

Hidden Point

How to measure Hidden Points
using Leica System 1200 GPS



Hidden Point

- Hidden Points can't be measured directly by GPS.
- Calculated by measuring distances and/or azimuths
- Additional auxiliary points may be manually occupied.
- Bearings may be computed from previously occupied points



Hidden Point

- A hidden point measurement device can be attached to the receiver.
 - Criterion
 - Disto
 - Laser Ace
- RTK points are calculated on the Rover.
- Static can be done in LGO.



Hidden Point

- Heights are taken into account dependant on configuration.
 - If configured for 3D and no entry is made elevation will be zero.



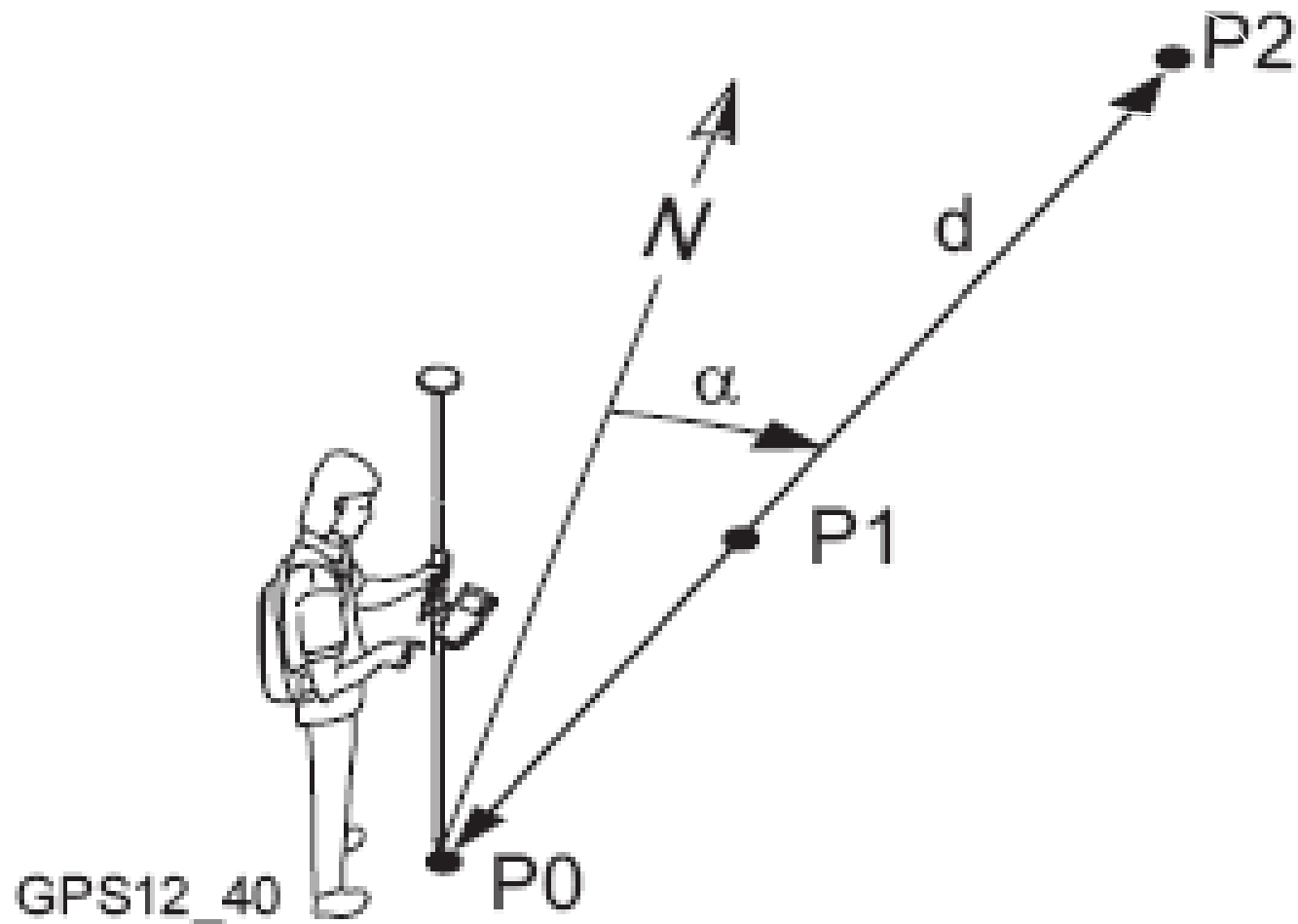
Hidden Point

- Methods for measuring a hidden point are:
 - Bearing and distance.
 - Station and offset.
 - Double bearing.
 - Backwards bearing and distance.
 - Double distance.



