



SHIELD Communicator Configuration Instructions

The Communicator module is an addition to the SHIELD system that allows for remote interface to the Emergency Communication System.

The Communicator dials out and allows a remote Call Center to talk and listen to the person in front of the Remote Call Station using a standard phone line.

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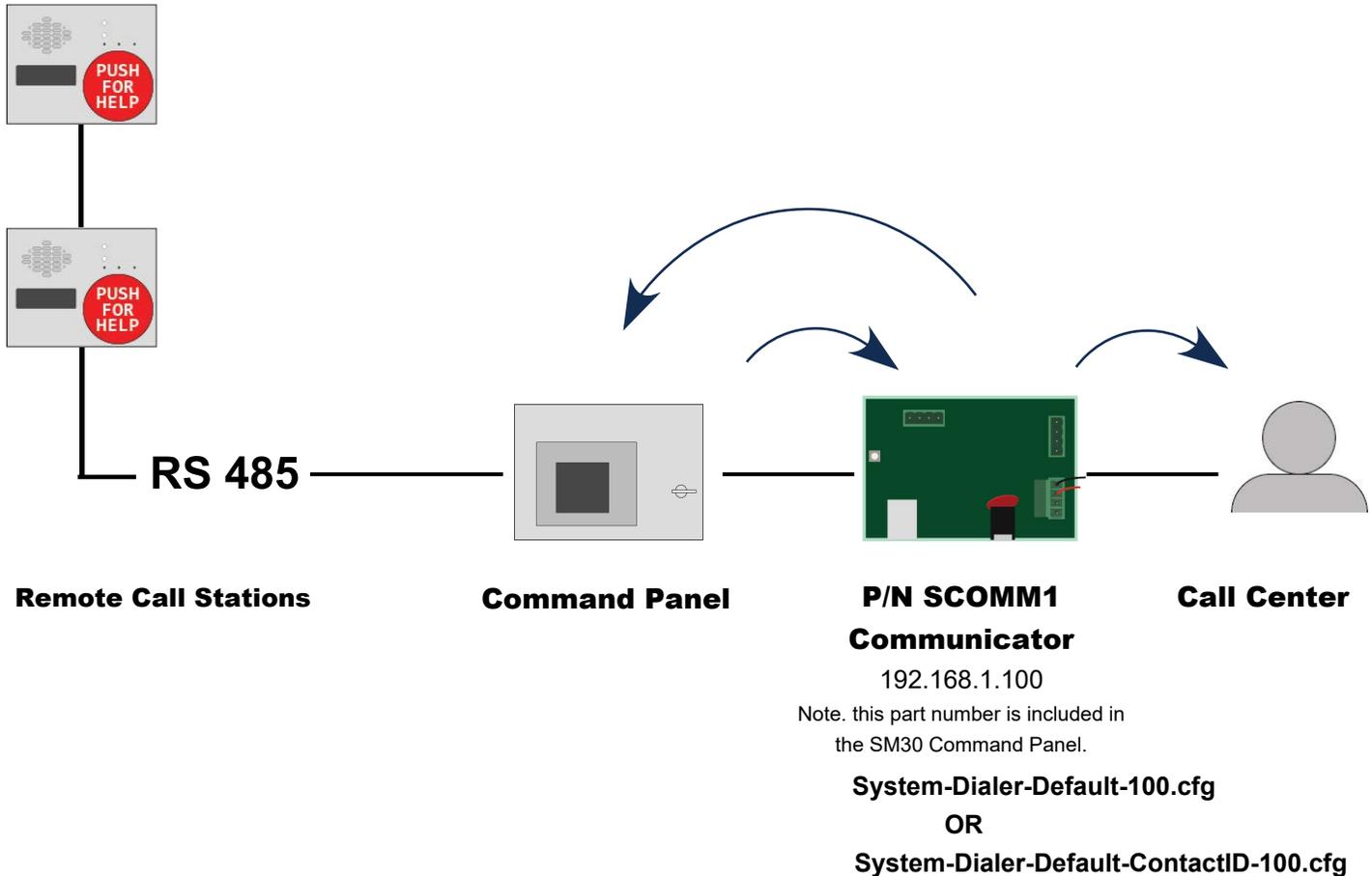
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INTRODUCTION



Description:

The purpose of the Communicator is to enable the ability for the system to dial off-site with a voice connection to the Remote Call Station in an alarm.

The Communication is half duplex. This means the Phone Operator can only either talk or listen, not both simultaneously. In order to switch between the Talk / Listen functions, press the asterisk / star key " * " on the keypad. To acknowledge and reset the call, press " 1 ".

Note: If the call is NOT reset, the system will keep dialing the number until it has been properly reset. This is to ensure the call is not dropped or interrupted and a pathway back to the remote's location is not lost.

It is recommended to send along the appropriate call sequence (Section 1.3, "Communicator Module Connections") and a zone list to the Call Center to attach to the account for the Phone Operator to see while answering a call.

1. About the Communicator

1.1: Requirements

This Communicator requires an Analog phone line. This may be supplied by the phone company, internet provider as a service, or via an analog terminal adapter.

To set up the Communicator, there are two things that must be done before hooking up the device. If you do not have access to install programs on your computer or make changes to your network adapter, see your IT administrator ahead of install. Ensure the computer being used has the DOWN Program installed.

The DOWN Program is available for download, see (Section 8, "*Resources*"). Set your computer to a static IP Address to match and use the same network as the Communicator. The default IP Address is printed on a sticker on the Ethernet port of your SHIELD device. The Communicator is configured by a computer using a standard Ethernet cable.

In order to set up the Communicator, five messages must be recorded and downloaded to the module. These messages may be done ahead of time. A recording device, such as your phone, is required to capture the messages. The Communicator will keep these messages even if the system is powered down.

1.2: Messages

Before setting up your system, contact the Call Center.

Message 0 should announce the main address. Example:

"This is an emergency call from Boston, Acorn St. 1."

Message 1 should be "Operator Talk"

Message 2 should be "Operator Listening"

Message 3 is the verification message that plays when pressing the ' 1 ' key the first time. "Press ' 1 ' again to acknowledge and end the call."

Message 4 not used

Message 5 is the message that will be played to the Central Station Operator, giving instructions on how to use the half-duplex mode.

"Press the Star key to Talk, and the Star key to listen. Press the '1' key to end communication, and the '1' key again to acknowledge and end the call.". This message must be played all the way through before the call will finally reset.

1.4: The Communicator

Remote PC Supervision LED
(Normally off, on for approximately 20 seconds after reset)

Processor Active LED
(In normal operation will blink approximately once every 2 seconds)

Power LED

NOT USED.
DO NOT CONNECT

DIP Switch

(Resets IP to Factory Default)

Test Call Button

NOT USED.
DO NOT CONNECT

24V DC

Default
MAC Address
IP Address

RJ-45 Jack
Ethernet

On Hook
LED

RJ-11 Jack
Standard POTS Line

A UL497A protector is required
to be installed on the POTS line
before leaving the building.

SPECS AND DETAILS

- Mounts in SHIELD30 Master Command Panel or Communicator Enclosure (sold separately)
- Allows emergency calls to be sent to a standard POTS Phone Line
- Set up Site-specific Messages and Instructions
 - Refer to (Section 2.1, "Messages") in this current document
- RJ-45 Ethernet Port connects Communicator with Command Panel
- Supports voice calls and Contact-ID with Voice
 - Refer to (Section 2.2b, "Configuring the System") in this current document
 - Refer to **SHIELD30-Emergency-Communication-System-Operations-Manual**
 - (Section 7.2, "Testing")
- Test Call Button - Calls to POTS Phone Line
- Operates off system 24V Regulated DC Power
- With all DIP Switches set up, uses stored memory. With them down, switches to factory settings, with the IP Address changing to ".91". Reset the Dialer or System to apply settings.

1.5: Sequence of Operation

For Messages and their contents, refer to Section 1.2, "Messages" in the **SHIELD30-Communicator-Configuration-Instructions** manual.

Call Sequence: (Non contact-ID):

1. Call from Remote Call Station is placed.
2. Communicator dials number in Configuration File.
3. Operator picks up call.
4. Communicator in Command Panel starts playing Message 0, followed by Message 5.
5. The minimum required Voice Loops will force the Messages to play a certain number of times before they can be interrupted before proceeding the call.

Note: These messages will repeat if no input is given.

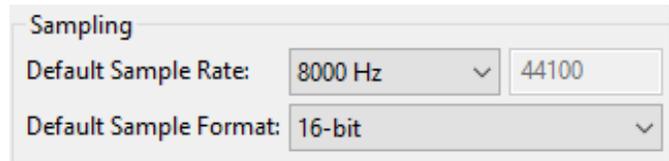
6. Operator listens to message and uses asterisk '*' key to talk.
7. Operator communicates with user at Remote using the '*' key. Each time the '*' is pressed the Operator hears Message 1 if they enable Talk, or Message 2 if they enable Listen.
8. Operator presses '*' key to stop communication. Message 3 is played. Operator presses '*' key again to acknowledge and end the call.

Note: If the '' key is not used to confirm ending the call, the system will re-dial the number until the call is acknowledged.*

2. Starting the Configuration Process

2.1: Messages

Messages are recordings that are stored in the Communicator and play on a POTS Phone Line to provide instructions and vital information to the Central Station.



The image shows a software configuration window titled "Sampling". It contains two settings: "Default Sample Rate" is set to "8000 Hz" with a dropdown arrow and the number "44100" visible in a separate box; "Default Sample Format" is set to "16-bit" with a dropdown arrow.

