Configuring Element consoles for use with Telos Nx12, Nx6, TWOx12 and Series 2101 talkshow systems

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Introduction

This document will help you configure your Axia Element console for use with Telos IP-based telephone systems. You should use the procedures documented here only if:

- You have upgraded to **Element v2.5.*x*** software or **Powerstation v1.1.3a** or higher, and
- You are using **Telos TWOx12, Nx12, Nx6**, or **Series 2101** talkshow systems.

To obtain the latest software, please visit www.AxiaAudio.com/downloads/ and follow the update instructions contained in the accompanying Release Notes prior to proceeding with this configuration document, if you have not already done so.

Starting with Element 2.5-series and Powerstation 1.1.3, a new and improved configuration method for connecting Element consoles to Telos phone systems which communicate via the legacy Telos "AP" protocol. This new method coincides with the introduction of the Telos VX VoIP talkshow system, as the code additions required to support the new VX control protocol allowed us to improve software and provide more flexibility for clients with earlier Telos equipment as well — specifically, for IP-connected TWOx12, Series 2101, Nx12 and Nx6 systems.

This new method lets you select control of a specific Telos phone unit in every Element Show profile, should you desire. For example, you can configure a show profile named "WXYZ" and specify that it connect with an Nx12 that controls the call in lines wired directly to that unit. Another show profile, "WABC," has settings to control an Nx6 handling POTS request lines wired to it. Using this new capability, you can define a different phone system to control for each Show Profile, if you wish, tailored to specific on-air needs.

You will need to know the following things in order to configure Element for use with your phone system:

1. The IP address of your Telos phone system(s)
2. The user name and password of your phone system(s)
3. The name of the phone system Show to which you wish to connect
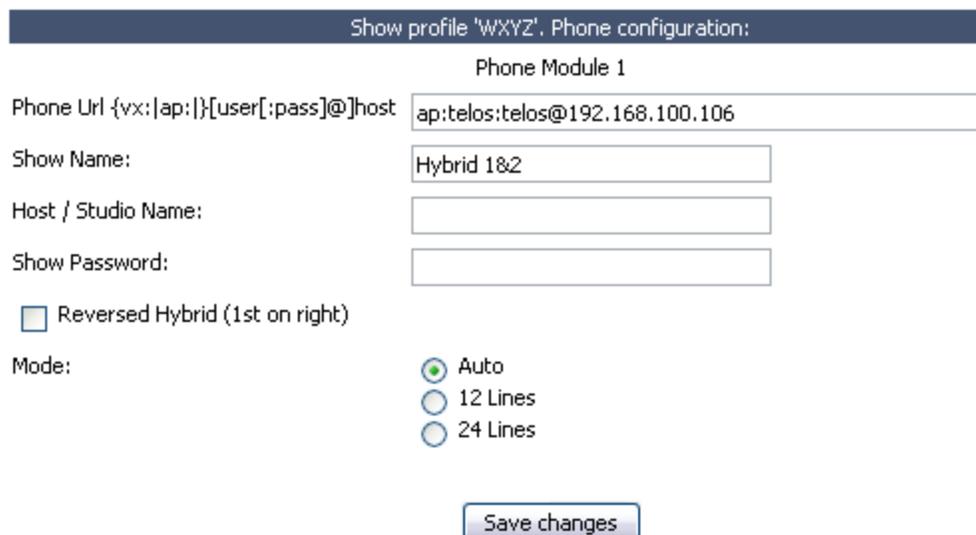
Configuring the Element Show Profile

The major change to Element phone configuration is that the IP address of your Telos phone system must be entered in the *Phone* section of your Element or PowerStation Show Profile, instead of in the *Phone Channel* section as was previously required. The phone system IP address is now stored in Element's Show Profile settings, allowing you to create different show profiles which connect to different Telos devices.

1. **Enter the Telos phone system's IP address.** Navigate to Element's *Sources and Profiles* page. Select the Element Show Profile you wish to configure, and click on *Phone*.

    In the *Phone URL* field, enter the IP address of the Telos product. The format begins with **ap:** (to define that you will be using the AP protocol) followed by a login, a password, and finally the IP address.

    In the screenshot below, the user is `telos`, the password is `telos` and the ip address follows, like so:

    `ap:telos:telos@192.168.100.106`

Show profile 'WXYZ'. Phone configuration:	
Phone Module 1	
Phone Url {vx:|ap:|}[user[:pass]@]host	ap:telos:telos@192.168.100.106
Show Name:	Hybrid 1&2
Host / Studio Name:	
Show Password:	
☐ Reversed Hybrid (1st on right)	
Mode:	◉ Auto
	○ 12 Lines
	○ 24 Lines
	[Save changes]

2. **Configure the Show.** In the same screen where you entered the IP address of your Telos phone system, enter the Telos Show running on that device. In the screenshot example, the show is called "Hybrid 1&2." If the Nx12 was configured for two shows, another show could have been

"Hybrid 3&4." Refer to the configuration of your Telos device to determine which show name you need to enter into this field.

