appears:

```
          Restore Database to Flash
 WARNING: The database will
          be overwritten
          ENTER-Continue ESC-Return
```

Hit Enter and you should see the following screen after the database was restored:

```
          Restore Database to Flash
     Database Successfully Restored
               ESC-Return
```
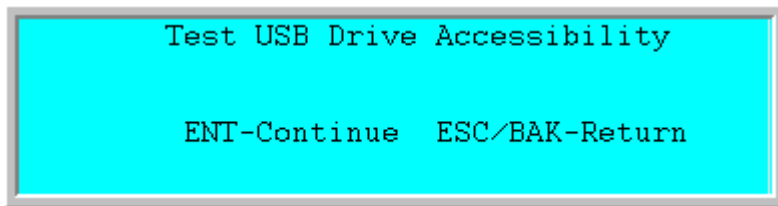
USB Utilities

```
          Disk Utilities
#.Backup Database   4.Backup to USB
2.Restore Database  5.Restore from USB
3.Erase Ram Drive   6.Test USB Drive
```

Each database is stored on the USB root directory. The user MUST create or view the folder named **naztec/databases.** Each database stored will be named **dbasexxxx.dat** where **xxxx** is the unique station id of the ATC controller using V76 or **dbasexxxxx.dat** where x**xxxx** is the unique station id of the ATC controller using V80.

1) Once you create the naztec/databases folder, you can test the USB drive for compatibility via Utility #6. First turn off the Run Timer via MM->1->7. After choosing menu Item 6 the following screen appears.
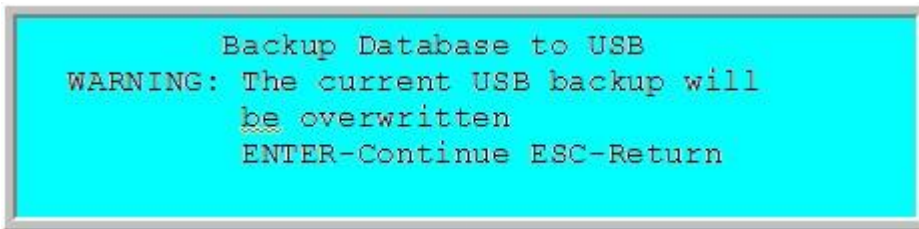
```
        Test USB Drive Accessibility


      ENT-Continue   ESC/BAK-Return
```

The utility will report if the USB is compatible or not.

2) Choose Utility # 5: Backup Database to copy your programmed database to an **USB** memory device.
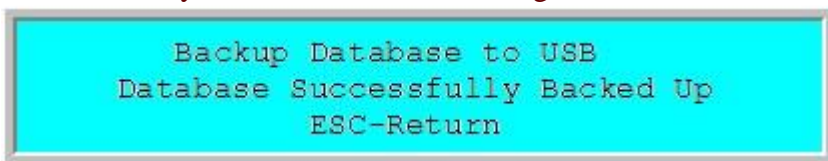
The following message appears:

```
           Backup Database to USB
     WARNING: The current USB backup will
             be overwritten
             ENTER-Continue ESC-Return
```

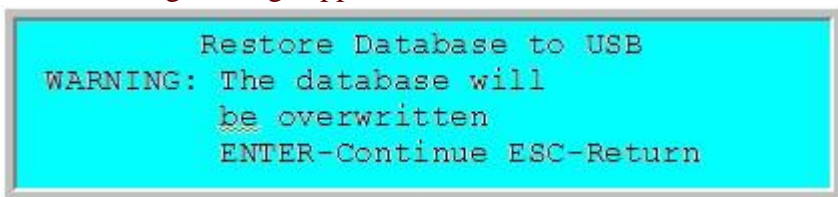**NOTE: Insert your USB Drive after seeing this message.**

Hit Enter and you should see the following screen after the backup:

```
         Backup Database to USB
      Database Successfully Backed Up
               ESC-Return
```

3) Choose Utility # 6 Restore Database to copy your stored database on the **USB** memory device to the high-speed Ram drive on the ATC.

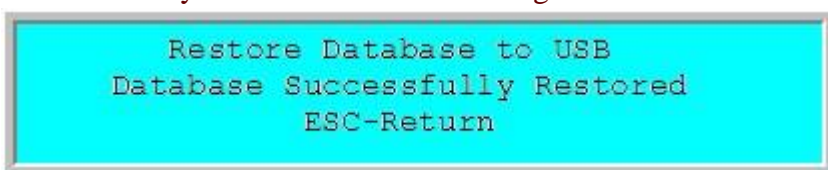The following message appears:

```
          Restore Database to USB
     WARNING: The database will
             be overwritten
             ENTER-Continue ESC-Return
```

NOTE: Insert your USB Drive after seeing this message.

Hit Enter and you should see the following screen after the database was restored:

```
         Restore Database to USB
      Database Successfully Restored
               ESC-Return
```

Summary

By following the steps above, you can backup and restore your intersection control database using the ATC's internal Flash drive or an external USB Drive.