2.1a: Description

Recording messages may be done in many different ways. The message downloaded to the Communicator must be in the following format:
8Khz, 16bit, Mono, export as .wav

Content of the messages is described in (Section 1.2, "Messages"). The end user or Central Station and AHJ should be consulted to determine the content of the messages.

Many applications may be used to generate the files, but you must have control to save in the 8000hz, 16bit, .wav format. Recording can be done with a microphone or a smartphone. It's best to record messages in a quiet area. Once the messages have been recorded, import them to Audacity or an audio program of your choosing. Trim any 'dead air' in the beginning and / or end of the recording. 'Dead air' only adds unnecessary time to the playback. Change the bitrate to match the requirements for the Communicator. For each message, it is best to have a clear, distinct recording with no extra dead space. Using a smartphone to record then save to your computer is a great option to get a clear recording, and then trim and format appropriately in Audacity.

Steps to complete audio messages:

- A. Record and trim messages (creates appropriate .wav files)
- B. Convert to processor or format (convert .wav to .son files)
- C. Upload messages to communicator.

2.1b: Recording Messages

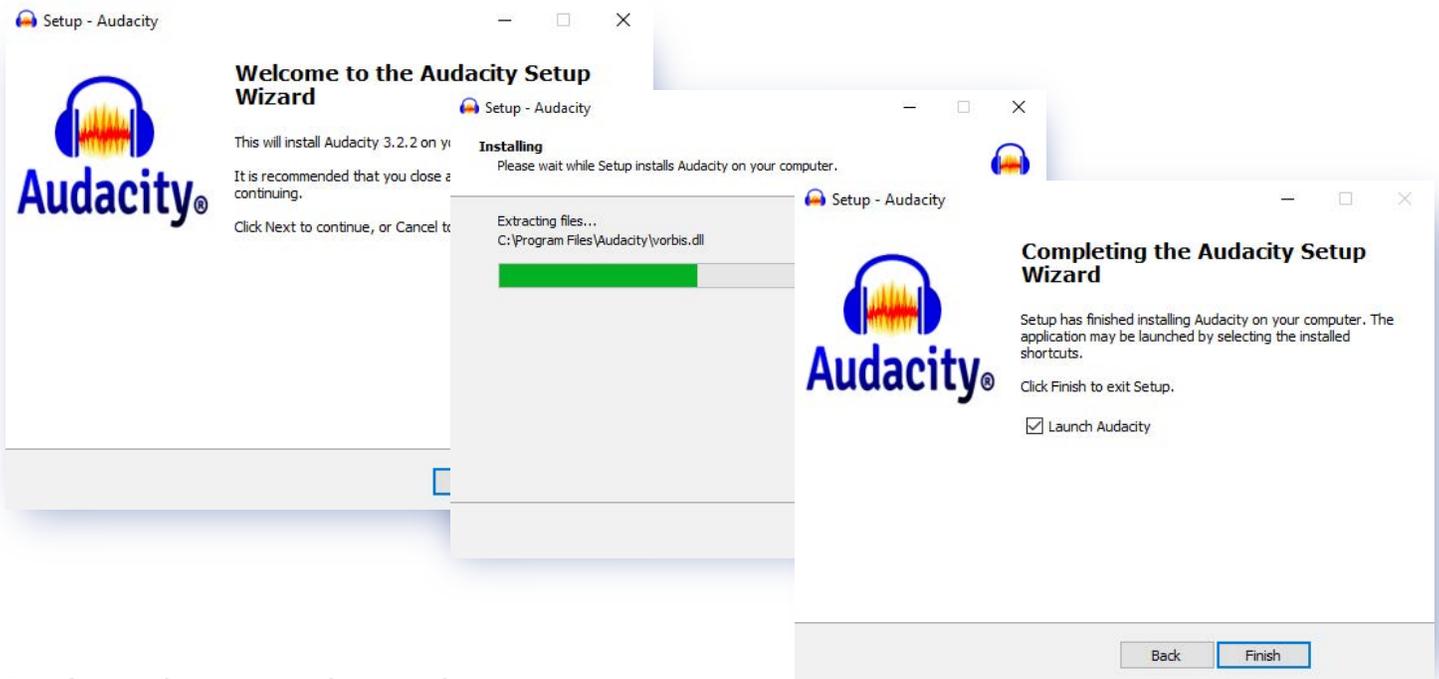
Audacity is a free, easy-to-use, multi-track audio editor and recorder for Windows, MacOS, GNU/Linux and other operating systems.

You may use ANY software available that can generate audio files with the correct sampling and bit rate.

Note: The message format before you convert it for the Communicator must be in the following format: 8Khz, 16bit, Mono, .wav

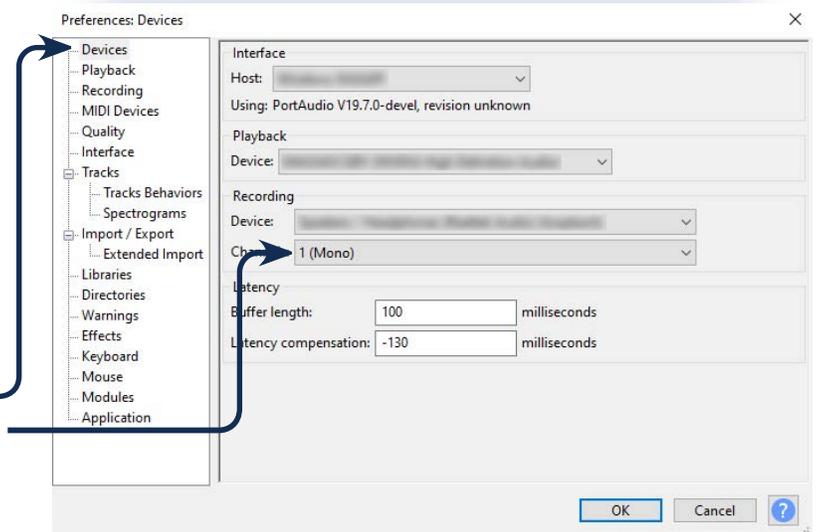
•Download and Install Audacity.

<https://www.audacityteam.org/download/>

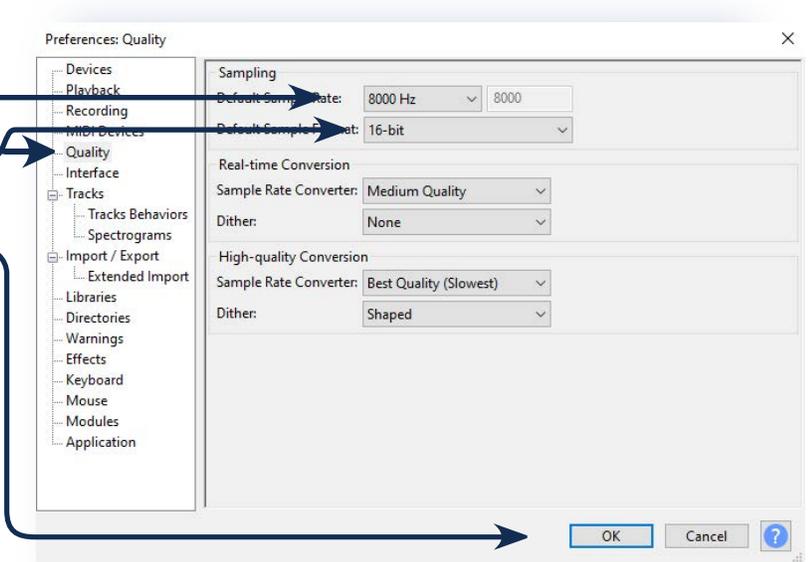


For Setup follow all of the defaults:

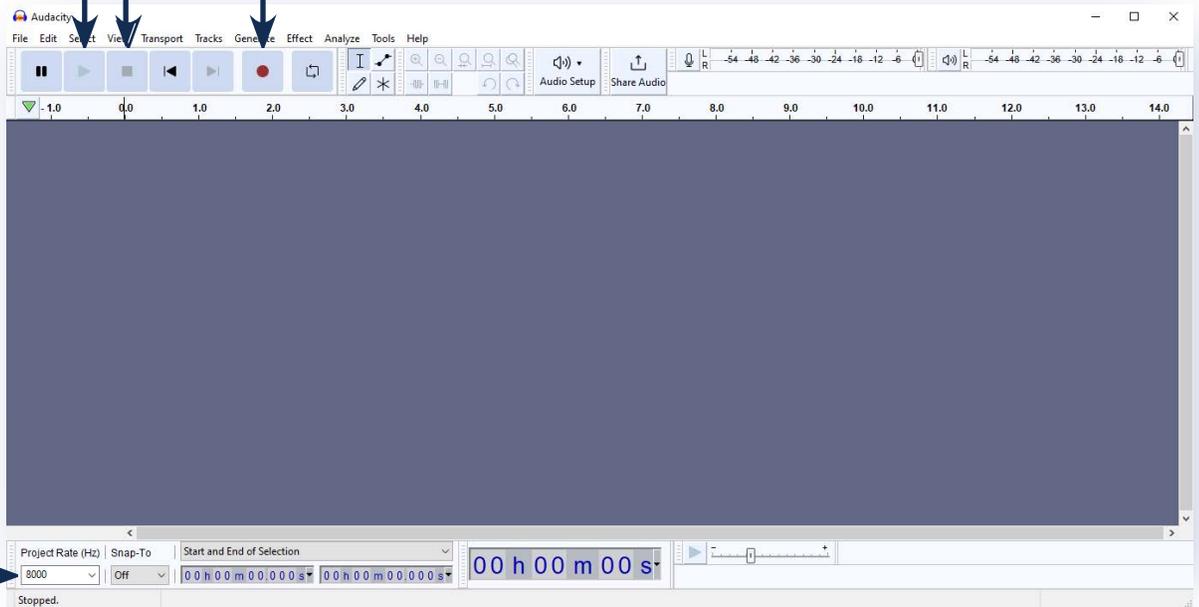
- Before Starting Audacity, create a folder in C:\visar\ called 'umessage'. This directory will be used to store all voice messages to be uploaded.
- Once you start Audacity, open the 'Edit' menu and then choose 'Preferences...' (at the very bottom)
- Under the 'Devices' section, make sure the 'Channels' is set to 1 (Mono)



- Next click on the 'Quality' section.
- Change the Sample Bitrate to 8000Hz
- Change the 'Default Sample Rate' to 16bit.
- Click on the 'OK' button to close the preferences.
- You may now record the Audio.
- Once you record the audio, save in the "C:\visar\umessage" directory as a .wav file



Play Stop Record



Project Rate (Hz):
Make sure to set this to 8000Hz before exporting your Message!