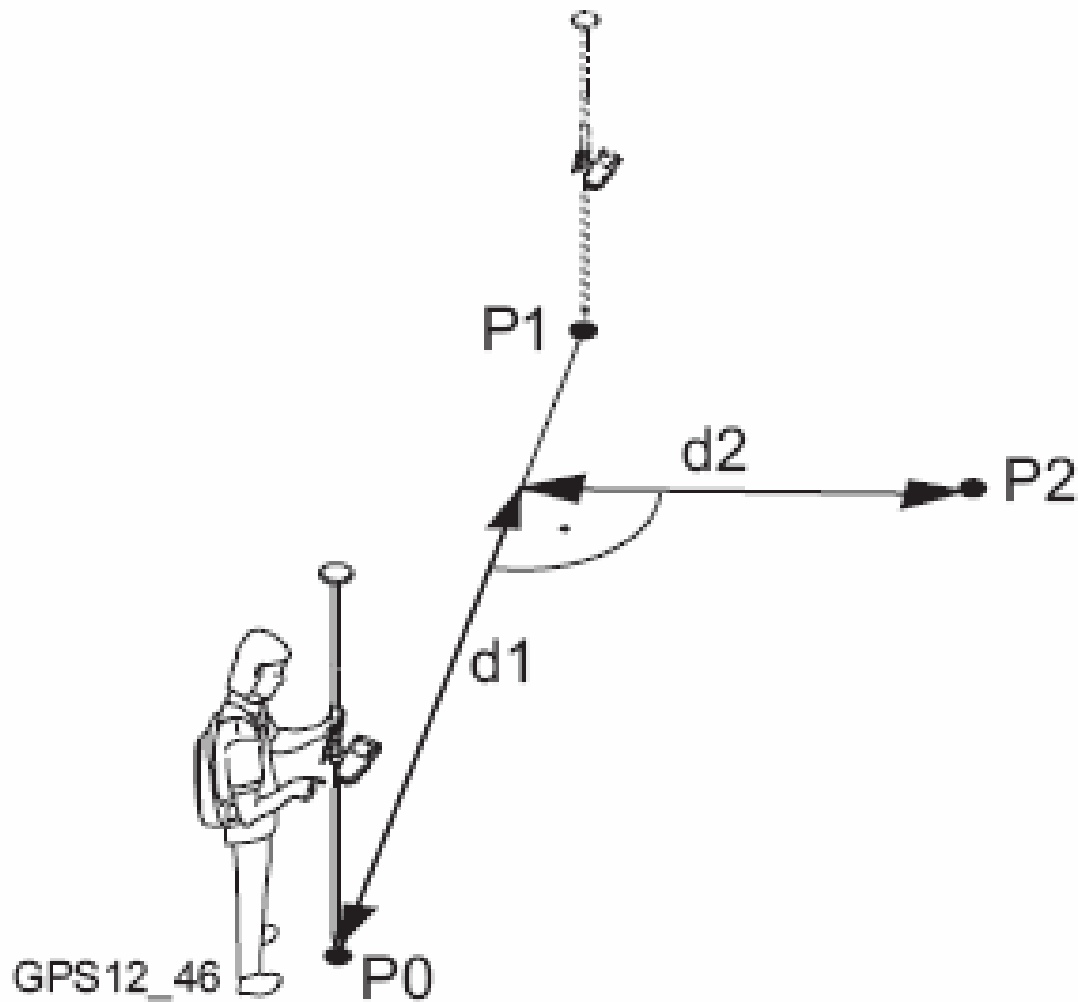
Hidden Point

Bearing & Distance



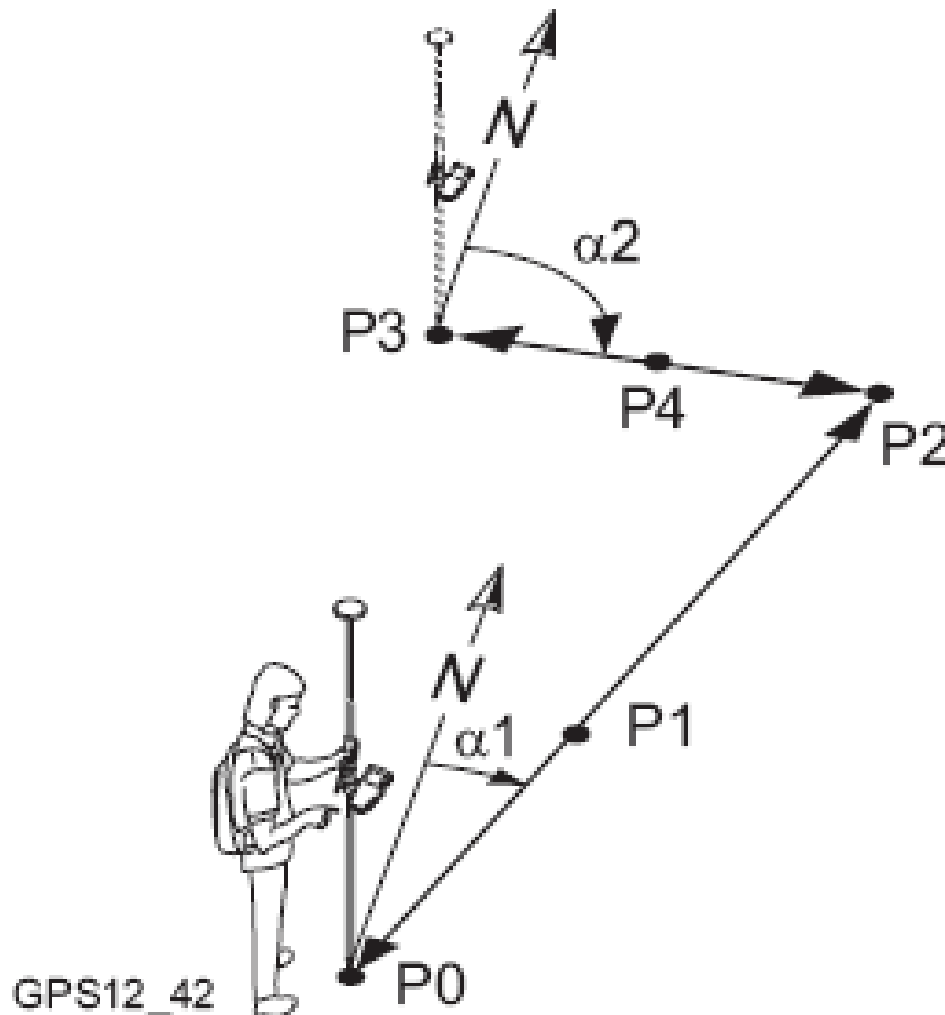
Hidden Point

Chainage & Offset



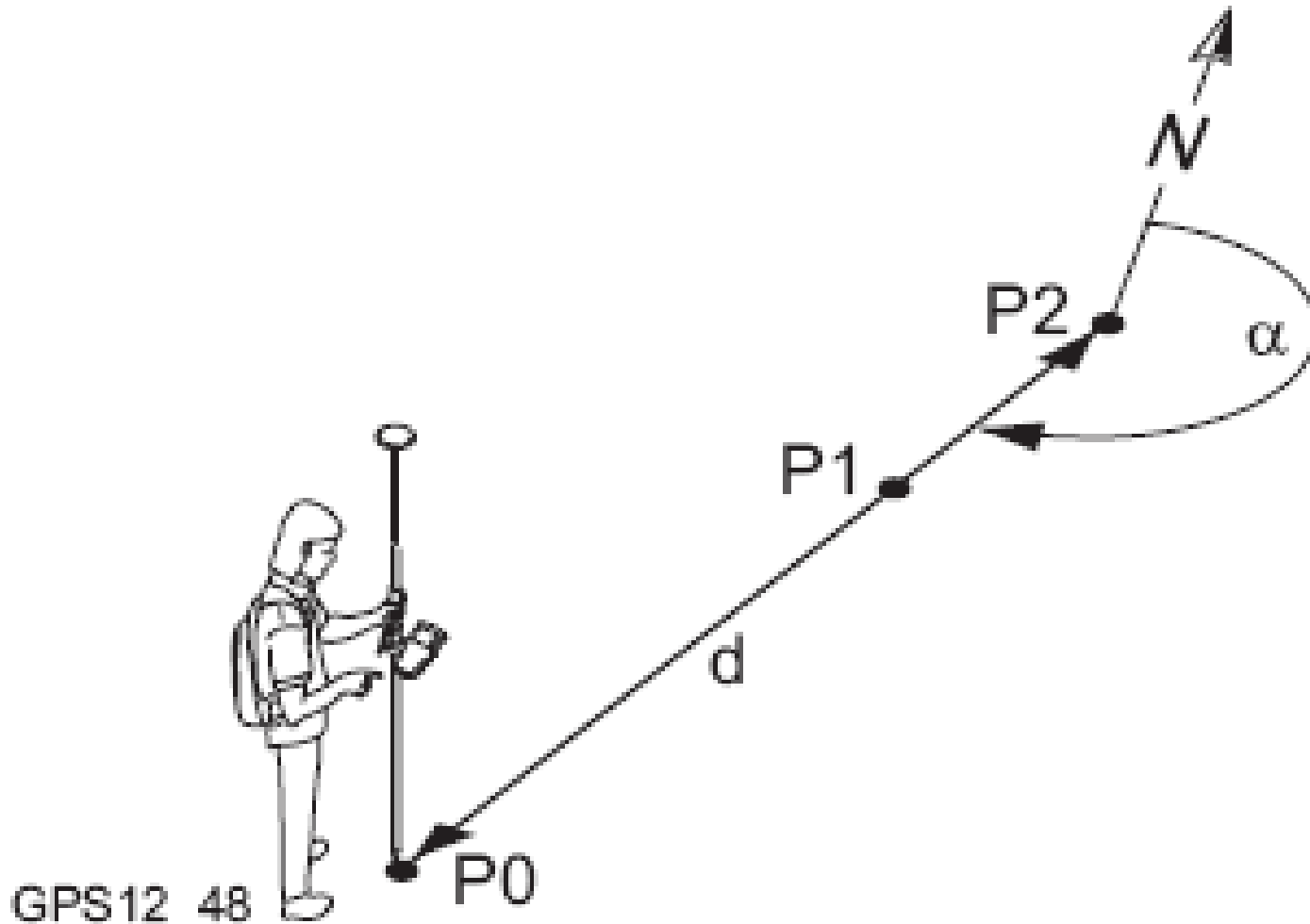
Hidden Point

Double Bearing



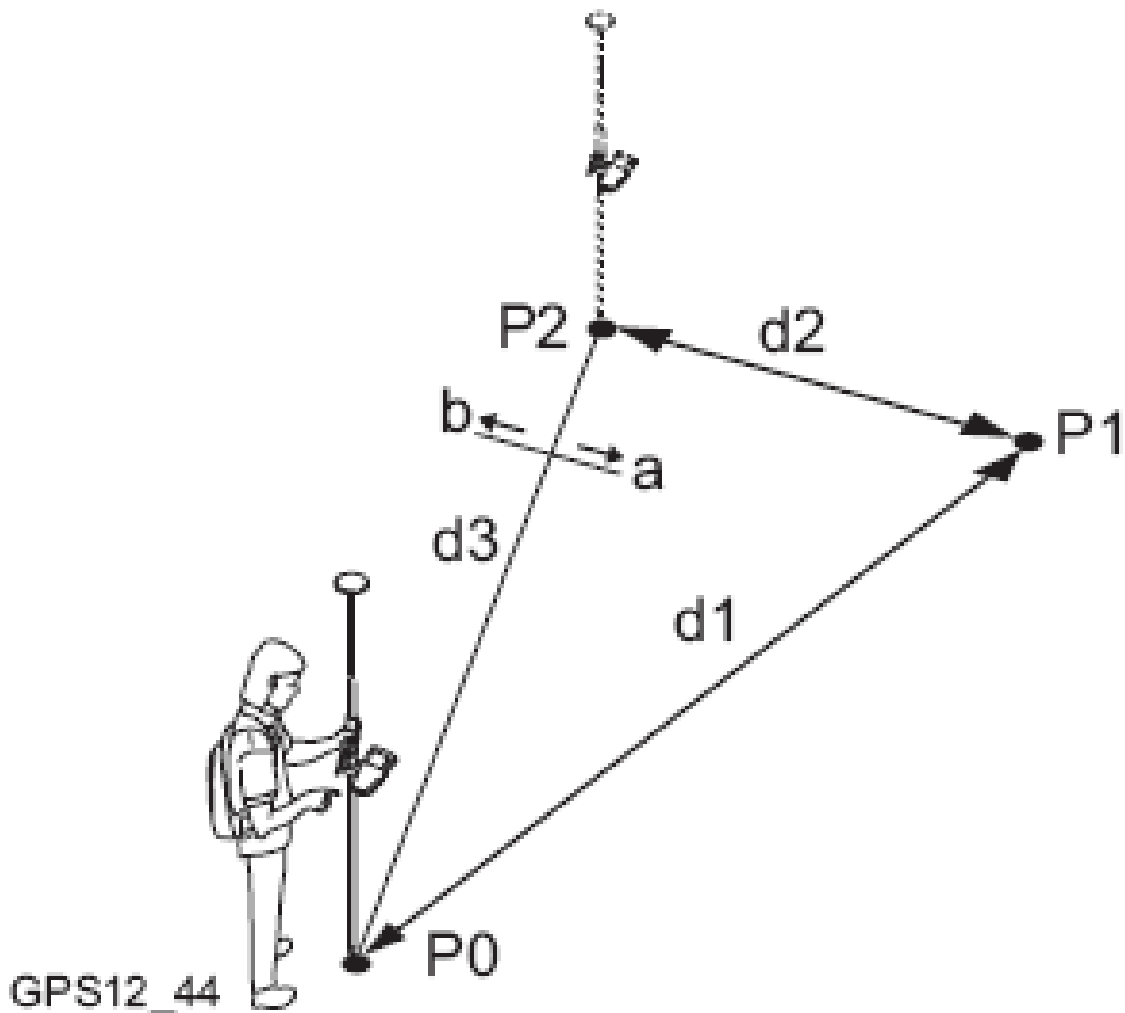
Hidden Point

Backwards Bearing & Distance



Hidden Point

Double Distance



Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

10:34 am SURVEY

L1=10 L2= 8

Survey: 99999T09 [X]

TOPO	Code	SCode	Map
Point ID	:	50000	
Code	:	TD	▲
Code Desc	:	DECIDUOUS TREE	
-----	:	-----	
Linework	:	-----	◀▶
Antenna Ht	:	6.562 fi	
3D CQ	:	0.034 fi	▼

Q3A ↑

OCUPY NEAR H PNT PAGE

Hidden Point

Rx Controller [min] [max] [close]

File Zoom Tools Help

10:35 am

HIDDEN PT

L1=10 L2=8

1

Hidden Point Measurement [close]

Method	:	Brng & Distance	◀▶
Point A	:	Double Bearing	◀▶
Horiz Dist	:	Double Distance	fi
ΔHeight	:	Change & Offset	fi
Point B	:	Back Brng & Dist	◀▶
Horiz Dist	:	0.000	fi
ΔHeight	:	-----	fi
Location	:	Right of Line AB	◀▶

