SEISMOGRAPH DATA ANALYSIS V13 DOWLOADING DATA WITH A MINI-SEIS III OR PRO LOCALLY

Local communication is when the seismograph is connected directly to a computer. There are two methods for communicating with a Mini-Seis III or Pro locally. One method is by USB, the other method is by RS232 (serial). The top female DB9 connector on the seismograph is RS232, the bottom male DB9 is USB.

USB

The recommended method is USB which is much faster than RS232. We supply an adapter cable with a computer USB on one end and a female DB9 on the other end. The use of the adapter requires that a driver be present on the computer. When making local communication, if there is no VCP port available, it means the driver is missing. The appropriate driver may be installed from the Communication Menu.

COMMUNICATION – INSTALL MINI-SEIS III USB DRIVER

Installs the FTDI driver for the Mini-Seis III. To use the USB cable the Mini-Seis III Comm Port must be set to USB.

COMMUNICATION – INSTALL MINI-SEIS III PRO USB DRIVER – 32 BIT OR 64 BIT

Installs the X86 or X64 VCP driver for the Mini-Seis III Pro. This driver must be installed before local USB communication can occur. The Pro will automatically recognize a USB connection. It is not necessary to explicitly set the Comm Port to USB.

RS232

The RS232 connector is nulled for use with a modem. This means that a null adapter will be required when making a local connection. When using RS232 the software baud rate must match the unit baud rate.

THE PROCESS

First, decide if the local communication is to be by USB or RS232, taking into account the information noted above. If the instrument type is a Mini-Seis III, make sure the Comm Port is set to USB or RS232 accordingly. If it is set to RS232, make note of the baud rate.

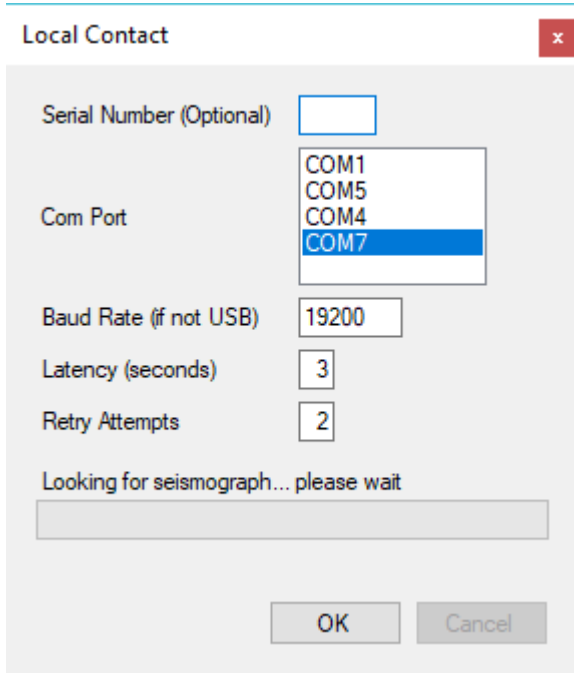Click Communication – Local Contact (Figure 1)

Figure 1

The serial number field does not have to be entered. It should only be used if there are multiple seismographs connected together. Providing the serial number limits communication to just that seismograph.

The Com Port list will show all available ports. Selected the port that represents your connection whether that be USB or RS232.

If you are using USB, the Baud Rate can be ignored. If using RS232, this value must match the setting on the seismograph.

With a local connection the Latency is unimportant. However, it represents the amount of time that the software will wait for a response from the seismograph after sending a command.

If a command fails, the Retry Attempts value indicates how many times the software will retry the command before quitting.

Assuming the attempt is successful, the Communication Successful dialog will be shown (Figure 2).

Communication Successful

Instrument Type	Mini-Seis III	Firmware Version	TV# 1.18.6.0 1.17	Refresh
Serial Number	7000	Internal Battery Voltage	6.30	
Operating Mode	Waveform Disarmed	Number of Files	6	

○ Review/Download Records by Date Range   ○ Download Records by Date Range   Download Folder _____   Browse

Starting Date 10/17/2020   Custom Filename _____   Optional

Ending Date 12/17/2020   Heading   Optional

○ Review Records by Event Range   ○ Download Records by Event Range

Starting Range

Ending Range

○ Command Terminal   Command Terminal is used to program the seismograph.