***** The files MUST be stored in the "C:\visar\umessage" directory!**

- Once the File is saved, repeat this process for message 1, 2, 3, 4 and 5.

Example Messages. See (Section 2.1e, "Upload Messages with Number Announcement") for full examples:

Message 0: Main Address. "This is an emergency call from Boston, Acorn St. 1"

Message 1: "Operator Talk".

Message 2: "Operator Listening".

Message 3: End of Call. "Press '1' key again to end the call".

Message 4: Not used.

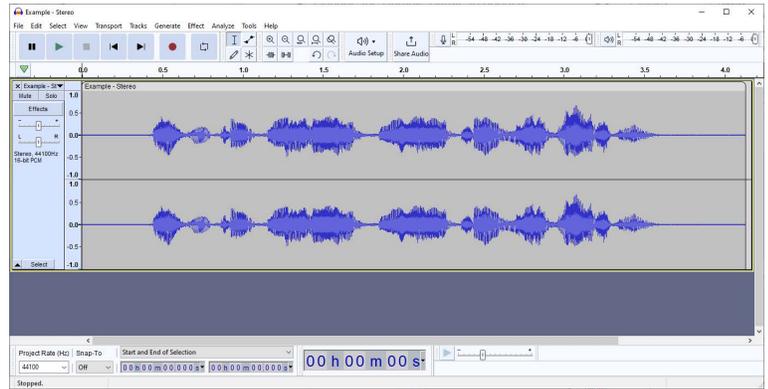
Message 5: Instruction message "Press the Star key to Talk, and the Star key to listen. Press the '1' key to end communication, and the '1' key again to acknowledge and end the call."

If you already have made recordings, such as on a different program or device, the recordings will need to be converted and exported in the appropriate format as specified above: **Mono, 16-bit, 8000Hz, .WAV format.**

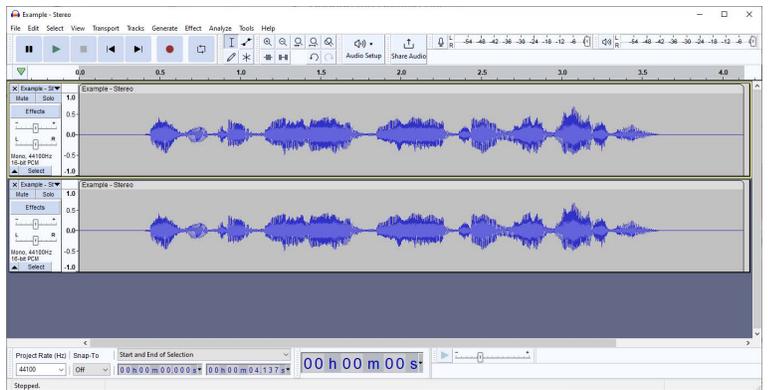
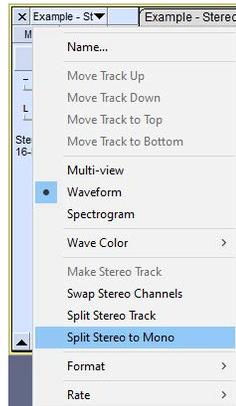
Note: Most programs and modern devices will record audio in Stereo instead of Mono.

To convert recordings from Stereo to Mono:

*Drag and drop the recording into Audacity. Since this is a Stereo Track, it will appear as two lines.

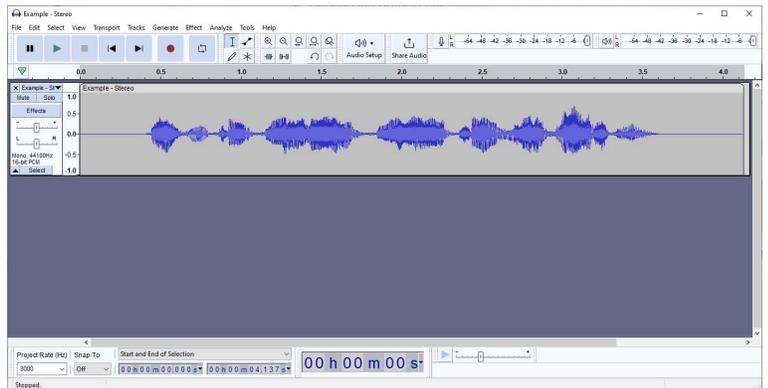


*Towards the left, on the Track, click on the small black arrow and a drop-down menu will appear. Select 'Split Stereo to Mono'.



The Track will now split into two separate Tracks, creating Mono Tracks.

*Delete one of them by clicking the little 'X' on the Track across from the arrow.



Example - Mono.wav
Example - Stereo.wav

65 KB
713 KB

Example - Mono.son
Example - Mono.wav

17 KB
65 KB

To ensure the recording has been converted to the appropriate format, a quick way to tell is to refer to its file size. Depending on how long the recording is, if the Mono .WAV file is less than 100 KBs, you may proceed with converting the .WAV into a .son.

2.1c: Conversion

- Now run the ADPCM converter from:
C:\visar\bin\AdpcmConverter.exe



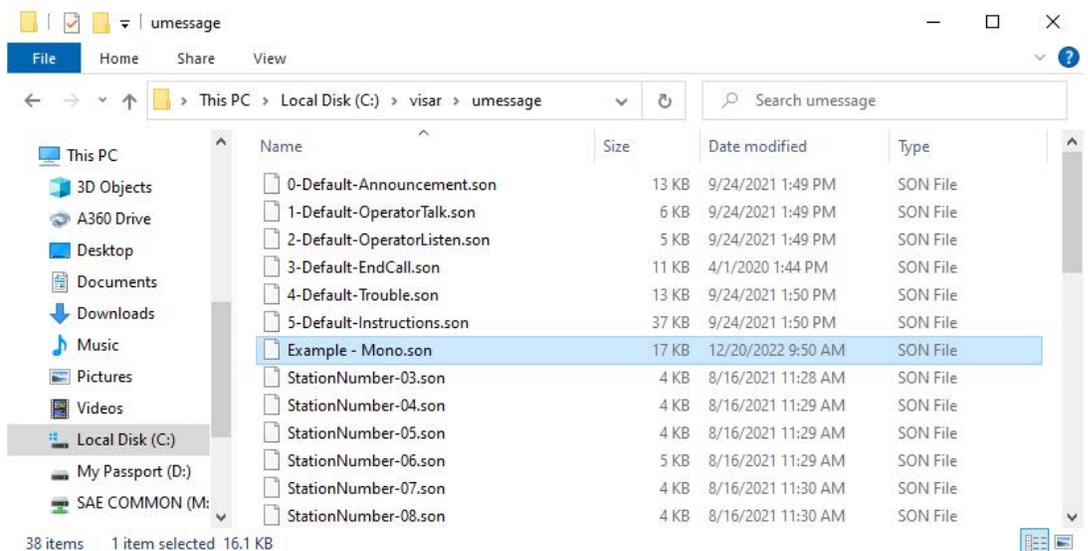
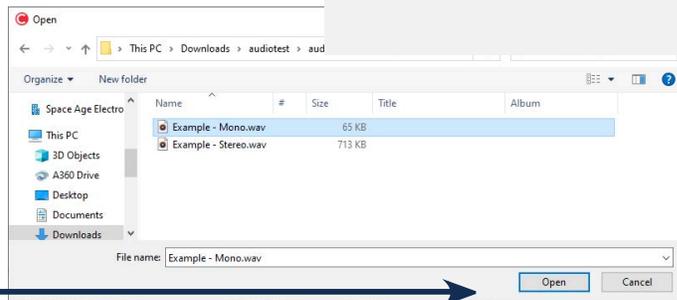
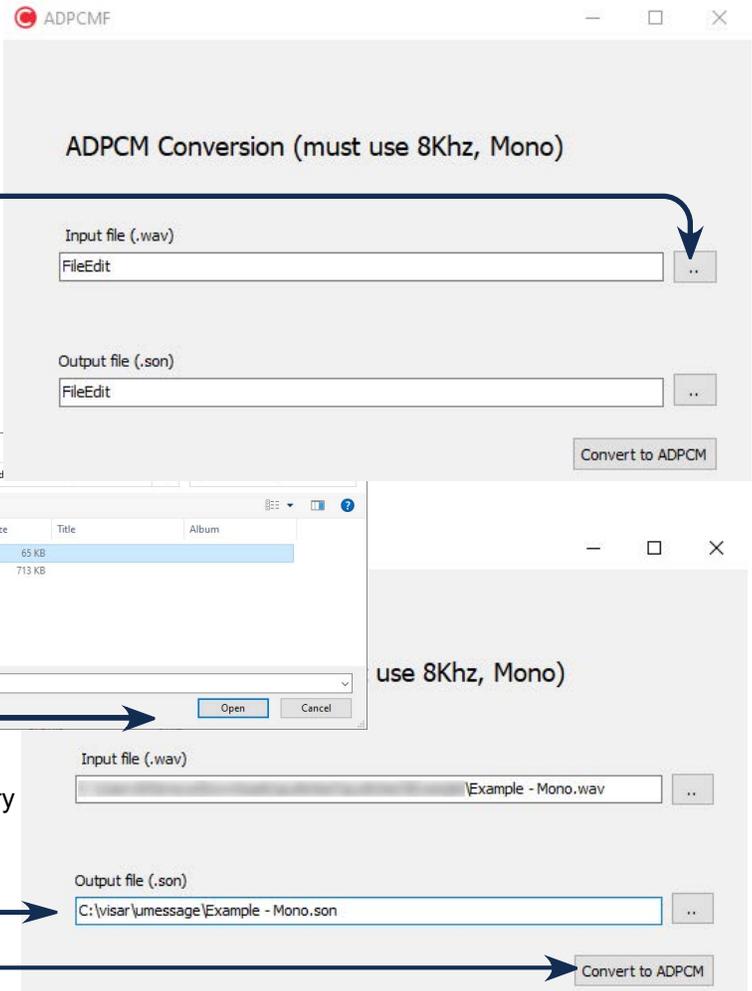
- This program converts the file into a format the dialer can play back.