Q3A

CALC

Hidden Point

Rx Controller [min] [max] [close]

File Zoom Tools Help

10:35 am

HIDDEN PT

L1=10 L2=8

1

Hidden Point Measurement [close]

Method : Double Distance

Point A : RTCM-Ref 0003

Horiz Dist : 0.000 fi

Δ Height : ----- fi

Point B : RTCM-Ref 0003

Horiz Dist : 0.000 fi

Δ Height : ----- fi

Location : Right of Line AB

Q3A ↑

CALC SURVY

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

10:36 am
HIDDEN PT

L1=10
L2= 8

1

Survey: 99999T09 [X]

TOPO	Code	SCode	Map
Point ID	:	Aux0001	
Code	:	<None>	◀▶▲
Code Desc	:	-----	
-----	:	-----	
Linework	:	-----	◀▶
Antenna Ht	:	6.562 fi	
3D CQ	:	0.044 fi	▼

Q3A ↑

OCUPY NEAR PAGE

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

10:37 am
HIDDEN PT

L1=10
L2= 8

1

Hidden Point Measurement [X]

Method	:	Double Distance	◀▶
Point A	:	Aux0001	◀▶
Horiz Dist	:	10.000	fi
ΔHeight	:	1.000	fi
Point B	:	RTCM-Ref 0003	◀▶
Horiz Dist	:	0.000	fi
ΔHeight	:	----	fi
Location	:	Right of Line AB	◀▶

Q3A ↑

CALC SURVY

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

10:39 am
HIDDEN PT

L1=10
L2= 8

1

Survey: 99999T09 [X]

TOPO	Code	SCode	Map
Point ID	:	Aux0002	
Code	:	<None>	◀▶▲
Code Desc	:	-----	
-----	:	-----	
Linework	:	-----	◀▶
Antenna Ht	:	6.562 fi	
3D CQ	:	0.037 fi	▼

BT 1: Bluetooth connection OK Q3A ↑

OCUPY NEAR PAGE

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

10:39 am
HIDDEN PT

L1=10
L2=8

1

Hidden Point Measurement [X]

Method	:	Double Distance	◀▶
Point A	:	Aux0001	◀▶
Horiz Dist	:	10.000	fi
ΔHeight	:	1.000	fi
Point B	:	Aux0002	◀▶
Horiz Dist	:	0.000	fi
ΔHeight	:	----	fi
Location	:	Right of Line AB	◀▶

Q3A ↑

CALC SURVY

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

10:40 am
HIDDEN PT

L1=10 L2=8

Hidden Point Measurement [X]

Method	:	Double Distance	◀▶
Point A	:	Aux0001	◀▶
Horiz Dist	:	10.000	fi
ΔHeight	:	1.000	fi
Point B	:	Aux0002	◀▶
Horiz Dist	:	11.000	fi
ΔHeight	:	1.000	fi
Location	:	Right of Line AB	◀▶

Q3A ↑

CALC

Hidden Point

Rx Controller [min] [max] [close]

File Zoom Tools Help

10:40 am
HIDDEN PT

L1=10
L2= 8

1

Hidden Point Result

Result	Code	Plot
Point ID	:	50000
Check Chng A	:	8.793 fi
Check Chng B	:	9.916 fi
Check Offset	:	4.762 fi
Check Dist AB	:	18.709 fi

Q3A ↑

STORE [] [] [] NEXT PAGE

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

10:41 am
HIDDEN PT

L1=10
L2= 8

1

Hidden Point Result [X]

Result	Code	Plot
Point Code	:	<None>
Code Desc	:	-----

Q3A ↑

STORE NEW-A [] LAST DEFLT PAGE

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

10:41 am
MANAGE

L1=10
L2= 8

1

Select Code [X]

Code	Code Description
TBM	TBM
TC	CONIFEROUS TREE
TD	DECIDUOUS TREE
TER	TERRAIN POINT
TL	UG PHONE LINE
TLL	LOCATES
TLO	E LINE
TLV	TELEPHONE VAULT

Search: TD

Q3A ↑

CONT NEW [] [] [] aNUM

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

10:42 am
HIDDEN PT

L1=10
L2=8

1

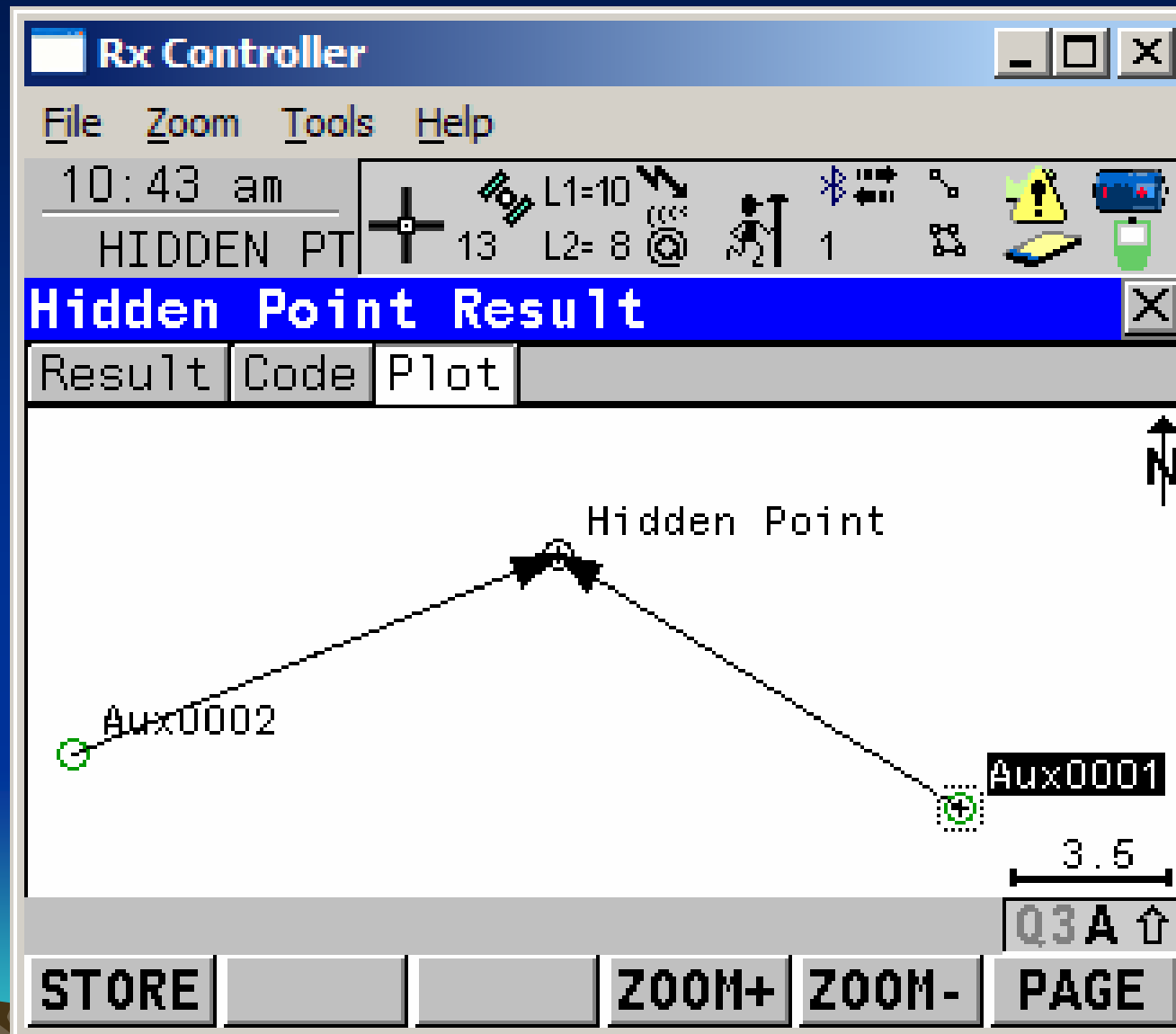
Hidden Point Result [X]

Result	Code	Plot
Point Code	:	TD
Code Desc	:	DECIDUOUS TREE

Q3A ↑

STORE NEW-A [] LAST DEFLT PAGE

Hidden Point



Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

10:43 am SURVEY

L1= 9 L2= 7

1

Survey: 99999T09 [X]

TOPO	Code	SCode	Map
Point ID	:	50001	
Code	:	TD	▲
Code Desc	:	DECIDUOUS TREE	
-----	:	-----	
Linework	:	-----	◀▶
Antenna Ht	:	6.562 fi	
3D CQ	:	0.041 fi	▼

Q3A ↑

OCUPY NEAR H PNT PAGE

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

10:44 am
MANAGE

L1=10
L2= 8

1

Data: 99999T09 [X]

Points ▾	Lines (0)	Areas (0)	Map ▾	
Point			Point Code	
50000				TD
Aux0001				-----
Aux0002				-----
RTCM-Ref 0003				-----

Q3A ↑

CONT NEW EDIT DEL MORE PAGE

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

10:45 am
MANAGE

L1=10
13 L2= 8

50000
TD

Aux0002

Aux0001

3.5

Q3A ↑

CONT FOCUS EDIT ZOOM+ ZOOM- PAGE

Data: 99999T09 [X]

Points ▾ Lines (0) Areas (0) Map ▾

The screenshot shows a software window titled 'Rx Controller'. At the top, there is a menu bar with 'File', 'Zoom', 'Tools', and 'Help'. Below the menu bar is a status bar displaying the time '10:45 am' and the word 'MANAGE'. To the right of the status bar is a toolbar with various icons, including a crosshair, a magnifying glass, and a warning sign. Below the toolbar is a blue bar with the text 'Data: 99999T09'. Underneath this is a panel with 'Points ▾', 'Lines (0)', 'Areas (0)', and 'Map ▾'. The main area is a map with a north arrow and a scale bar labeled '3.5'. Three points are visible: '50000 TD' (a green circle with a crosshair), 'Aux0002' (a green circle), and 'Aux0001' (a green circle). At the bottom of the window is a control bar with buttons for 'CONT', 'FOCUS', 'EDIT', 'ZOOM+', 'ZOOM-', and 'PAGE'. A 'Q3A ↑' indicator is also present in the bottom right corner of the map area.