○ Find New SN
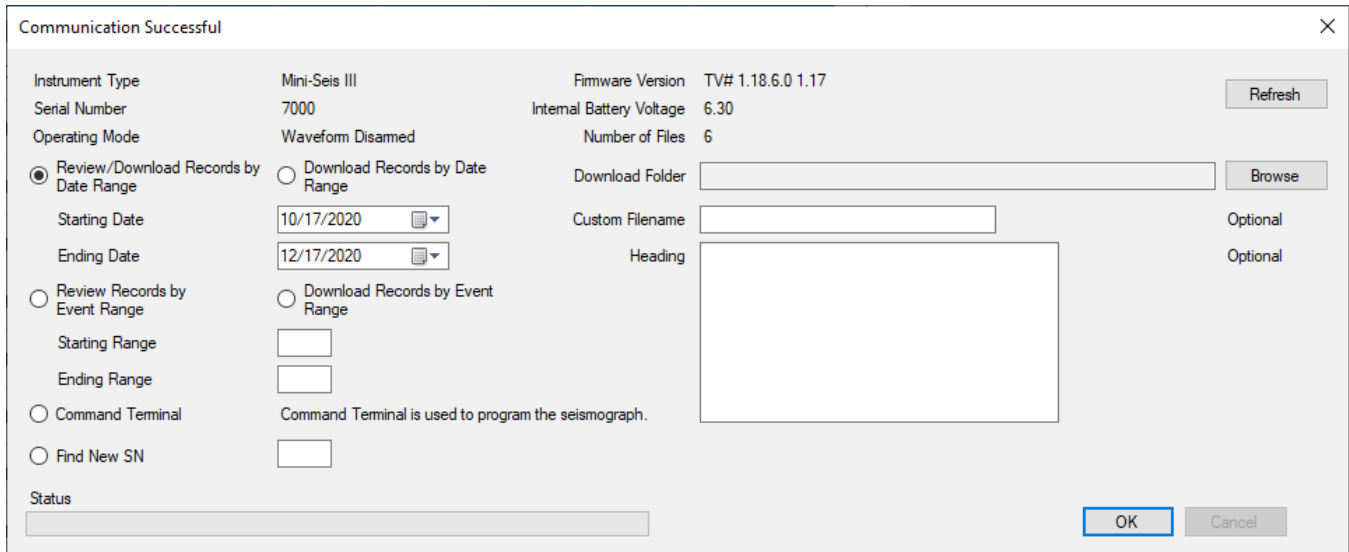
Status

OK   Cancel

Figure 2

REVIEWING RECORDS BEFORE DOWNLOADING

REVIEWING RECORDS BY DATE RANGE
The software will retrieve summary data for events that satisfy the date range. If records are found, they will be displayed for selection and downloading.

REVIEWING RECORDS BY EVENT RANGE
The software will retrieve summary data for events that satisfy the event range. If records are found, they will be displayed for selection and downloading.

DOWNLOADING RECORDS WITHOUT REVIEWING

DOWNLOAD RECORDS BY DATE RANGE
The software will download the records that satisfy the date range. They will not be displayed.

DOWNLOAD RECORDS BY EVENT RANGE
The software will download the records that satisfy the event range. They will not be displayed.

DOWNLOAD FOLDER
If using Download Records by Date Range or Download Records by Event Range, the Download Folder must be specified. Use the Browse button to select the folder.

CUSTOM FILENAME
The default file name for a download record is:

<sn><year><month><day><hour><minute><second><event>

Example: 8000202012211530230017

<sn> = 8000
<year> = 2020
<month> = 12

<day> = 21
<hour> = 15
<minute> = 30
<second> = 23
<event> = 0017

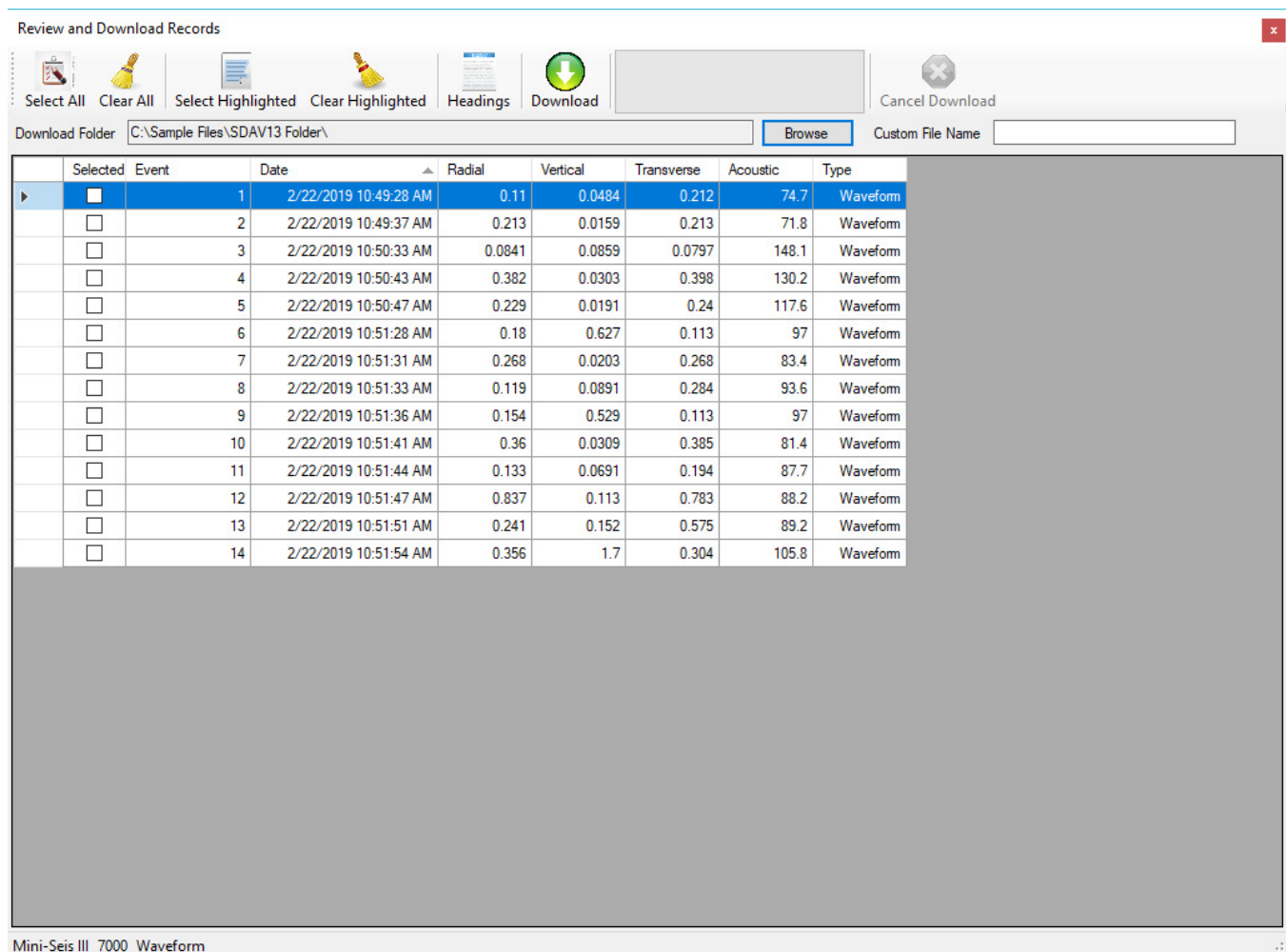If a custom filename is supplied the program will name the file

<customname><event>

HEADING
A user heading can be stored with each record by entering it in the text box.

REVIEW AND DOWNLOAD RECORDS FORM
Figure 3 appears when reviewing records before downloading. Whether accessing data by date or event range, if records satisfy the search they will be shown in the Review and Download Records form.

Selected	Event	Date	Radial	Vertical	Transverse	Acoustic	Type
☑	1	2/22/2019 10:49:28 AM	0.11	0.0484	0.212	74.7	Waveform
☐	2	2/22/2019 10:49:37 AM	0.213	0.0159	0.213	71.8	Waveform
☐	3	2/22/2019 10:50:33 AM	0.0841	0.0859	0.0797	148.1	Waveform
☐	4	2/22/2019 10:50:43 AM	0.382	0.0303	0.398	130.2	Waveform
☐	5	2/22/2019 10:50:47 AM	0.229	0.0191	0.24	117.6	Waveform
☐	6	2/22/2019 10:51:28 AM	0.18	0.627	0.113	97	Waveform
☐	7	2/22/2019 10:51:31 AM	0.268	0.0203	0.268	83.4	Waveform
☐	8	2/22/2019 10:51:33 AM	0.119	0.0891	0.284	93.6	Waveform
☐	9	2/22/2019 10:51:36 AM	0.154	0.529	0.113	97	Waveform
☐	10	2/22/2019 10:51:41 AM	0.36	0.0309	0.385	81.4	Waveform
☐	11	2/22/2019 10:51:44 AM	0.133	0.0691	0.194	87.7	Waveform
☐	12	2/22/2019 10:51:47 AM	0.837	0.113	0.783	88.2	Waveform
☐	13	2/22/2019 10:51:51 AM	0.241	0.152	0.575	89.2	Waveform
☐	14	2/22/2019 10:51:54 AM	0.356	1.7	0.304	105.8	Waveform

Review and Download Records

Select All   Clear All   Select Highlighted   Clear Highlighted   Headings   Download   Cancel Download

Download Folder   C:\Sample Files\SDAV13 Folder\   Browse   Custom File Name

Mini-Seis III 7000 Waveform

Figure 3

The first step is to browse to the folder where the records are to be stored. Once a folder has been selected it will be displayed in the Download Folder text box.

The second step is to select the records to be retrieved. A record is selected when the Selected box is marked. There are multiple methods to do this. To download all of the displayed records we click Select All in the toolbar. We can also highlight multiple records by using Shift + arrow keys. Then we can use Select Highlighted to select them.