- Click on the browse button next to "Input File".

- Navigate to the previously recorded message and select open.

- This will fill in the output file name in the same directory as the input file and update the extension to .son

- Click the convert to ADPCM button, and you will see the new file appear in the directory.

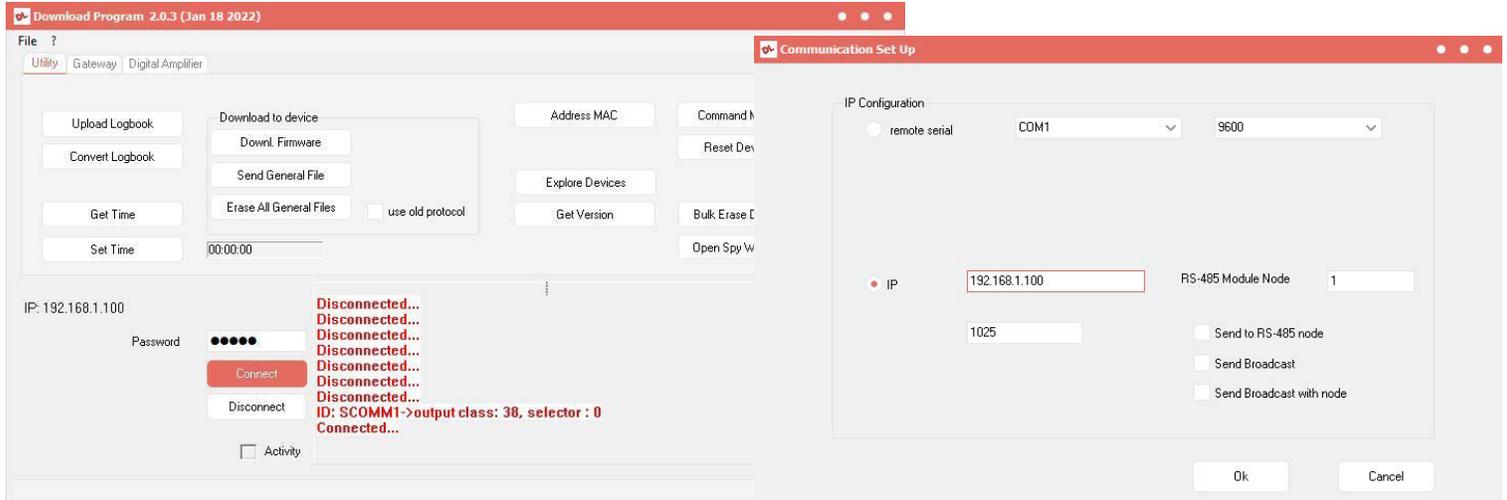


2.1d: Upload Messages

Now it is time to run the Down Program and configure the device. Execute the DOWN Program from the Desktop Icon. Instructions for installing the Down Program may be found in the [SHIELD30-DOWN-Program-Installation-and-Setup-Guide](#) which may be found in the Dropbox:

<https://www.1sae.com/lifeguard-networks>

First, we must connect to the Communicator, the module that connects directly to the phone line. This is the module the messages will be uploaded to.



Main Screen

Configuration Menu

- Go to File > Configuration Menu
- Select 'IP'
- In the field, type in the IP Address of the target module. In this instance, we are connecting to the Dialer, 192.168.1.100. The factory default address is 192.168.1.100 This is the IP address of the Communicator
- Leave everything else be and click 'OK' to refer back to the Main Screen.
- Enter the password '33333' (five 3's) in the 'Password' field.
- Click the 'Connect' button.
- Once connect, the text in the console area will turn red and the message 'Connected...' appears.
- Next, at the Main Screen navigate to the 'Digital Amplifier' tab, then click on the 'VoiceMessages' icon.
- This will open the Voice Messages window.



- After the first five Messages, under 'Start of Station Messages', you can scroll through the individual available audio files. This is also how you can select and upload custom messages to certain Remote Call Stations, for instance, the locations of these Remotes.
- Click 'Load Directory'. All of the recorded messages in the **C:\visar\umessage** folder will be listed.
- Once complete, click 'Ok'.

Note: If you choose to select one Message, any blank fields will not remove the corresponding Message on the Dialer.

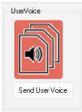
| File Name | File Content | Duration(s) |
|--------------------------------|--------------|-------------|
| 0 0-Default-Announcement.son | | 4 |
| 1 1-Default-OperatorTalk.son | | 2 |
| 2 2-Default-OperatorListen.son | | 2 |
| 3 3-Default-EndCall.son | | 3 |
| 4 4-Default-Trouble.son | | 4 |
| 5 5-Default-Instructions.son | | 10 |
| Start of station messages | | |
| 3 StationNumber-03.son | | 1 |
| 4 StationNumber-04.son | | 1 |
| 5 StationNumber-05.son | | 1 |
| 6 StationNumber-06.son | | 2 |
| 7 StationNumber-07.son | | 1 |
| 8 StationNumber-08.son | | 1 |
| 9 StationNumber-09.son | | 2 |
| 10 StationNumber-10.son | | 2 |
| 11 StationNumber-11.son | | 1 |
| 12 StationNumber-12.son | | 2 |
| 13 StationNumber-13.son | | 2 |
| 14 StationNumber-14.son | | 2 |
| 15 StationNumber-15.son | | 2 |
| 16 StationNumber-16.son | | 2 |
| 17 StationNumber-17.son | | 2 |
| 18 StationNumber-18.son | | 2 |
| 19 StationNumber-19.son | | 2 |
| 20 StationNumber-20.son | | 2 |
| 21 StationNumber-21.son | | 2 |
| 22 StationNumber-22.son | | 2 |
| 23 StationNumber-23.son | | 2 |
| 24 StationNumber-24.son | | 2 |
| 25 StationNumber-25.son | | 2 |
| 26 StationNumber-26.son | | 2 |
| 27 StationNumber-27.son | | 2 |
| 28 StationNumber-28.son | | 2 |
| 29 StationNumber-29.son | | 2 |
| 30 StationNumber-30.son | | 1 |
| 31 | | 0 |
| 32 | | 0 |