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

10:45 am SURVEY

L1=10 L2= 8

Survey: 99999T09 [X]

TOPO	Code	SCode	Map
Point ID	:	50001	
Code	:	TD	▲
Code Desc	:	DECIDUOUS TREE	
-----	:	-----	
Linework	:	-----	◀▶
Antenna Ht	:	6.562 fi	
3D CQ	:	0.038 fi	▼

Q3A ↑

OCUPY NEAR H PNT PAGE

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

11:01 am
HIDDEN PT

L1= 9
L2= 8

1

Hidden Point Measurement [X]

Method	:	Brng & Distance	◀▶
Point	:	50000	◀▶
Azimuth	:	0°00'00"	
Horiz Dist	:	0.000	fi
ΔHeight	:	-----	fi

Q3A ↑

CALC SURVY

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

11:02 am
HIDDEN PT

L1= 9
L2= 8

1

Survey: 99999T09 [X]

TOPO	Code	SCode	Map
Point ID	:	Aux0003	
Code	:	<None>	◀ ▶ ▲
Code Desc	:	-----	
-----	:	-----	
Linework	:	-----	◀ ▶
Antenna Ht	:	6.562 fi	
3D CQ	:	0.136 fi	▼

Q3A ↑

OCUPY NEAR PAGE

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

11:02 am
HIDDEN PT

L1= 9
L2= 8

1

Hidden Point Measurement [X]

Method	:	Brng & Distance	◀▶
Point	:	Aux0003	◀▶
Azimuth	:	0°00'00"	
Horiz Dist	:	0.000	fi
ΔHeight	:	-----	fi

Q3A ↑

CALC SURVY

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

11:03 am
HIDDEN PT

L1= 9
L2= 8

1

Hidden Point Measurement [X]

Method	:	Brng & Distance	◀▶
Point	:	Aux0003	◀▶
Azimuth	:	0°00'00"	
Horiz Dist	:	0.000	fi
ΔHeight	:	-----	fi

Q3A ↑

CALC SUN AZMTH

Hidden Point

The screenshot shows the 'Rx Controller' software interface. At the top, there is a menu bar with 'File', 'Zoom', 'Tools', and 'Help'. Below the menu bar is a status bar displaying the time '11:03 am' and the text 'HIDDEN PT'. The main toolbar contains various icons, including a crosshair, a sun icon, and a person icon. The 'Hidden Point Measurement' dialog box is open, showing a confirmation message: 'CONFIRMATION: 6500'. Below the confirmation, there are instructions: 'Press F4 if the hidden point is in the direction towards the sun.' and 'Press F6 if the hidden point is in the direction away from the sun.' At the bottom of the dialog, there are two buttons labeled 'TOWRD' and 'AWAY'.

Rx Controller

File Zoom Tools Help

11:03 am
HIDDEN PT

Hidden Point Measurement

Method : Range & Distance

Poi

Azi

Hor

Δ He

CONFIRMATION: 6500

Press F4 if the hidden point is in the direction towards the sun.

Press F6 if the hidden point is in the direction away from the sun.

TOWRD AWAY

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

11:03 am
HIDDEN PT

L1= 8
L2= 7

1

Hidden Point Measurement [X]

Method	:	Brng & Distance	◀▶
Point	:	Aux0003	◀▶
Azimuth	:	334°47'35"	
Horiz Dist	:	0.000	fi
ΔHeight	:	-----	fi

Q3A ↑

CALC SUN AZMTH

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

11:04 am
HIDDEN PT

L1= 9
L2= 7

1

Hidden Point Measurement [X]

Method	:	Brng & Distance	◀▶
Point	:	Aux0003	◀▶
Azimuth	:	334°47'35"	
Horiz Dist	:	12.000	fi
ΔHeight	:	0.300	fi

Q3A ↑

CALC [] [] [] SLOPE [] []

Hidden Point

Rx Controller [min] [max] [close]

File Zoom Tools Help

11:05 am
HIDDEN PT

L1= 9
L2= 7

1

Hidden Point Result [close]

Result	Code	Plot
Point ID	:	50001

BT 1: Bluetooth connection OK Q3A ↑

STORE [] [] [] NEXT PAGE

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

11:05 am
HIDDEN PT

L1= 9
L2= 7

1

Hidden Point Result [X]

Result	Code	Plot
Point Code	:	<None>
Code Desc	:	-----

Q3A ↑

STORE NEW-A [] LAST DEFLT PAGE

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

11:05 am
MANAGE

L1= 9
L2= 7

14

1

Select Code [X]

Code	Code Description
SXS	STREAM X-SECTION
TBM	TBM
TC	CONIFEROUS TREE
TD	DECIDUOUS TREE
TER	TERRAIN POINT
TL	E LINE
TLL	LOCATES
TLO	OHEAD PHONE LINE

Q3A ↑

CONT NEW LAST aNUM

Search:
TD

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

11:07 am
HIDDEN PT

L1= 8
L2= 7

1

Hidden Point Result [X]

Result	Code	Plot
Point Code	:	TD
Code Desc	:	DECIDUOUS TREE

Q3A ↑

STORE NEW-A [] LAST DEFLT PAGE

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

11:07 am
HIDDEN PT

L1= 9
L2= 7

1

Hidden Point Result [X]

Result	Code	Plot

Hidden Point

Aux0003

4.5

Q3A ↑

STORE ZOOM+ ZOOM- PAGE

Hidden Point

Rx Controller [-] [□] [X]

File Zoom Tools Help

11:08 am SURVEY

L1= 9 L2= 7

Survey: 99999T09 [X]

TOPO	Code	SCode	Map
Point ID	:	50002	
Code	:	<None>	◀▶▲
Code Desc	:	-----	
-----	:	-----	
Linework	:	-----	◀▶
Antenna Ht	:	6.562 fi	
3D CQ	:	0.053 fi	▼

Q3A ↑

OCUPY NEAR H PNT PAGE

Hidden Point

Rx Controller [Window Title Bar]

File Zoom Tools Help

11:08 am
MANAGE

L1= 8
L2= 7

1

Data: 99999T09

Points ▾	Lines (0)	Areas (0)	Map ▾
Point			Point Code
50000			TD
50001			TD
Aux0001			-----
Aux0002			-----
Aux0003			-----
RTCM-Ref 0003			-----

Q3A ↑

CONT NEW EDIT DEL MORE PAGE

Hidden Point

The screenshot displays the 'Rx Controller' software interface. At the top, the title bar reads 'Rx Controller' with standard window controls. Below it is a menu bar with 'File', 'Zoom', 'Tools', and 'Help'. A status bar shows the time '11:11 am' and the word 'MANAGE'. The main toolbar contains various icons for navigation and data management, including a crosshair, a satellite icon, and a person icon. Below the toolbar, a blue bar displays 'Data: 99999T09'. The main map area shows several points: '50001 TD' (a green circle), '50000 TD' (a green circle with a dashed border), 'Aux0002' (a green circle), 'Aux0001' (a green circle), and 'Aux0003' (a green circle). A north arrow is in the top right of the map area. A scale bar at the bottom right indicates '6.0'. At the very bottom, a row of buttons includes 'CONT', 'FOCUS', 'EDIT', 'ZOOM+', 'ZOOM-', and 'PAGE'. A 'Q3A' button with an upward arrow is also visible above the 'PAGE' button.

Field to Office

Send or receive files from the office.



Field to Office

- Using GPS Cell Modem.
- Connect to Internet.
- Access ODOT's FTP site.
- Read or Write Files.
- Create folders as needed for each office.
- Must delete or cut files when done.



Field to Office

- Tool available on Leica System 1200 GPS or TPS V6.0
- Must have Cell Modem with Internet and Data Transfer Capability.
- Works on our GPS units as is.
- When using with TPS Cell must be Blue Tooth enabled.



Field to Office

- Cost is about \$50.00 Per Month
- AT&T's Unlimited Service
 - Limited to 5 Gig per month
- Verizon's Unlimited Service is unlimited.
- Transfer any type of files

