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

🗊 Pho

👸 Mol

🛃 Wir

🖌 Seti

Bluetoo

🗧 Sett

Select a Next.

😵 Blue

Passcode

123 1 2 Tab q v CAP a

Shift z Ctl áü

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) ٠
- Click on New Outgoing Port (J)
- Highlight BluePort... and click on Next (K)

Start 🔅 🌾 📜	Connected
🕒 Tuesday 😽 4:38 PM	Add new device
January 18, 2011	BluePortXP-CB2E
WI-FI: IGAGE	3 9
MobileMapper Field	
Connectivity	Devices Mode COM Ports
Wireless Manager	Connect
IGAGE (Wi-Fi)	
Settings	😹 Settings 🛛 👷 🏹 € 💷
- Sectings	Partnership Settings
	Display Name: BlueDortVD-CB2E
竇 Wireless Manager 築≯ Y <sub>X</sub> € (Ⅲ X	Select convices to use from this device
	Serial Port
All Ø	
Wi-Fi 🔋	
IGAGE	
	II <b>H</b> II
Bluetooth	
001/0	
	Refresh
Settings 🔍 🖓 🚅 💷 🕅	Cancel Save
	Currer and Surry
Tap Add peut device to centrch for other	Add new device
Bluetooth devices. Tap on a device to modify	Disconnected
its settings.	S BluePortXP-CB2F
Connected	
Add new device	
D	
	Devices Mode COM Ports
Settings 👷 🏹 🌾 💷	Devices Mode COM Ports
Settings ♀♀☆ ≪ @ Select a Bluetooth Device	Devices Mode COM Ports
Settings 2+ 7 4 ( )	Devices Mode COM Ports
Settings  Art  Comparison    Select a Bluetooth Device  ?    Select a device to connect with and tap    Vext.	Devices Mode COM Ports Connect Settings Strong Connect
Settings  Art  Comparison    Select a Bluetooth Device  ?    Select a device to connect with and tap    Vext.    BluePortXP-CB2F.	Devices Mode COM Ports Connect Settings & X Connect Bluetooth
Settings    Art    Common      Select a Bluetooth Device    ?      Select a device to connect with and tap      Vext.      BluePortXP-CB2F      MobileMapper CXA	Devices Mode COM Ports Connect Settings 2+ 7 < Connect Bluetooth After pairing with a device, to set up a COM
Settings    Art    Comment      Select a Bluetooth Device    ?      Select a device to connect with and tap      Next.      BluePortXP-CB25      MobileMapper CX	Devices Mode COM Ports Connect Settings 9+ 7
Settings    Art Mark    Common Select a Bluetooth Device    Image: Common Select a Bluetooth Device      Select a device to connect with and tap Next.    Image: Common Select a Bluetooth Device    Image: Common Select a Bluetooth Device    Image: Common Select a Bluetooth Device      BluePortXP-CE25    Image: Common Select a Bluetooth Device    Image: Common Select a Bluetooth Device a Bluetooth Device    Image: Common Select a Bluetooth Device    Image: Common Select a Bl	Devices Mode COM Ports
Settings    Image: Constraint of the set of t	Devices Mode COM Ports Connect Connect Settings Sett
Settings    Article A      Select a Bluetooth Device    ?      Select a device to connect with and tap      Vext.      BluePortXP-CB2F      MobileMapper CX	Devices Mode COM Ports Connect Connect Settings Sett
Settings 2+ 1 < ( Select a Bluetooth Device ( Select a device to connect with and tap Next. BluePortXP-CB2F MobileMapper CX	Devices Mode COM Ports Connect Settings 9+ 7   Connect Settings 9+ 7   Connect Settings 9+ 7   Connect Settings Settings 9+ 7   Connect Settings Settings 9+ 7   Connect Settings
Settings 2+ 1/2 ( ) Select a Bluetooth Device ? Select a device to connect with and tap Next. BluePortXP-CB2F MobileMapper CX Passcode: ****	Devices Mode COM Ports Connect Settings 2+ 7   Connect Settings 2+ 7   Connect Settings 2+ 7   Connect Settings 2+ 7   Connect Settings 2+ 7   Connect New Outgoing Port New Outgoing Port Settings 2+ 7   Connect Settings 2+ 7   Connect
Settings    Provide    Comment      Select a Bluetooth Device    ?      Select a device to connect with and tap      Next.      BluePortXP-CB2F      MobileMapper CX      Passcode:      *****      Blue12 3 4 5 6 7 8 9 0 - =	Devices Mode COM Ports Connect Settings 9+ 7x
Settings    Provide    Image: Constraint of the provided in the provide	Devices Mode COM Ports Connect Settings 2+ 7   Connect Bluetooth After pairing with a device, to set up a COM port tap New Outgoing Port For other options, tap and hold an explaing port. New Outgoing Port Settings 2+ 7   C COM Add a Device 2 Select the device you want to add
Settings    Provide    Provide      Select a Bluetooth Device    ?      Select a device to connect with and tap      Next.      BluePortXP-CB2F      MobileMapper CX      Passcode:      *****      Blue PortXP-CB2F      MobileMapper CX      Passcode:      ****      Blue PortXP-CB2F      MobileMapper CX      Passcode:      ****      Blue PortXP-CB2F      Passcode:      ****      Blue PortXP-CB2F      Passcode:      *****      Passcode:      *****      Passcode:  <	Devices Mode COM Ports Connect Settings 2+ 7x
Settings    Provide the set of th	Devices Mode COM Ports Connect Settings Q+ X   Connect Bluetooth After pairing with a device, to set up a COM port tap New Outgoing Port For other options, tap and hold an explaing port. New Outgoing Port Select the device You want to add EluePortXP-CB2F K
Settings Q+ K ( ((((((((((((((((((((((((((((((((	Devices Mode COM Ports Connect Settings Q+ Y C Connect Bluetooth After pairing with a device, to set up a COM port tap New Outgoing Port For other options, tap and hold an explaining port. New Outgoing Port Settings Q+ Y C C C Select the device you want to add EluePortXP-CB2F

- 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).