Voice Messages

C:\N
visar
UMESSAGE

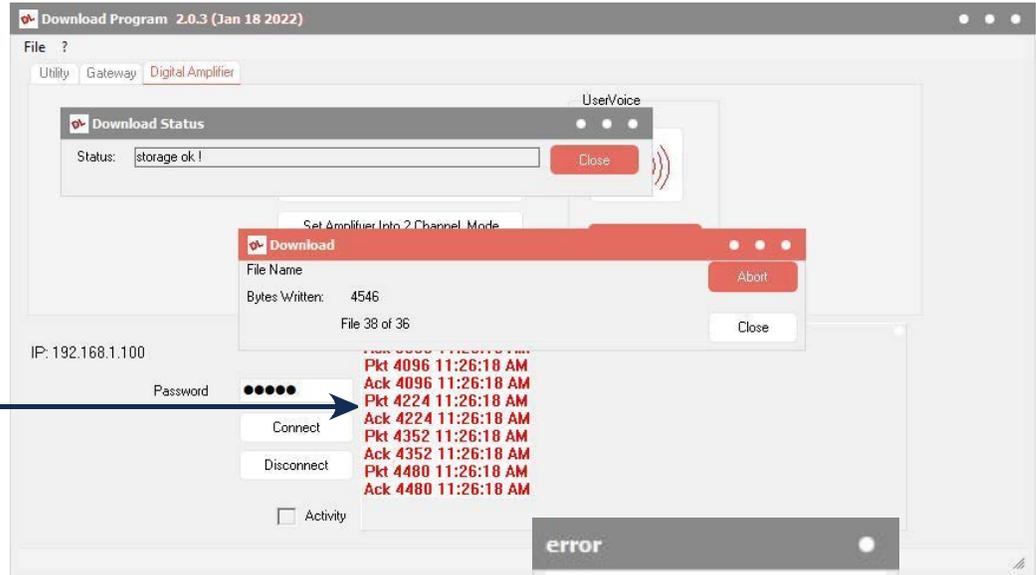
Load Directory

Ok
Cancel
Print



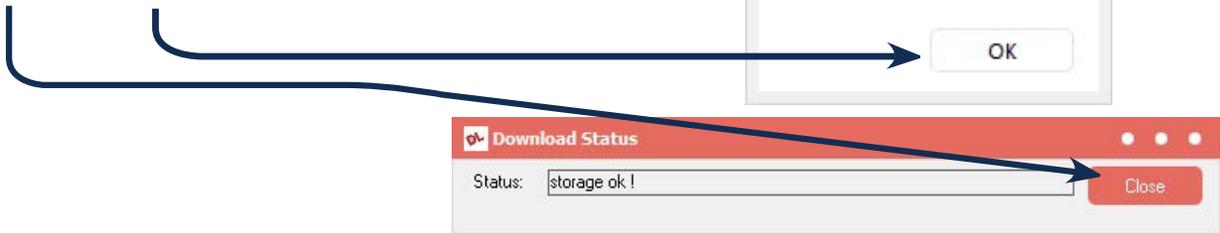
- Next, click the 'Send User Voice' button.
This will upload all of the messages to the Communicator.

Note: During upload, it will send each file one after another. The Download Status dialogue box will pop up after every file has been uploaded. Do NOT click any dialog boxes until it completes all files.



Note: During upload it will scroll through the packets being sent for each file. This is a good indicator all is working.

- Once complete, errors will appear. This is normal.
Press 'Close' and 'OK' on the final dialogue boxes.



If 'File xx of xx' exceeds the number of messages you are uploading (in this case 38 of 36), then the uploading process was a success!

Once messages are uploaded, the Communicator will immediately use them. Resetting the device is not required at this time.

2.1e: Upload Messages with Number Announcement

Uploading messages with the number announcement is very similar to the previous method, except selecting the additional messages. Note the order is critical:

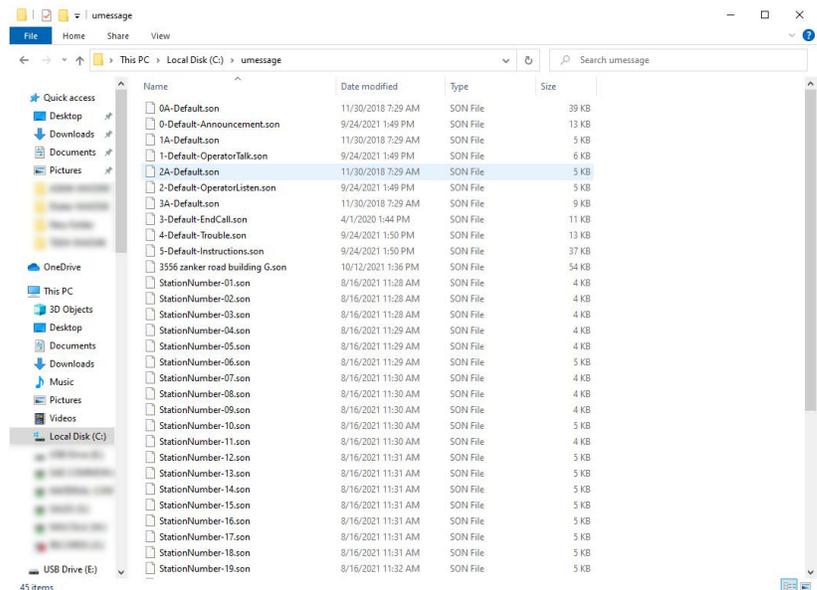
File Name Message

- 0 'Emergency Communication System has been activated'
- 1 'Clear to Talk'
- 2 'Now Listen'
- 3 'End Call'
- 4 Trouble Message
- 5 Instructions
- 6 'Three'
- 7 'Four'
- 8 'Five'
- 9 'Six'
- 10 'Seven'
- 11 'Eight'
- 12 'Nine'
- 13 'Ten'
- 14 'Eleven'
- 15 'Twelve'
- 16 'Thirteen'
- 17 'Fourteen'
- 18 'Fifteen'
- 19 'Sixteen'
- 20 'Seventeen'
- 21 'Eighteen'
- 22 'Nineteen'
- 23 'Twenty'
- 24 'Twenty-One'
- 25 'Twenty-Two'
- 26 'Twenty-Three'
- 27 'Twenty-Four'
- 28 'Twenty-Five'
- 29 'Twenty-Six'
- 30 'Twenty-Seven'
- 31 'Twenty-Eight'
- 32 'Twenty-nine'
- 33 'Thirty'

| File Name | File Content | Duration(s) |
|--------------------------------|--------------|-------------|
| 0 0-Default-Announcement.son | | 4 |
| 1 1-Default-OperatorTalk.son | | 2 |
| 2 2-Default-OperatorListen.son | | 2 |
| 3 3-Default-EndCall.son | | 3 |
| 4 4-Default-Trouble.son | | 4 |
| 5 5-Default-Instructions.son | | 10 |
| Start of station messages | | |
| 3 StationNumber-03.son | | 1 |
| 4 StationNumber-04.son | | 1 |
| 5 StationNumber-05.son | | 1 |
| 6 StationNumber-06.son | | 2 |
| 7 StationNumber-07.son | | 1 |
| 8 StationNumber-08.son | | 1 |
| 9 StationNumber-09.son | | 2 |
| 10 StationNumber-10.son | | 2 |
| 11 StationNumber-11.son | | 2 |
| 12 StationNumber-12.son | | 1 |
| 13 StationNumber-13.son | | 2 |
| 14 StationNumber-14.son | | 2 |
| 15 StationNumber-15.son | | 2 |
| 16 StationNumber-16.son | | 2 |
| 17 StationNumber-17.son | | 2 |
| 18 StationNumber-18.son | | 2 |
| 19 StationNumber-19.son | | 2 |
| 20 StationNumber-20.son | | 2 |
| 21 StationNumber-21.son | | 2 |
| 22 StationNumber-22.son | | 2 |
| 23 StationNumber-23.son | | 2 |
| 24 StationNumber-24.son | | 2 |
| 25 StationNumber-25.son | | 2 |
| 26 StationNumber-26.son | | 2 |
| 27 StationNumber-27.son | | 2 |
| 28 StationNumber-28.son | | 2 |
| 29 StationNumber-29.son | | 2 |
| 30 StationNumber-30.son | | 1 |
| 31 StationNumber-31.son | | 2 |
| 32 StationNumber-32.son | | 2 |

Voice Messages

c:\
visar
UMESSAGE



2.2: Configuration Files

2.2a: Description

The Communicator uses a Configuration File (.cfg) to configure the IP address of the Master and Communicator defaults.

The Communicator may be connected directly to the Master or through a standard Ethernet network. If it is necessary to configure through a firewall, the default port is UDP - 1025.

In the following Example, the IP address of the Master is 192.168.1.90 /1025

And the IP address of the Communicator is: 192.168.1.100 /1025

The system-Dilaer-Default-100.cfg of the Communicator includes:

/MEMBER_IP and /VOICE_IP

Defines the CP on the network. Multiple CP's may be defined to use a single dialer.

/SYSTEM_POLLING

Should remain un-touched.

/DIAL_NUMBER

Must be updated to the target for the site.

/DIAL_WAIT

the number of seconds the dialer will wait to call out on the POTS line if the Command Panel does not acknowledge the call coming from a Remote Call Station. This may be from 1 to 1800 seconds.

/LINE_IN_DB_AUDIO

***Set to*default, only change if necessary**

This function allows the input volume to be adjustable. (0 - 32)

/VOLUME_HP_PERCENT

***Set to default, only change if necessary**

The amplitude of the audio transmitted to the POTS phone. unless necessary, this should remain at 125

Note: Both functions /LINE_IN_DB_AUDIO and /VOLUME_HP_PERCENT use logarithmic numbers, not linear!

Note: An 'x' after any backslash will comment out the line, disabling that function, as shown in this example.

See (Sections 1.3, "Contact-ID" and 2.2b, "Configuring the System") for Contact-ID Example.

All of the Configuration Files are available for download. See (Section 8, "Resources").

There are additional functions that can be used in the Configuration Files.

These functions include: Note, Changing any of these settings is outside of the UL

/DTMFDURATION 125

Duration of dial tones.

/DTMFMARK 125

Duration of time between dial tones.

/DTMFAMPLITUDE 110

Volume of dial tones.

/DIAL_PERIODIC_REPORT_PERIOD_MINUTES 10

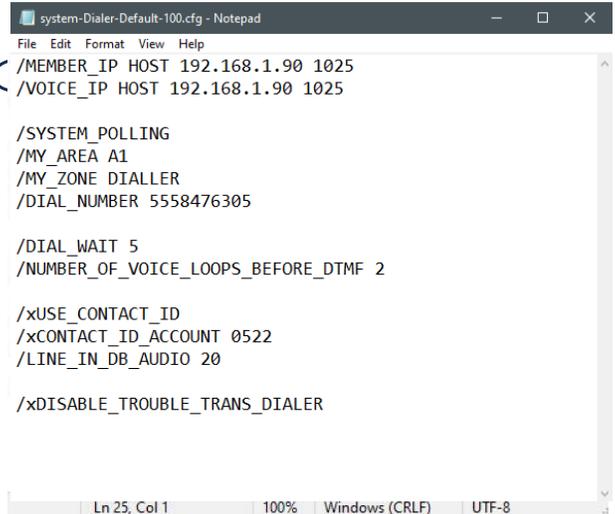
The Command Panel will dial the Central Station every 10 minutes to check in. See (Section 2.2b, "Configuring the System") for one set to check in every 24 hours.