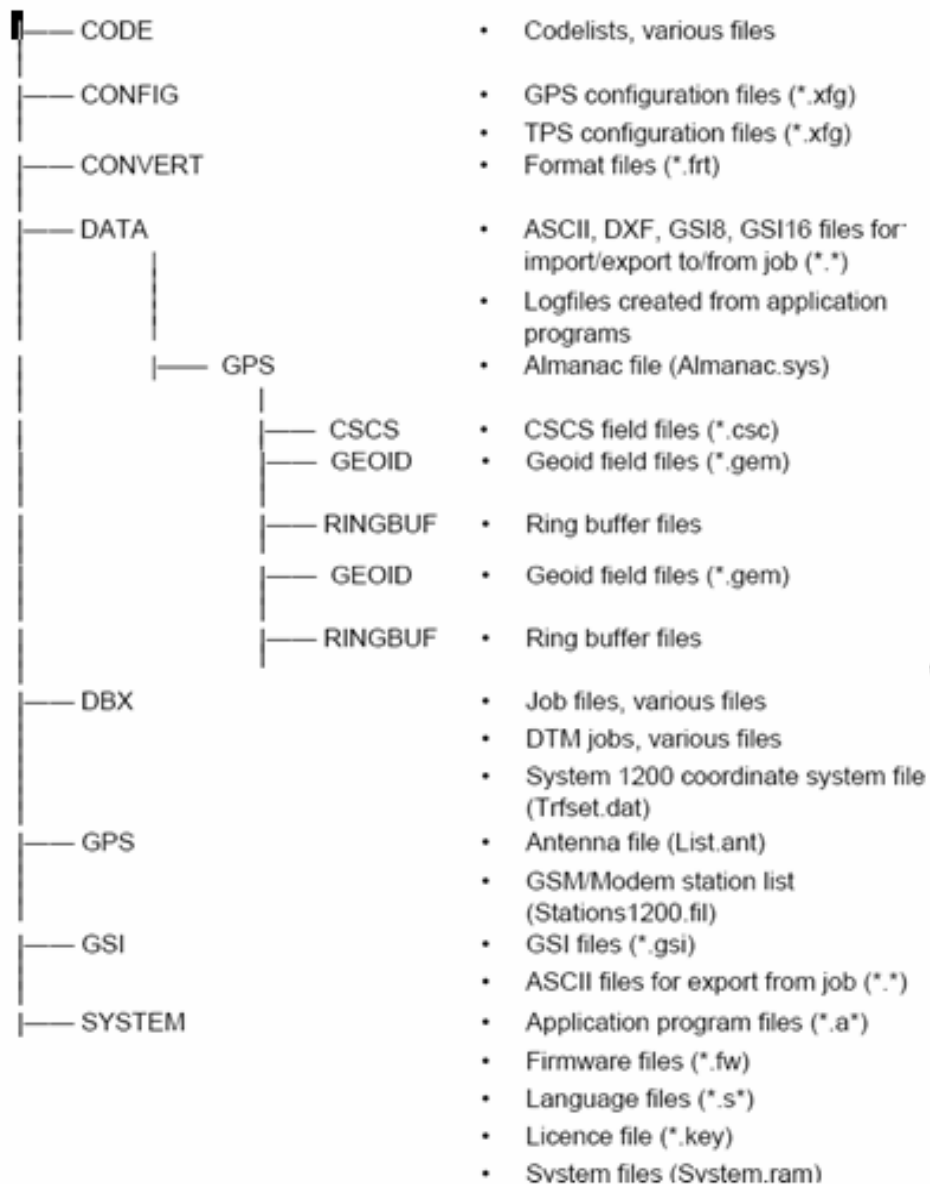


Field to Office

- DBX
 - Alignments
 - Coordinate
 - DTM Surfaces
 - Any LGO Projects
- Transfer Coordinate Files as:
 - ASCII
 - Must have .txt extension to send to Data Folder



Field to Office



Field to Office



Field to Office

The screenshot shows a software window titled "Rx Controller" with a menu bar containing "File", "Zoom", "Tools", and "Help". The status bar displays "01:52 pm" and "GPS1200". A toolbar includes icons for "Hold", "L1=0", "L2=0", a person icon, a Bluetooth symbol, a network icon, a key icon, a flag icon, and a mobile phone icon. The "Tools Menu" is open, listing seven options: "1 Format Memory Device", "2 Transfer Objects...", "3 Upload System Files...", "4 Calculator", "5 File Viewer", "6 Licence Keys", and "7 Field to Office", which is highlighted. At the bottom right of the window, there is a display showing "Q3A" with an upward arrow icon. Below the window, a row of six buttons is visible, with the first button labeled "CONT".

Field to Office

The screenshot shows a software window titled "Rx Controller" with a menu bar (File, Zoom, Tools, Help) and a toolbar. The main display area shows a configuration window titled "Field to Office: Config" with the following text:

03:27 pm
TOOLS

L1= 0
L2= 0

Field to Office: Config

Enter Office(FTP) conn. details

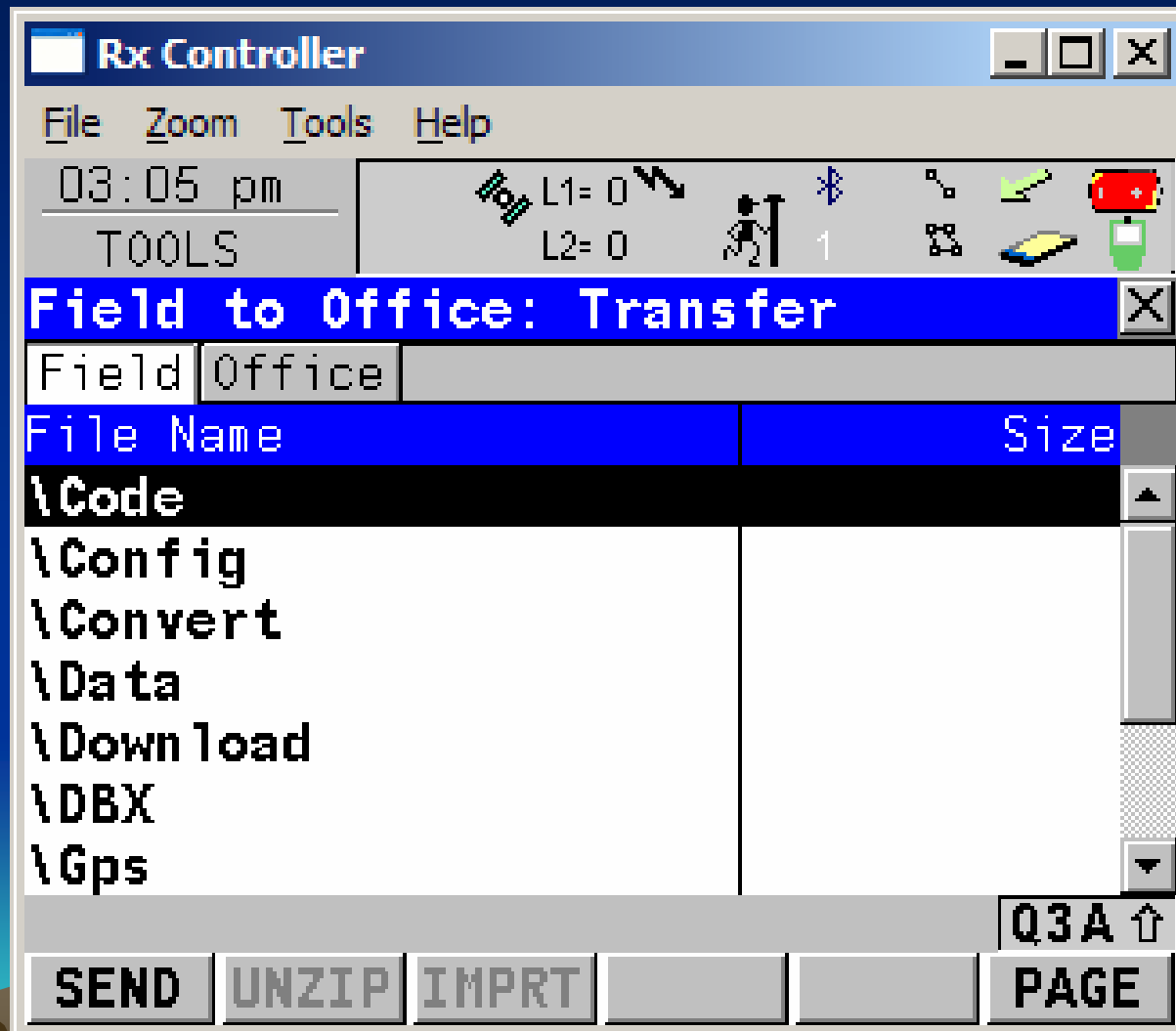
IP Address : 167.131.14.8
TCP/IP Port : 21

User ID : anonymous
(cont) : - - - -
Password : *****

Q3A ↑

CONEC

Field to Office



Field to Office

The screenshot shows the 'Rx Controller' application window. The title bar reads 'Rx Controller'. The menu bar includes 'File', 'Zoom', 'Tools', and 'Help'. The status bar shows the time '03:28 pm' and the word 'TOOLS'. A toolbar contains various icons, including a 'Hold' button, 'L1=0', 'L2=0', a person icon, a Bluetooth symbol, a network icon, a green checkmark, a yellow and red flag, a yellow card, and a green mobile phone. A blue dialog box titled 'Field to Office: Transfer' is open, showing a file transfer progress bar between 'Field' and 'Office'. Below the progress bar is a table with two columns: 'File Name' and 'Size'. The table lists several folders and files, with '_Survey_Crews' selected. At the bottom of the dialog, there is a status bar showing 'Q3A ↑' and a 'PAGE' button.

File Name	Size
..	
_Survey_Crews	
\01_RWDMS_REQUESTS-^1	
\02_RWDMS_REQUESTS-^1	
\1205AirportWayInfo^1	
\Audit_FlatFee	
\Bridge	

Q3A ↑

RECIV PAGE

Field to Office

The screenshot shows the 'Rx Controller' application window. The title bar reads 'Rx Controller'. The menu bar includes 'File', 'Zoom', 'Tools', and 'Help'. The status bar shows the time '03:28 pm' and the word 'TOOLS'. A toolbar contains various icons, including a 'Hold' button, 'L1=0', 'L2=0', a person icon, a Bluetooth symbol, a '1', and several other device-related icons.

A secondary window titled 'Field to Office: Transfer' is open, showing a file transfer progress. The window has a header with 'Field' and 'Office' tabs. Below the header is a table with two columns: 'File Name' and 'Size'. The table lists the following items:

File Name	Size
..	
_Clean_Out_Folders^1	
\Geometronics	
\WhiteCity	

At the bottom of the window, there is a status bar with 'Q3A ↑' and a 'PAGE' button. Below the status bar are several buttons, including one labeled 'RECV'.