The *Host / Studio Name* field can remain blank as this is a function of the VX system.

A *Show Password* is used only if there is a password assigned to the Show of your Telos unit. Otherwise, leave this field blank.

3. **Configure other options.** Element's Call Controller module uses the left row of telephone line selection buttons to control Hybrid 1, the right row to control Hybrid 2. If you wish to use the right row of Call Controller buttons to control Hybrid 1 and the left row to control Hybrid 2, click the *Reversed Hybrid* box.

   Some Telos products provide support for up to 24 lines. You can select either *Auto*, *12 Lines* or *24 Lines* with the Mode Selection radio buttons. In 12-line mode, 12 lines are displayed on both columns of the Call Controller module; the left key bank answers lines on Hybrid 1, the right keys answer lines on Hybrid 2. In 24-line mode, both left and right key banks will answer lines using Hybrid 1. To answer lines on any other hybrid, operators will use the module's *SET* key to choose which hybrid to use. Selecting "Auto" uses the configuration of the device to dynamically set the number of lines used.

4. **Click "Save" when done.** Note that after any changes made in the show profile pages, the show must be loaded (or re-loaded) from the Element surface in order for the new settings to become active.

Configuring an Element Source Profile

In the Element Control Center, navigate to *Source Profiles*. Click *New Source Profile* and, using the *Primary Source* drop-down box, select the audio channel that you configured in the Telos device. In the list, you should see a Livewire channel number and short description of the Hybrid; give it an Element source name, such as "Nx12 Call1," and select *Phone* for Source Type.

Primary source:	3201 <Hybrid1@Nx12>
Source profile name:	Nx12 Call1
Source name override:	⦿ Show sourcename
	◯ Allow application to override
	◯ Show both
Source availability:	☑ Channel 1
	☑ Channel 2
	☑ Channel 3
	☑ Channel 4
	☑ Channel 5
	☑ Channel 6
	☑ Channel 7
	☑ Channel 8
	☐ CR Monitor inputs
	☐ Studio Monitor input
	☐ V-mixer input
Source type:	◯ Operator
	◯ CR producer
	◯ CR guest
	◯ Studio guest
	◯ External microphone
	◯ Line
	⦿ Phone
	◯ Codec
	◯ Computer player

The Source Profile for the hybrid should be filled in as follows:

- Leave the *Phone Hybrid IP* field empty.
- Leave the *Phone line* and *Phone hybrid (for NX12)* fields at their default value of "0."
- *Use 2nd show (split mode for NX12)* should be left unchecked.
- The *Phone Module ID* field lets you select from the multiple phone modules, if you have more than one installed in your console. Normally, you will have just one, so select "1" from the drop-down box.
- For *Hybrid Nr.* select the hybrid that corresponds to the Primary Source audio you selected above. Typically this will be either a 1 or a 2.

  Note: *If using the second show of an Nx-series, the value of 1 is for Hybrid 3 (the first hybrid of the **Hybrid 3&4** show) and the value of 2 is for Hybrid 4 (second hybrid of the show).*

- *Conferencing Allowed* lets you permit "button mash" conferencing. Unless you specially wish to prohibit this type of conferencing, select *Yes* from the drop-down box.
- *Fixed Line* lets you assign a line permanently to a specific fader channel, emulating a dedicated hybrid. Normally this is used with a 4-Fader Module.

The other fields in the Source Profile page are non-phone specific, and may be configured as you wish. Repeat this procedure to create a source profile for each hybrid in your studio.

You'll now need to load the hybrid sources onto the fader channels. This can be done either manually, or automatically using Show Profiles. Naturally, we recommend that you make this assignment in each Show Profile which will use the phone system.

For normal operation, you will assign Hybrid 1 to the left fader channel of the Call Controller, and Hybrid 2 to the right fader channel. Additional hybrids, if you have them, may be assigned to any channel on a 4-Fader Phone Module.

Note: Within Element, each incoming "phone" type audio source has an associated backfeed for automatic mix-minus generation. There are several user configuration options that affect which audio sources are fed to the hybrid under various conditions; please refer to the "Source Profile Options" and "Feed To Source Mode" sections of the Element 2.0 User's Manual.

If you have questions or need assistance, please contact Axia Support at support@AxiaAudio.com .