/NUMBER_OF_VOICE_LOOPS_BEFORE_DTMF

The number of times required to listen to the informational and instruction messages when answering the phone line before they can be interrupted to start the call. If set to 1, the phone operator can immediately interrupt the messages any time by pressing the * key. If set to 2, the operator must listen to the messages all the way through at least once before they can be interrupted. Any greater than 2 adds an additional loop before the messages can be interrupted.

/xDISABLE_TROUBLE_TRANS_DIALER

Disables Trouble errors at the Command Panel in relation to the Communicator.



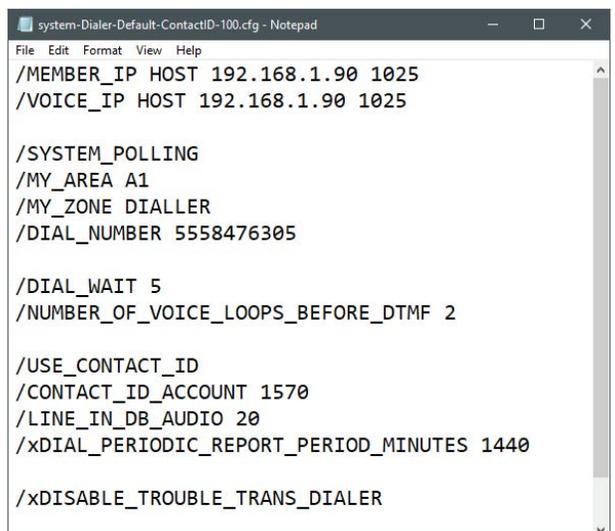
```
system-Dialer-Default-100.cfg - Notepad
File Edit Format View Help
/MEMBER_IP HOST 192.168.1.90 1025
/VOICE_IP HOST 192.168.1.90 1025

/SYSTEM_POLLING
/MY_AREA A1
/MY_ZONE DIALLER
/DIAL_NUMBER 5558476305

/DIAL_WAIT 5
/NUMBER_OF_VOICE_LOOPS_BEFORE_DTMF 2

/xUSE_CONTACT_ID
/xCONTACT_ID_ACCOUNT 0522
/LINE_IN_DB_AUDIO 20

/xDISABLE_TROUBLE_TRANS_DIALER
Ln 25, Col 1 100% Windows (CRLF) UTF-8
```



```
system-Dialer-Default-ContactID-100.cfg - Notepad
File Edit Format View Help
/MEMBER_IP HOST 192.168.1.90 1025
/VOICE_IP HOST 192.168.1.90 1025

/SYSTEM_POLLING
/MY_AREA A1
/MY_ZONE DIALLER
/DIAL_NUMBER 5558476305

/DIAL_WAIT 5
/NUMBER_OF_VOICE_LOOPS_BEFORE_DTMF 2

/USE_CONTACT_ID
/CONTACT_ID_ACCOUNT 1570
/LINE_IN_DB_AUDIO 20
/xDIAL_PERIODIC_REPORT_PERIOD_MINUTES 1440

/xDISABLE_TROUBLE_TRANS_DIALER
```

2.2b: Configuring the System

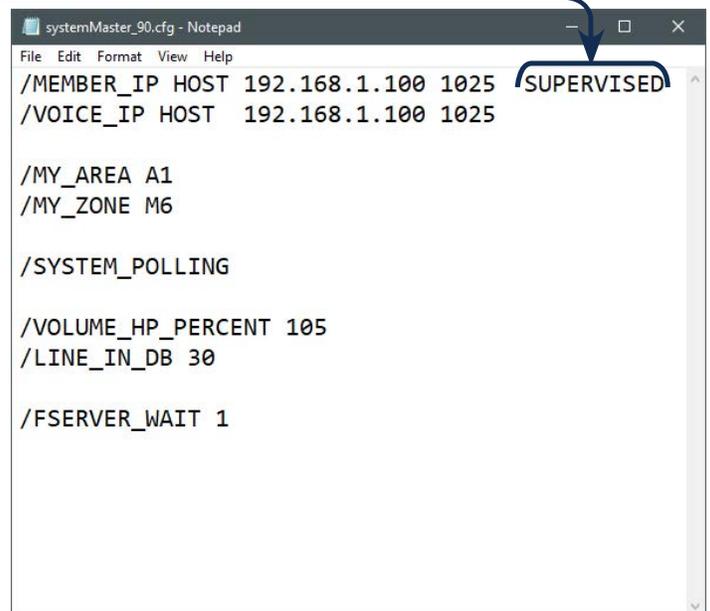
Configuration for the Master

The systemMaster_90.cfg of the Command Panel:

/MEMBER_IP and /VOICE_IP

Defines the Communicator address. The **SUPERVISED** tag tells the Master to supervise the Communicator and Report an error event if the Communicator goes offline or if the phone line is un-plugged.

Note: without the 'SUPERVISED' tag, this is the default configuration for the Command Panel. You should not need to adjust the Command Panel's Configuration File except to add the 'Supervised' tag or change IP settings from default.



```
systemMaster_90.cfg - Notepad
File Edit Format View Help
/MEMBER_IP HOST 192.168.1.100 1025 SUPERVISED
/VOICE_IP HOST 192.168.1.100 1025

/MY_AREA A1
/MY_ZONE M6

/SYSTEM_POLLING

/VOLUME_HP_PERCENT 105
/LINE_IN_DB 30

/FSERVER_WAIT 1
```

Note: If changing the IP addresses of either module, update the /MEMBER_IP and /VOICE_IP in the configuration files to match the new IP Addresses. Also perform this task when working with a setup using multiple Command Panels and/or Relays.

Note: Uploading the Configuration Files to the modules will not be possible without the device connected to a phone line!

2.2c: Upload Configuration File via the DOWN Program

Each configuration should be uploaded to the associated device.
When saving the files, any name is acceptable as long as it uses the .cfg extension.

•Using the Down Program connect to the target device and select 'Send General File'.

•Use the browse button to select the file.

•In the dialog box select the 'File Name Translation' and choose 'system.cfg' from the pulldown. then press the "OK" button. Wait for the dialog to pop up for "Download Complete".

•Once complete, click 'Disconnect' and then select 'Reset Device' to have it read in the new configuration. A hard reset (turning the power off and on) is also recommended. Repeat this process for the other module.

Note: Using system-Dialer-Default-100.cfg and systemMaster_90.cfg is recommended.

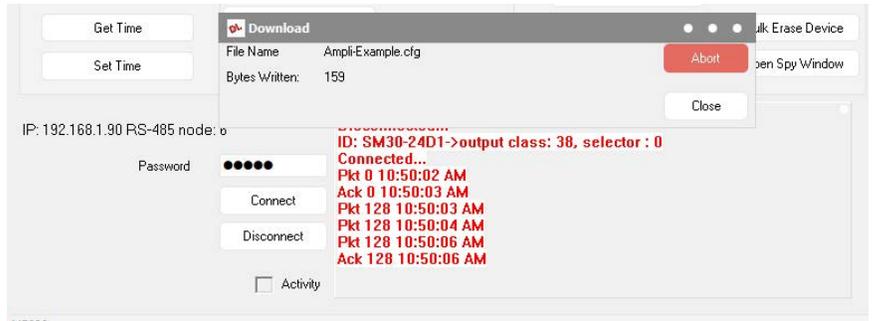
If multiple Command Panel devices are being used, label each device's Configuration Files to match its designated location.

Example: "systemMaster_Airport_90.cfg"

For an example of a Multi-Command Panel setup, refer to (Section 2.4b, "Multiple Command Panels Setup").

Labeling Remote Call Stations (Continued)

Label downloading...



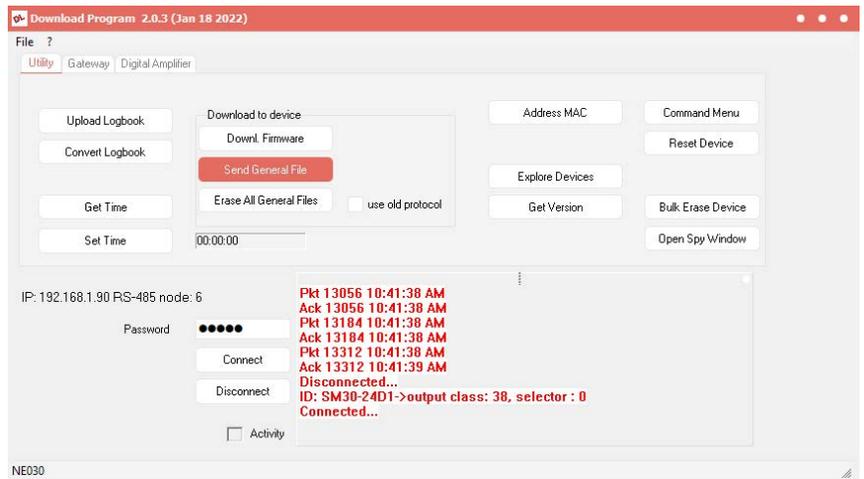
Download Completed!

Once finished, close the Download windows and restart the device.