Field to Office

Rx Controller [min] [max] [close]

File Zoom Tools Help

01:28 pm
TOOLS

L1= 0
L2= 0

Bluetooth icons

Field to Office: Transfer [close]

Field	Office
File Name	Size
..	
Job: 99999N01_6483_^1	491.4KB
99999ct1a.txt	2.5KB

Q3A ↑

RECV PAGE

Field to Office

Rx Controller [min] [max] [close]

File Zoom Tools Help

01:35 pm
TOOLS

L1= 0
L2= 0

Bluetooth icons

Field to Office: Transfer [close]

Field	Office
File Name	Size
..	
Job: 99999N01_6483_^1	491.4KB
99999ct1a.txt	2.5KB

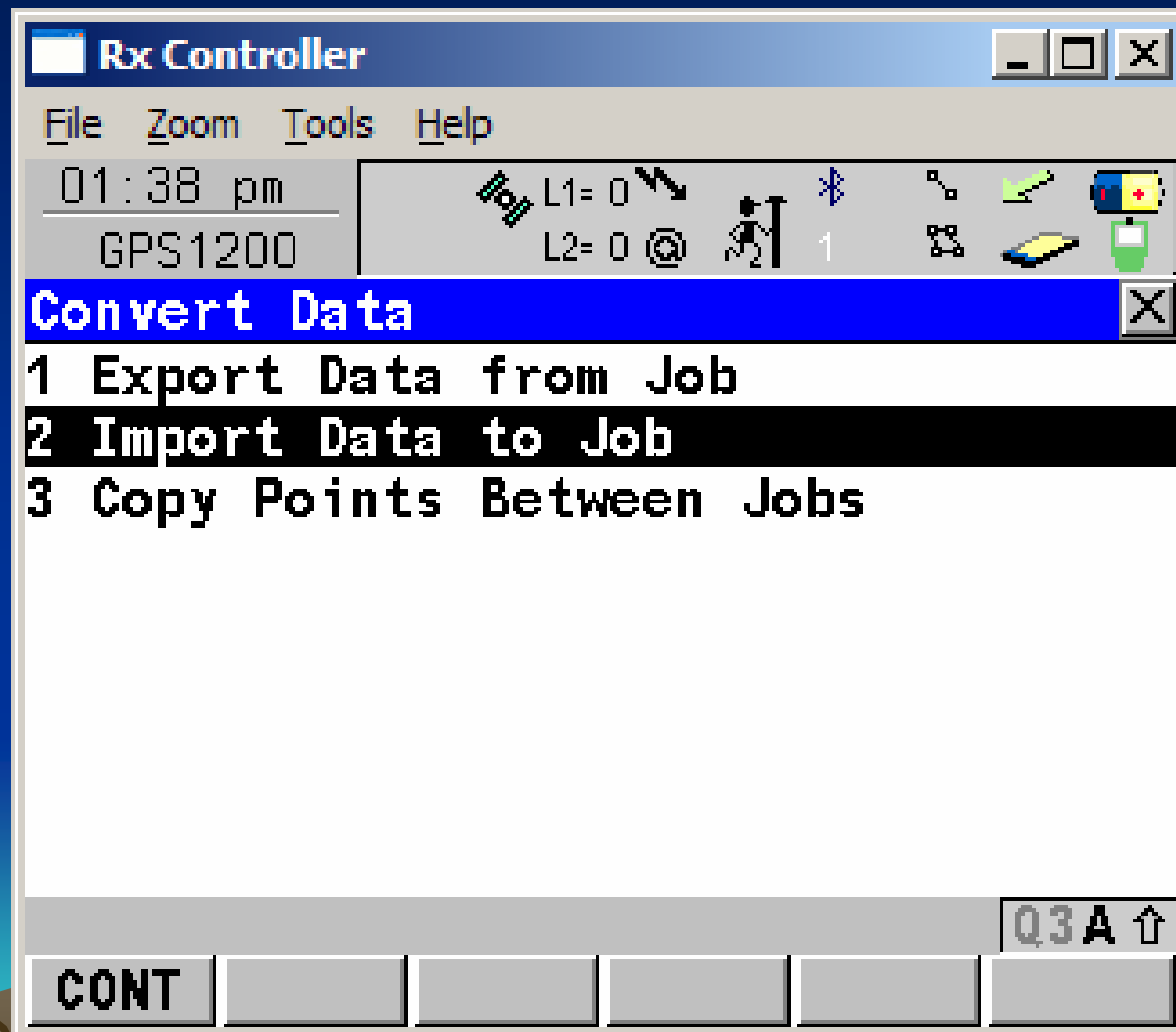
Transfer completed Q3A ↑

RECV [] [] [] [] PAGE

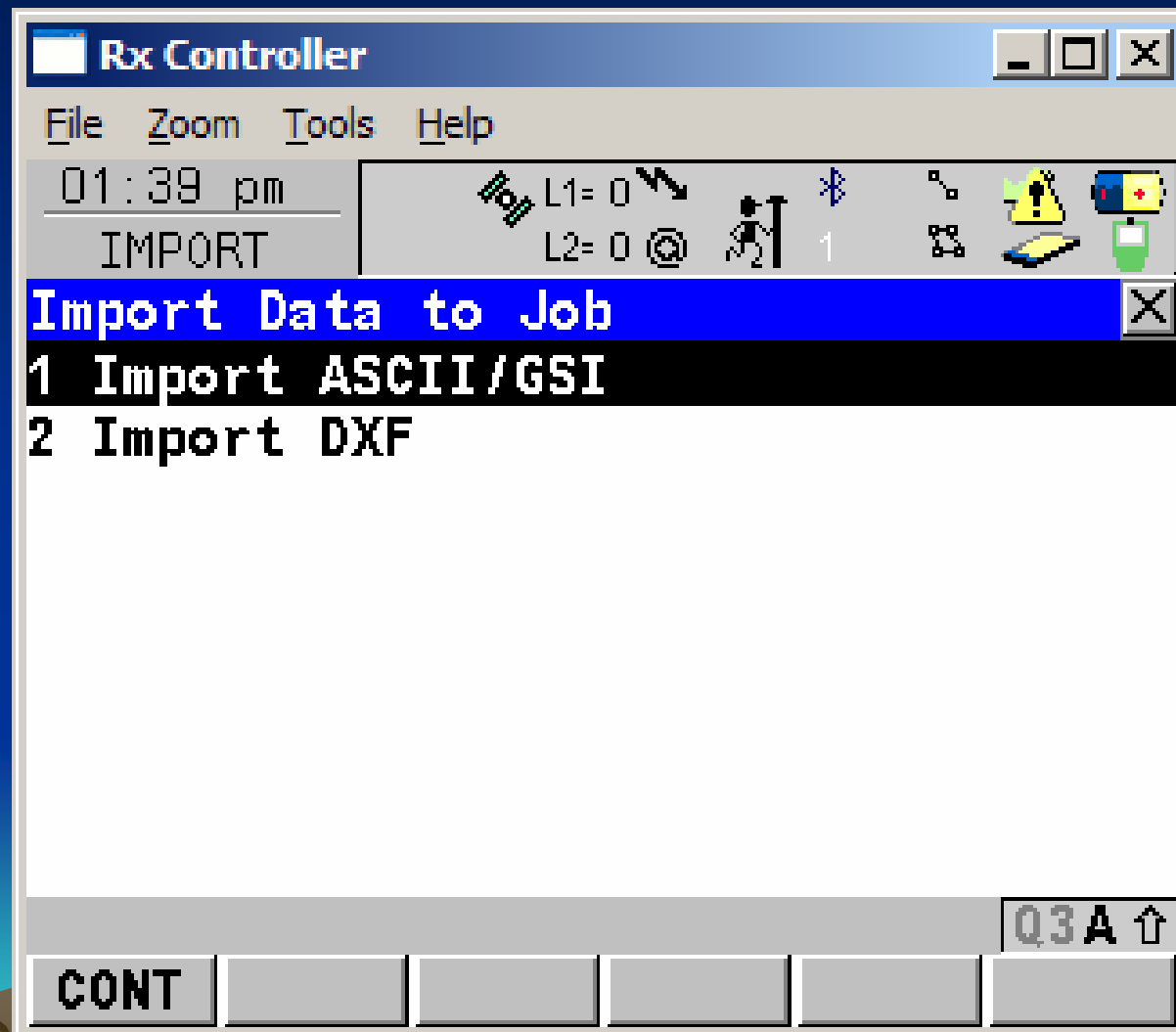
Field to Office



Field to Office



Field to Office



Field to Office

The screenshot shows the 'Rx Controller' software interface. At the top, there is a menu bar with 'File', 'Zoom', 'Tools', and 'Help'. Below the menu bar, the time '03:35 pm' and the word 'IMPORT' are displayed. A toolbar contains various icons, including a 'Hold' button, 'L1=0', 'L2=0', a person icon, a Bluetooth symbol, a number '1', a warning icon, and a mobile phone icon. The main window is titled 'ASCII Files' and contains a table with two columns: 'File Name' and 'Date'. The table lists two files: '99999ct1a.txt' with a date of '03/04/09' and 'logfile.txt' with a date of '08/13/08'. At the bottom of the window, there is a status bar showing 'Q3A' with an upward arrow, and a row of buttons including 'CONT', 'DEL', and several empty buttons.