USER HEADINGS
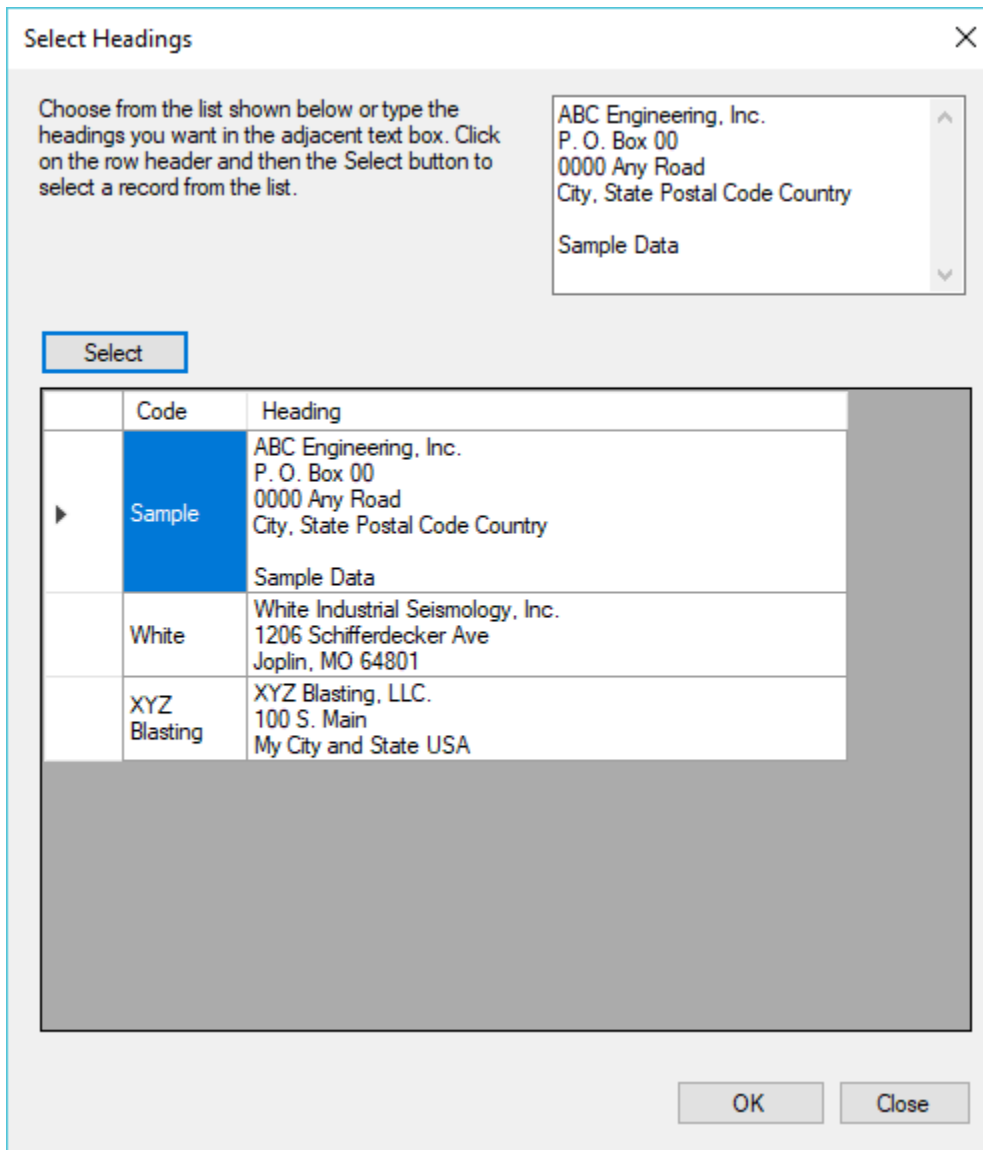Once we have records selected we can apply user headings by clicking the Headings button (Figure 4).

Figure 4

The heading can be specified by selecting from an entry in the grid or it can be typed manually in the text box.

CUSTOM FILE NAME

As previously described, the software will automatically generate a file name based on the unit serial number, date and time, and event number. However, if a custom file name is supplied, the software will use that name and append the event number.

Be careful when using a custom file name. If the list of records includes the same event number the software will prompt to overwrite an existing record.

DOWNLOADING

Click the Download button to download the selected records into the specified Data Folder. The progress bar will show the download progress. The bottom of the form will also show each record as it is downloaded. A download in progress can be canceled by clicking the Cancel Download button.

When the download has finished the form may be closed. The Communication Successful dialog may also be closed unless there is further communication needed.

COMMAND TERMINAL

Please see the documentation regarding using the Command Terminal with the Mini-Seis III or Pro.