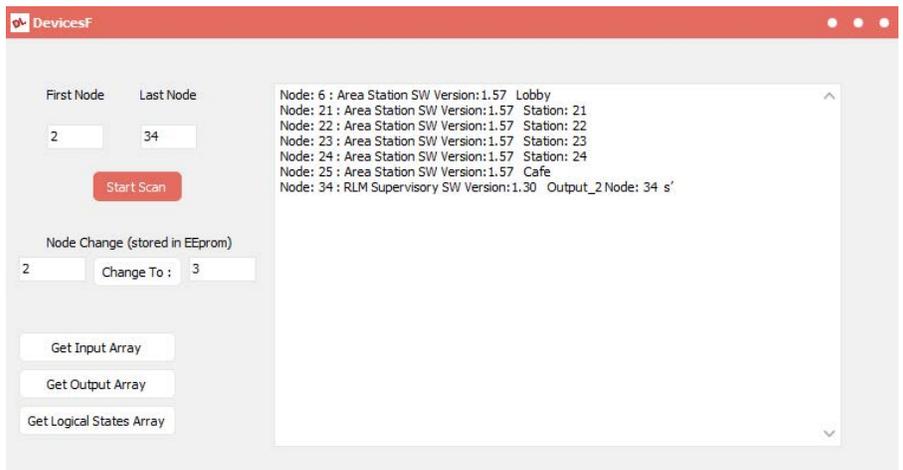


Referring back to the main screen, reconnect to the Remote Call Station and hit 'Explore Devices'.

In the Explore Devices screen, hit 'Start Scan' and wait for the DOWN Program to load all the connected Modules in your setup.



Command Panel View
After pressing '6' on Main Screen



Explore Devices View

2.2d: Creating Configuration Files

When creating Configuration Files for your Device, it is important to note the file extension. With File Name Extensions turned off, the file extension can still be seen in the top-left corner of the notepad.

When saving, be sure to switch the "Save as type:" from "Text Documents (*.txt)" to "All Files (*.*)", then type in ".cfg" at the end of the file name.

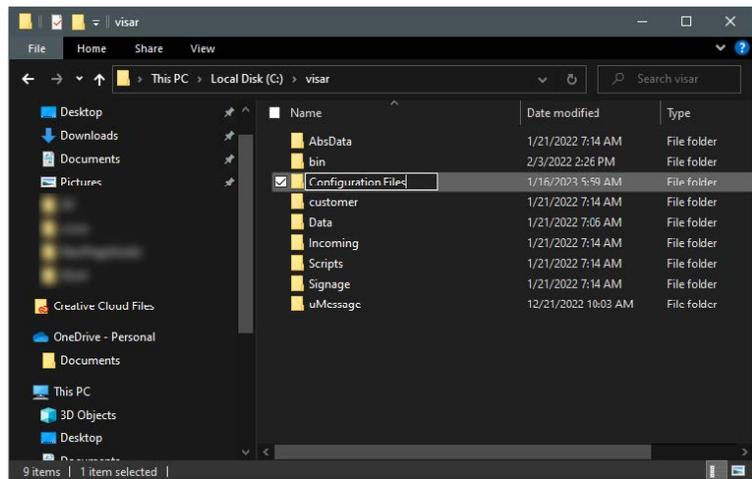
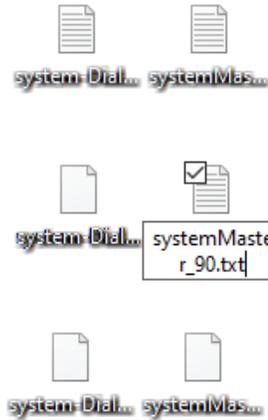
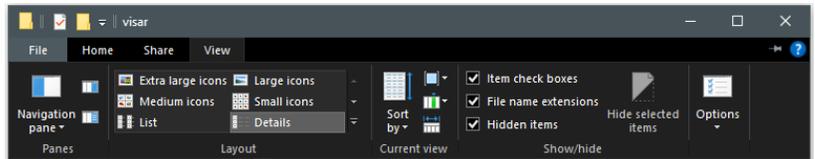
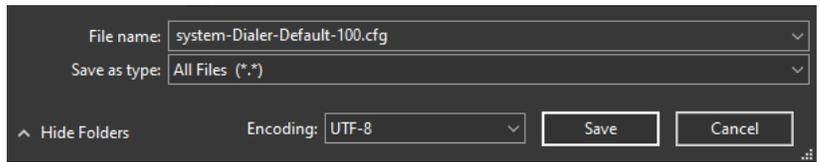
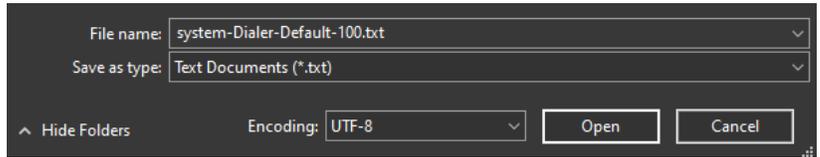
If you wish to turn on File Name Extensions, open File Explorer, click "View" towards the top of the window, then check "File name extensions."

With this feature on, you can also change the file extension without needing to open it. This method can be done both on the desktop and the file explorer.

Right-click on the file, select "Rename," then replace its original file extension with the desired one.

Note: Windows will give you a warning popup informing that changing certain files this way could corrupt it. This is **not** a concern when dealing with .txt and .cfg files.

For best practices, we recommend creating a folder either on the desktop or in the "C:/Visar" folder to store the Configuration Files.



2.3 Updating IP Parameters (Continued)

Opening the DOWN Program, type in the password, "33333", then navigate to: File > Configuration Menu.

Configuration Screen on the Command Panel. This screen can be found under: Menu > Config.



Default MAC and IP Master Module

As we can see here, this Command Panel's IP Parameters are currently set to its default, **192.168.1.90**

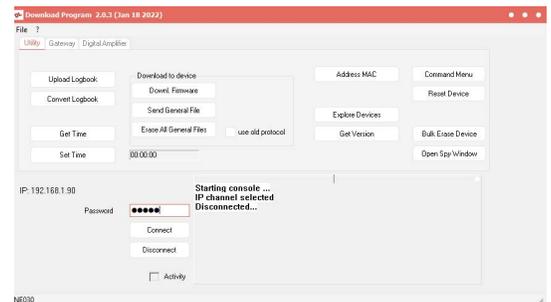
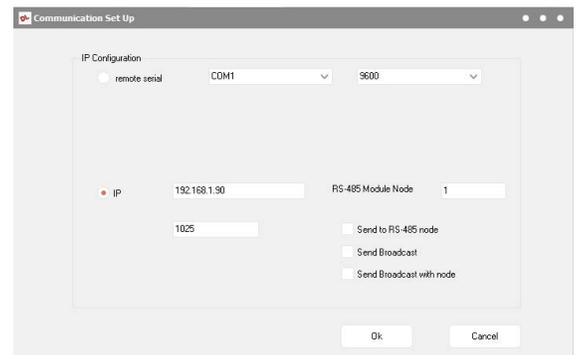
Connect to the desired Module you wish to change the IP Parameters of.

In this example, we are connecting to the Master Module. It's currently set to its default IP, "162.198.1.90".

We want to change the end of the IP address from ".90" to ".94".

Click "Ok".

Back in the main screen, click 'Connect', then select the 'Gateway' tab towards the top of the screen.

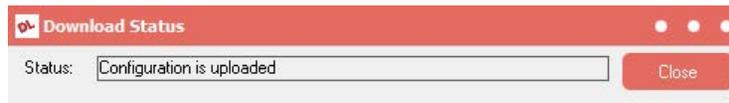


2.3 Updating IP Parameters (Continued)

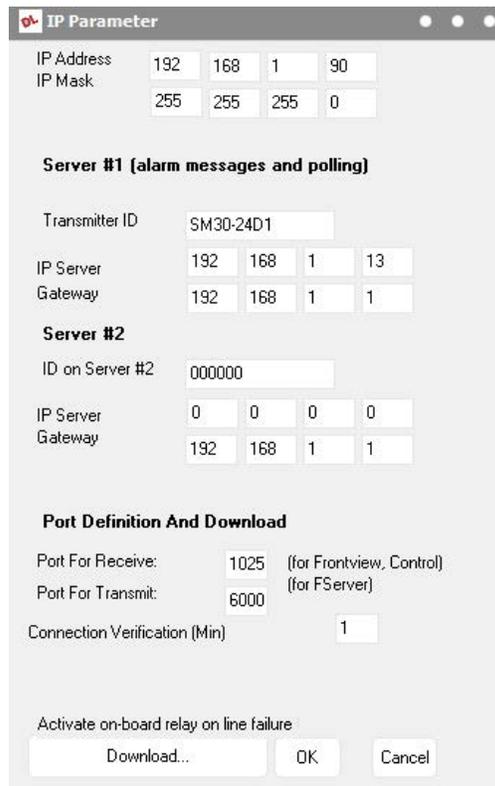
While connected to the device, select 'Get Main Configuration'.



A window saying "Configuration Uploaded" will appear. Close it, then select the TCP/IP button.



In 'IP Address', type in the new desired IP.