File Name	Date
99999ct1a.txt	03/04/09
logfile.txt	08/13/08

Field to Office

The screenshot shows the 'Rx Controller' software interface. At the top, there is a menu bar with 'File', 'Zoom', 'Tools', and 'Help'. Below the menu bar, the time '03:35 pm' and the word 'IMPORT' are displayed. A toolbar contains several icons, including a person with a cane, a Bluetooth symbol, a warning sign, and a mobile phone. The main area of the window is titled 'Import ASCII/GSI Data to Job' and contains the following settings:

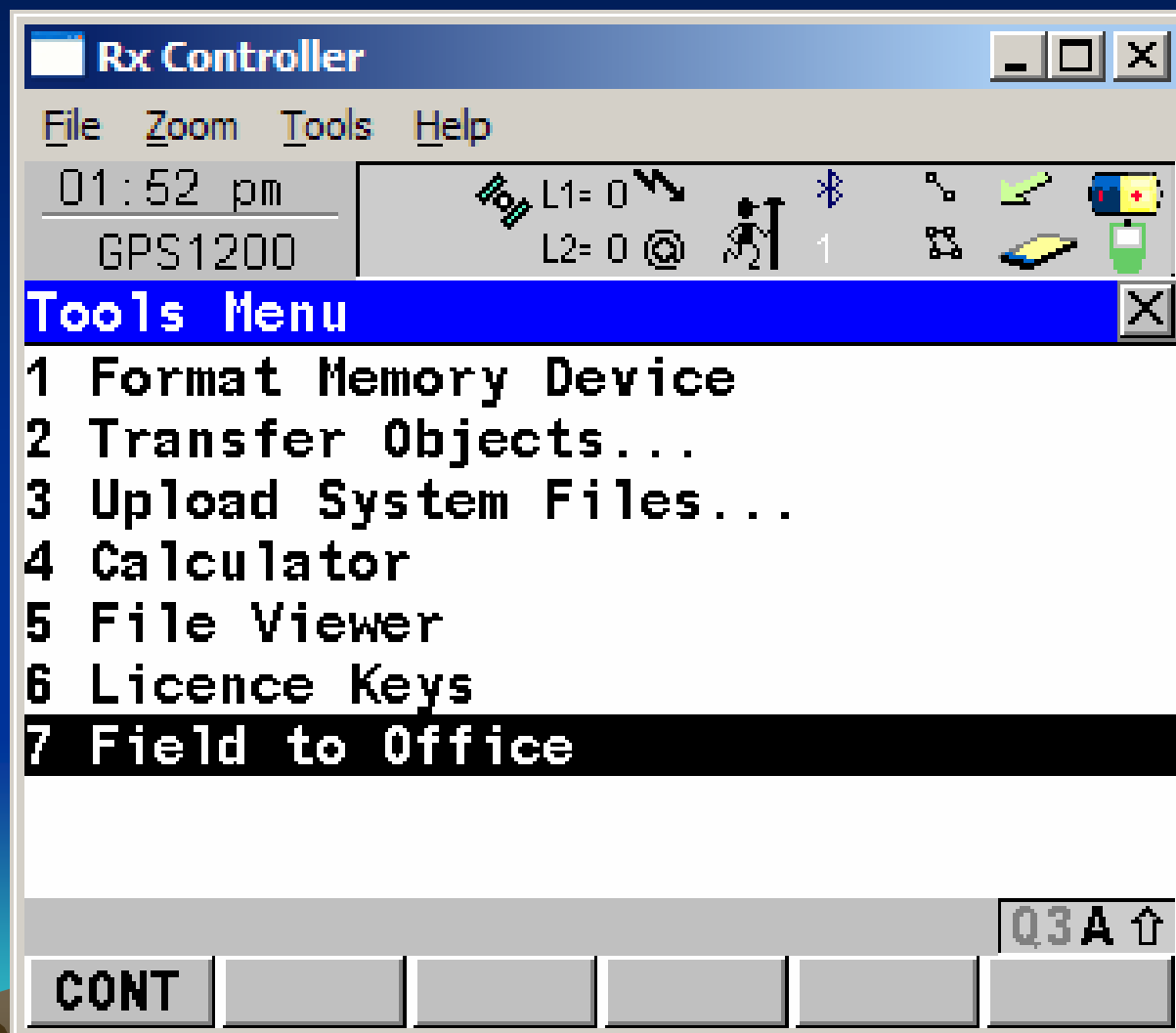
Import	:	ASCII Data
From File	:	99999ct1a.txt
To Job	:	99999N01
Header	:	None

At the bottom of the window, there is a status bar showing 'Q3A' with an upward arrow. Below the status bar are several buttons: 'CONT', 'CONF', 'VIEW', and three empty buttons.

Field to Office



Field to Office



Field to Office

The screenshot shows a software window titled "Rx Controller" with a menu bar (File, Zoom, Tools, Help) and a toolbar. The toolbar includes a clock showing "02:05 pm", a "TOOLS" button, and various icons for network, Bluetooth, and other functions. A status bar at the top shows "L1= 0", "L2= 0", and a signal strength indicator.

A secondary window titled "Field to Office: Transfer" is open, showing a file transfer interface. It has a header with "Field" and "Office" tabs. Below the header is a table with two columns: "File Name" and "Size".

File Name	Size
..	
_Survey_Crews	
\01_RWDMS_REQUESTS-^1	
\02_RWDMS_REQUESTS-^1	
\1205AirportWayInfo^1	
\Audit_FlatFee	
\Bridge	

At the bottom of the window, there are several buttons: "RECV", a series of empty buttons, and a "PAGE" button. A status indicator "Q3A ↑" is visible in the bottom right corner of the window.

Field to Office

The screenshot shows the 'Rx Controller' application window. The title bar reads 'Rx Controller'. The menu bar includes 'File', 'Zoom', 'Tools', and 'Help'. The status bar shows the time '02:08 pm' and the word 'TOOLS'. A toolbar contains various icons, including a 'Hold' button, 'L1=0', 'L2=0', a person icon, a Bluetooth symbol, a network icon, a yellow arrow, a red and blue flag, a yellow card, and a green battery icon. A 'Field to Office: Transfer' dialog box is open, showing a file transfer progress window. The dialog has a title bar with 'Field to Office' and a close button. Below the title bar, there are two input fields: 'Field' and 'Office'. The main area of the dialog is a table with two columns: 'File Name' and 'Size'. The table contains the following entries:

File Name	Size
..	
_Clean_Out_Folders^1	
\Geometronics	
\WhiteCity	

At the bottom of the dialog, there is a status bar with 'Q3A ↑' and a 'PAGE' button. Below the dialog, there are several buttons: 'RECV', a blank button, another blank button, a third blank button, and a fourth blank button.

Field to Office

Rx Controller [min] [max] [close]

File Zoom Tools Help

02:08 pm
TOOLS

L1= 0
L2= 0

Bluetooth icons

Field to Office: Transfer [close]

Field	Office
File Name	Size
..	
Job: 99999N01_6483_^1	491.4KB
99999ct1a.txt	2.5KB

Q3A ↑

RECV PAGE

Field to Office

The screenshot shows the 'Rx Controller' software interface. At the top, there is a menu bar with 'File', 'Zoom', 'Tools', and 'Help'. Below the menu bar, the time '01:54 pm' and the word 'TOOLS' are displayed. A toolbar contains various icons, including a Bluetooth symbol, a USB symbol, and a battery icon. The main window is titled 'Field to Office: Transfer' and features a table with two columns: 'File Name' and 'Size'. The table lists several files: '\Code', '\Config', '\Convert', '\Data', '\Download', '\DBX', and '\Gps'. The '\DBX' file is currently selected. At the bottom of the window, there are several buttons: 'SEND', 'UNZIP', 'IMPRT', and 'PAGE'. The 'PAGE' button also displays 'Q3A' and an upward arrow icon.

File Name	Size
\Code	
\Config	
\Convert	
\Data	
\Download	
\DBX	
\Gps	

Field to Office

Rx Controller

File Zoom Tools Help

02:38 pm
TOOLS

L1= 0
L2= 0

Field to Office: Transfer

Field	Office
File Name	Size
..	
Job: Default_6483_0^1	44.4KB
Job: 99999M01_6483_^1	297.4KB
Job: 99999N01_6483_^1	491.4KB
Job: 99999T01_6483_^1	1.2MB
Job: 99999T02_6483_^1	1.2MB
Job: 99999T03_6483_^1	1.0MB

Q3A ↑

SEND UNZIP IMPRT PAGE

Field to Office

Rx Controller [min] [max] [close]

File Zoom Tools Help

02:41 pm
TOOLS

L1= 0
L2= 0

Bluetooth 1

Field to Office: Transfer [close]

Field	Office	
File Name		Size
..		
Job: Default_648	⌚ 1	44.4KB
Job: 99999M01_64	⌚ 1	297.4KB
Job: 99999N01_6483_	^ 1	491.4KB
Job: 99999T01_6483_	^ 1	1.2MB
Job: 99999T02_6483_	^ 1	1.2MB
Job: 99999T03_6483_	^ 1	1.0MB

