

Using the 3M Dynatel Cable/Pipe/Fault Locator With the Ashtech MobileMapper 100 & MobileMapper Field Software

Note: Ashtech would like to thank Mark Silver, from Igage Mapping Corporation, UT, USA, for his valuable contribution to the publication of this Application Note.

Igage Mapping Corporation is knowledgeable about the Dynatel to “MobileMapper Field” software connectivity. The company also manufactures a nice bracket that slides onto the locator and leaves the MobileMapper 100 presented to the sky properly while allowing unobstructed operation of the internal camera when documenting ground features.



1. Make sure you have configured your Bluetooth adapter to 4800 baud. A Roving BluePort-XP is used. The Bluetooth Pass Code is “1234” on this device.

Detailed instructions on how to configure the adapter can be found in a video for the MobileMapper 6; see chapter 11 “Configuring Bluetooth” in this video:

http://www.igage.com/mp/Video_mm6Training/MM6%20Training%20Video.html

You should watch this video, even though the video is targeted at the MobileMapper 6 as the configuration is nearly identical prior to attempting to setup your MobileMapper 100.

2. Configure your 3M locator:
 - Press **Menu**
 - Press **COM Setup**
 - Select **PDA**, Log Prompt **Yes** (Do NOT select GIS)
 - Press the **OK** button. Do NOT click **Exit**.
3. On your MobileMapper 100:
 - Click on the **Connectivity** icon (see arrow on A)
 - Click on **Wireless Manager** (B)
 - Turn on Bluetooth if it is not already on by clicking on the Big Blue Bar (see arrow on C)
 - Turn OFF, then ON the Bluetooth adapter so it will enable discovery.
 - Select **Menu**, then ‘Bluetooth Settings, then click on **Add new device....** (D). Wait until the Bluetooth Adapter is shown.
 - Highlight the **BluePortXP** device and then press **Next** (E).
 - Enter “1234” and press **Next** (F)
 - Click on the **BluePortXP** device (G)
 - Check the **Serial Port** box and click on **Save** (H)

- Now click on the **COM Ports** tab at the bottom (I)
- Click on **New Outgoing Port** (J)
- Highlight **BluePort...** and click on **Next** (K)



- Choose **COM7** and check **Secure Connection** (L)
 - Finally press **Finish**; then click on **OK** in the upper-right corner; then click on the **X** to close the Wireless Manager.
4. Configure MobileMapper Field:
- Start MobileMapper Field and allow the receiver to collect data from SV's. Make a new job.
(You can setup your own layers, but the first time you store a point on the Dynatel, MobileMapper Field is going to make a new layer called "Marker").
 - Click on **Menu**, then **Options**, then click on the **External Devices** tab at the bottom (M)
 - Click on the **Connect...** button, then select (N):
Device Type = "3M Dynatel Locator"
Port = "COM7"
Baud Rate = "4800":
 - Click on **OK** in the upper-right corner, then **OK** (again) to exit the options and return to the map display screen.
5. Now, locate a marker (this works slightly differently for a trace too).
6. On the Dynatel: click on 'Read', after read completes, click on 'OK Locate'.
7. The Dynatel will say 'Press OK to log or Exit'; press 'OK' and the Dynatel will send a command to the MobileMapper 100 instructing it to store the marker information (O)
There is a 10 second average (this is set on the settings tab of 'Log'.) At the end of the averaging time, a point will be stored at your current location (P)
You can click on the new point to view its properties (Q).

The procedure was tested with MobileMapper Field V1.09 and V1.21 (The System Information was as shown on R).