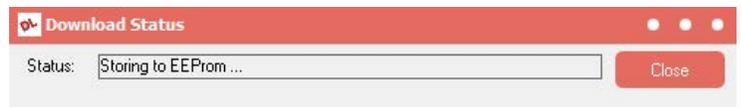
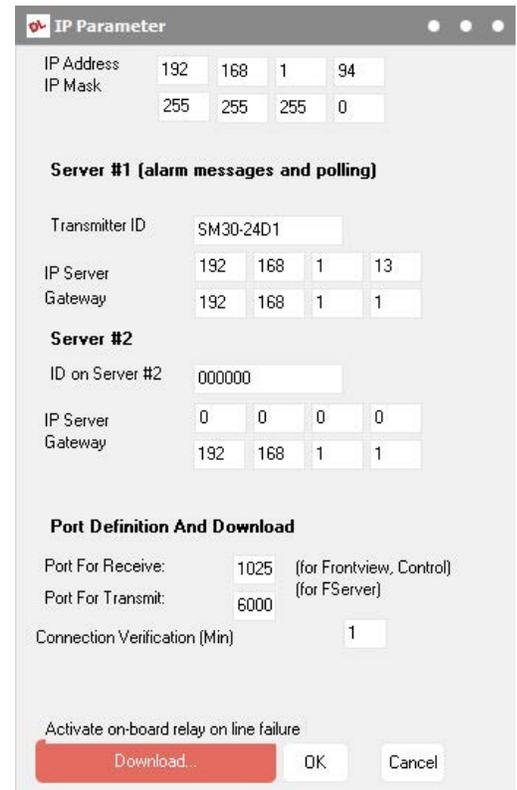
You may also change the Transmitter ID, which is the name of the Communicator Module. This name can be found in the DOWN Program's main screen and the Device Scan.

Make other changes as necessary to your setup.

Once finished, click on the 'Download' button.

When updating IP Parameters to the Master Module, it takes approximately 65 seconds total for the changes to finish uploading. Within 12 seconds of uploading, the Command Panel will reset itself.

Note:
Currently, in DOWN Program version Jan 18, 2022, there is a visual error which reads "Download FAILED! Check Password!" This is only a visual bug in the program and has no functional effect on the system.

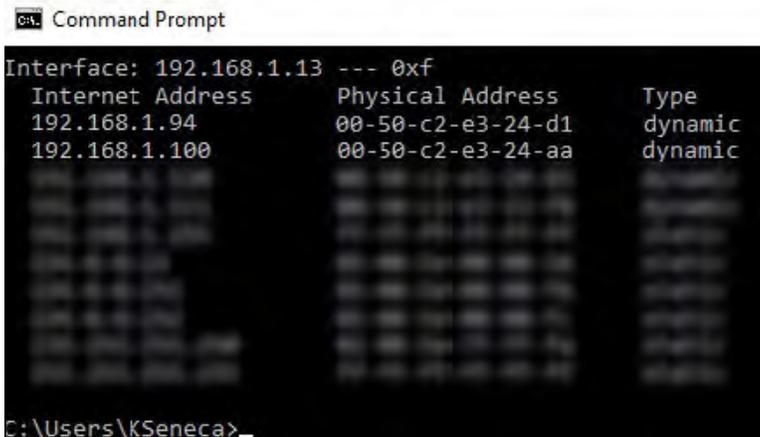
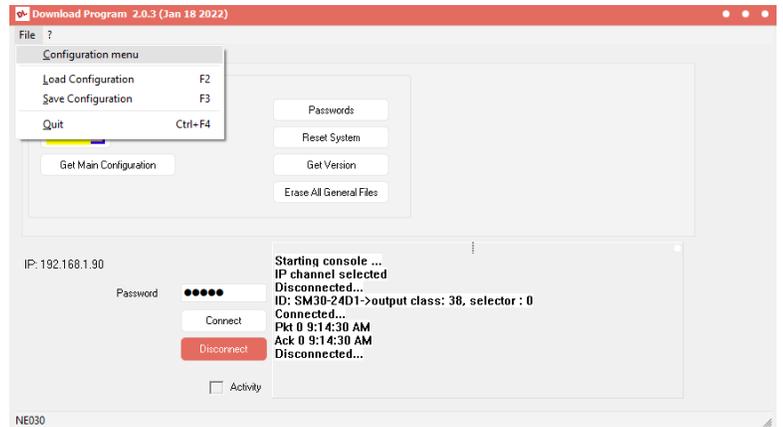


2.3 Updating IP Parameters (Continued)

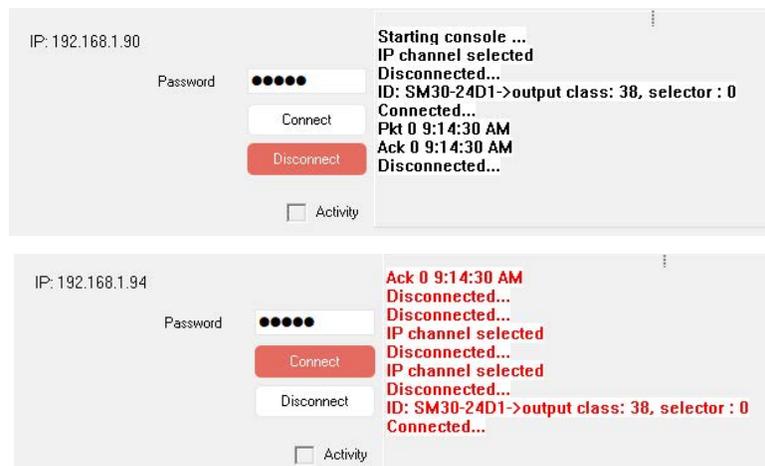
Once the changes have finished uploading, close all the Download and TCP/IP windows and refer back to the main window.

Check the Command Panel and refer to its Configuration Screen to see the updated IP.

You can also check by entering the 'arp -g' command using the CMD Prompt.



Go into the Configuration Menu and switch to the new IP Address.



Note: Whatever changes are being made to the IP Address must also match in their Configuration Files!

```
system-Dialer-Default-100(2).cfg - Notepad
File Edit Format View Help
/MEMBER_IP HOST 192.168.1.90 1025
/VOICE_IP HOST 192.168.1.90 1025
```

Default Communicator Configuration File

```
*system-Dialer-Default-100(2).cfg - Notepad
File Edit Format View Help
/MEMBER_IP HOST 192.168.1.94 1025
/VOICE_IP HOST 192.168.1.94 1025
```

Modified Communicator Configuration File

5. Summarized Workflows

*This section goes over all the previous steps in a condensed format.
For visual steps, refer to Sections 2 thru 4.*

5.1: Uploading Messages (Summarized)

1. Launch the DOWN Program and Connect to the **Communicator Module**
 - a. The Messages get stored on the Communicator Module while the Master Module handles their execution.
2. Navigate to the **Digital Amplifier > Voice Messages icon**
 - a. Select each individual field and assign Messages to their corresponding Station Number,

OR...
 - b. If quick-loading Messages with the Voice.ini file, select "Load Directory" and wait for the list to populate with all messages written in that file.
 - i. *Note: Messages 0 - 5 are reserved for Announcement and Instructions. The order is critical!*
 - c. Select "OK and refer back to the Digital Amplifier tab.
3. Upload the Messages to **Communicator**
 - a. Select "Send User Voice". A dialogue box will pop up. select 'OK' to continue.
 - b. A message will appear every time each file has been uploaded to the Communicator. Leaving these windows alone will *not* stall the uploading process, so they can all be closed at once when finished.

5.2: Uploading Configuration File (Summarized)

1. Launch the DOWN Program and Connect to the **Target Module**
 - a. Master, Communicator, Remote Processor (RCS)
2. From the Main Menu, select "Send General File" and search for the appropriate Configuration Files (.cfg) that goes with the correct Module.
 - a. At the "Download File" window...
 - i. If uploading to Master, Remote Processor and Communicator Modules, select "TSD -> system.cfg, main.cfg" from the drop-down menu,

OR...
 - ii. If uploading a Label to Remote Processor, select "Amplifier -> Ampli.cfg" from the drop-down menu.
 - b. Select 'OK' and wait for Configuration File to upload.
 - c. Once finished, restart the Device or specific Module.
 - d. If uploading a Label to a Remote Processor, check to ensure successful upload by either referring to **Explore Devices > Scan Device** in the DOWN Program, or refer to the Command Panel and select the corresponding Station Number from the Main Screen.

Sequence of Operation Central Station Operator's Copy



Call Sequence: (Non contact-ID):

1. Call from Remote Call Station is placed.
2. Communicator dials number in Configuration File.
3. Operator picks up call.
4. Communicator in Command Panel starts playing Message 0, followed by Message 5.
5. The minimum required Voice Loops will force the Messages to play a certain number of times before they can be interrupted before proceeding the call.

Note: These messages will repeat if no input is given.

6. Operator listens to message and uses asterisk '*' key to talk.
7. Operator communicates with user at Remote using the '*' key. Each time the '*' is pressed the Operator hears Message 1 if they enable Talk, or Message 2 if they enable Listen.
8. Operator presses '1' key to stop communication. Message 3 is played. Operator presses '1' key again to acknowledge and end the call.

Note: If the '1' key is not used to confirm ending the call, the system will re-dial the number until the call is acknowledged.

*Voice Loops:

The number of times required to listen to the informational and instruction messages when answering the phone line before they can be interrupted to start the call. If set to 1, the phone operator can immediately interrupt the messages any time by pressing the * key. If set to 2, the operator must listen to the messages all the way through at least once before they can be interrupted. Any greater than 2 adds an additional loop before the messages can be interrupted..



 www.1sae.com

 (800).486.1723

This sheet is a part of the
SHIELD30-Communicator Configuration Instructions
manual. For further documentation, visit our website
or scan the QR code on the right.