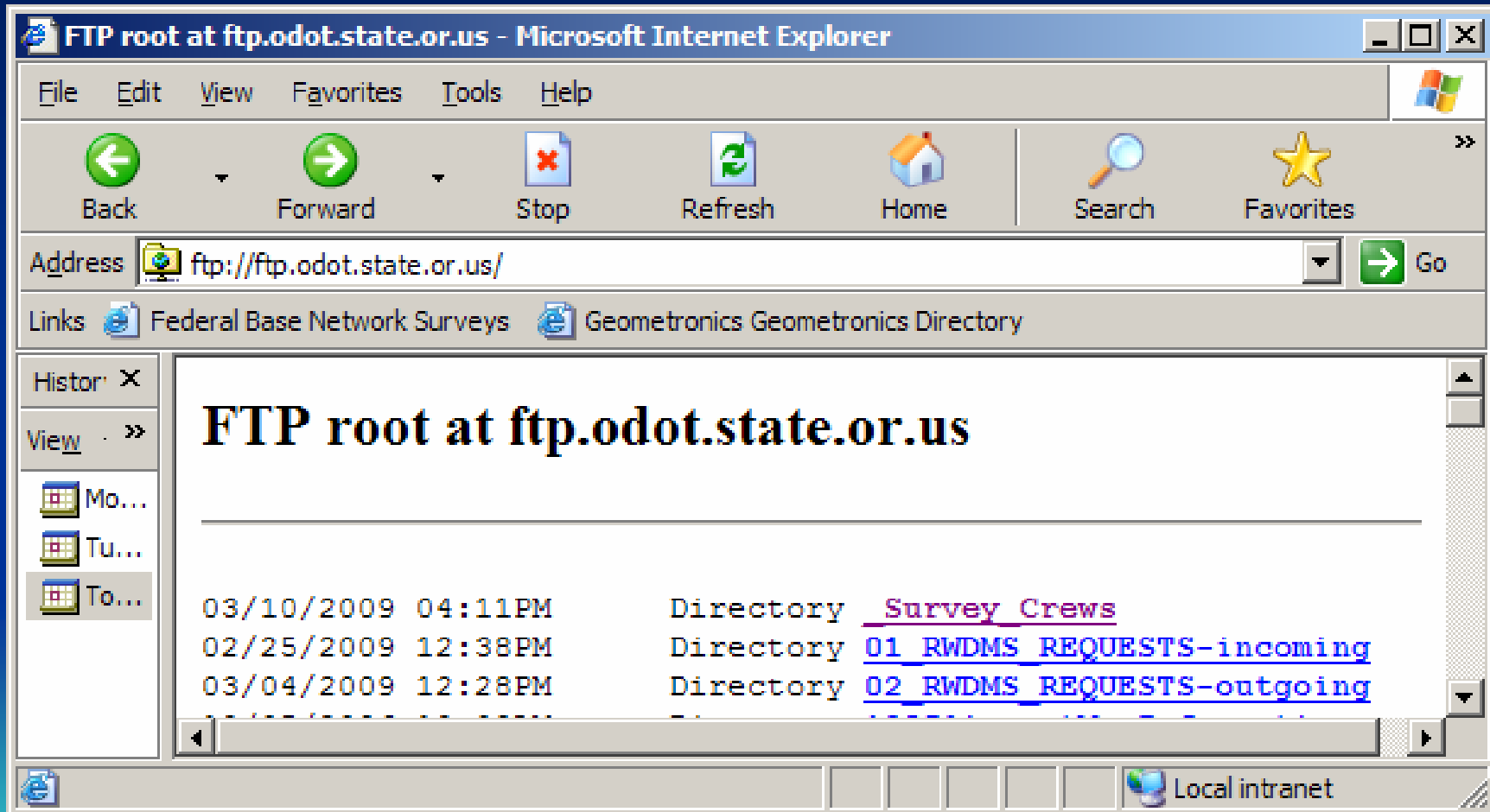
Zippering file(s) Q3A ↑

SEND **UNZIP** **IMPRT** **PAGE**

Field to Office



Field to Office



Field to Office

FTP directory /_Survey_Crews/ at ftp.odot.state.or.us - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History

Address ftp://ftp.odot.state.or.us/_Survey_Crews/ Go

Links Federal Base Network Surveys Geometronics Geometronics Directory

History View Search

Monday
Tuesday
Today

FTP directory /_Survey_Crews/ <http://egov.oregon.gov/ODOT/HWY/GEOMETRONICS/Geom>
ftp.odot.state.or.us

[Up to higher level directory](#)

08/20/2008 12:00AM	Directory	Clean Out Folders When Done
03/11/2009 03:32PM	Directory	Geometronics
02/04/2009 03:47PM	Directory	WhiteCity

Local intranet

Field to Office

FTP directory /_Survey_Crews/Geometronics/ at ftp.odot.state.or.us - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History

Address ftp://ftp.odot.state.or.us/_Survey_Crews/Geometronics/ Go

Links Federal Base Network Surveys Geometronics Geometronics Directory

History View Search

- Monday
- Tuesday
- Today

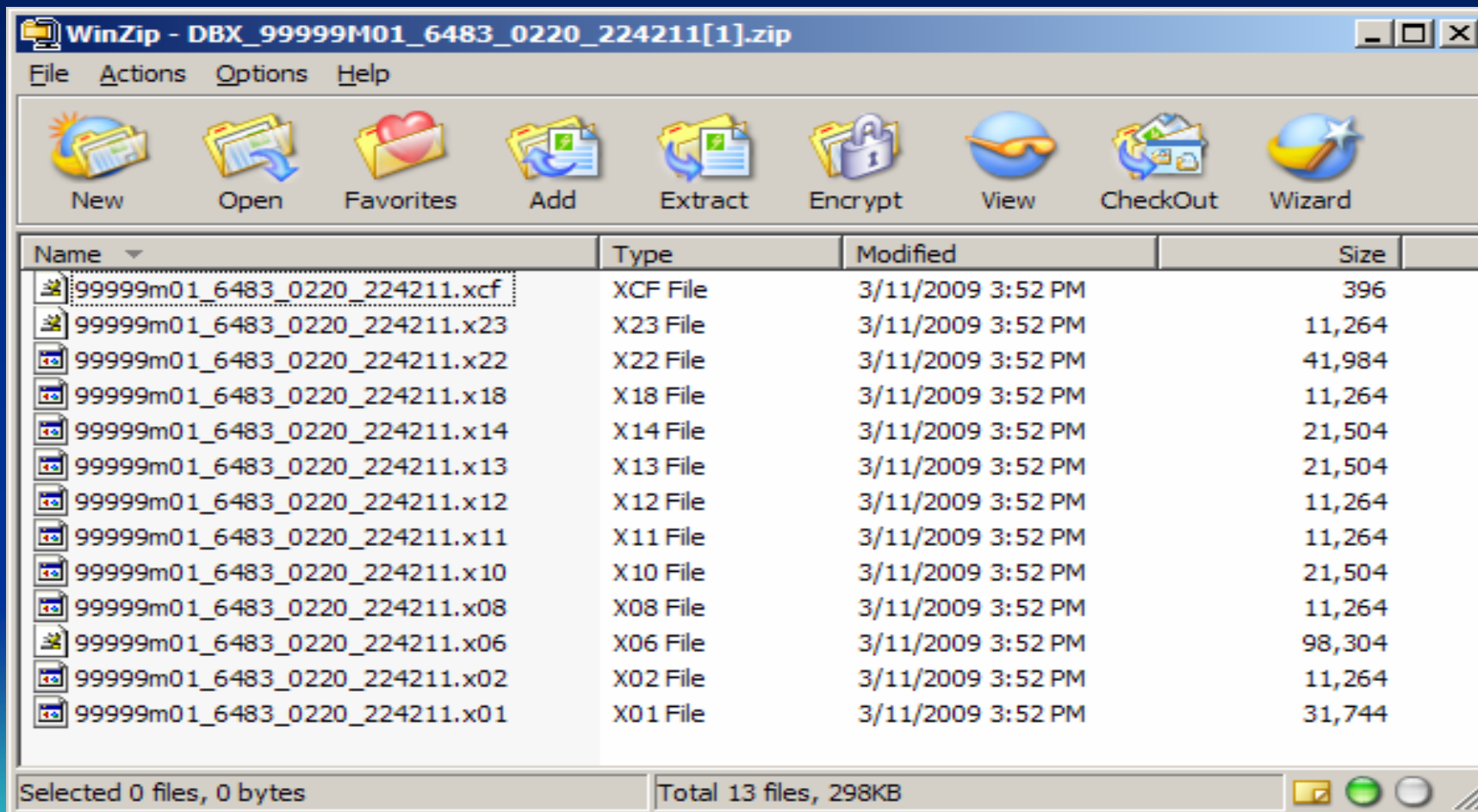
FTP directory /_Survey_Crews/Geometronics/ at ftp.odot.state.or.us

[Up to higher level directory](#)

02/11/2008 12:00AM	2,536	99999ct1a.txt
10/04/2007 12:00AM	72,704	99999N01_6483_0910_104023.X01
10/04/2007 12:00AM	11,264	99999N01_6483_0910_104023.X02
10/04/2007 12:00AM	72,704	99999N01_6483_0910_104023.X06
10/04/2007 12:00AM	21,504	99999N01_6483_0910_104023.X08
10/04/2007 12:00AM	52,224	99999N01_6483_0910_104023.X10
10/04/2007 12:00AM	11,264	99999N01_6483_0910_104023.X11
10/04/2007 12:00AM	11,264	99999N01_6483_0910_104023.X12
10/04/2007 12:00AM	62,464	99999N01_6483_0910_104023.X13
10/11/2007 12:00AM	11,264	99999N01_6483_0910_104023.X18
10/04/2007 12:00AM	164,864	99999N01_6483_0910_104023.X22
10/11/2007 12:00AM	11,264	99999N01_6483_0910_104023.X23
10/11/2007 12:00AM	409	99999N01_6483_0910_104023.XCF
03/11/2009 03:32 PM	25,905	DBX_99999M01_6483_0220_224211.zip

Local intranet

Field to Office



The screenshot shows the WinZip application window titled "WinZip - DBX_99999M01_6483_0220_224211[1].zip". The menu bar includes "File", "Actions", "Options", and "Help". The toolbar contains icons for "New", "Open", "Favorites", "Add", "Extract", "Encrypt", "View", "CheckOut", and "Wizard". The main area displays a list of files with columns for Name, Type, Modified, and Size. The status bar at the bottom indicates "Selected 0 files, 0 bytes" and "Total 13 files, 298KB".

Name	Type	Modified	Size
99999m01_6483_0220_224211.xcf	XCF File	3/11/2009 3:52 PM	396
99999m01_6483_0220_224211.x23	X23 File	3/11/2009 3:52 PM	11,264
99999m01_6483_0220_224211.x22	X22 File	3/11/2009 3:52 PM	41,984
99999m01_6483_0220_224211.x18	X18 File	3/11/2009 3:52 PM	11,264
99999m01_6483_0220_224211.x14	X14 File	3/11/2009 3:52 PM	21,504
99999m01_6483_0220_224211.x13	X13 File	3/11/2009 3:52 PM	21,504
99999m01_6483_0220_224211.x12	X12 File	3/11/2009 3:52 PM	11,264
99999m01_6483_0220_224211.x11	X11 File	3/11/2009 3:52 PM	11,264
99999m01_6483_0220_224211.x10	X10 File	3/11/2009 3:52 PM	21,504
99999m01_6483_0220_224211.x08	X08 File	3/11/2009 3:52 PM	11,264
99999m01_6483_0220_224211.x06	X06 File	3/11/2009 3:52 PM	98,304
99999m01_6483_0220_224211.x02	X02 File	3/11/2009 3:52 PM	11,264
99999m01_6483_0220_224211.x01	X01 File	3/11/2009 3:52 PM	31,744