Install Guide

For Audient ASP510 With Tango Series Smart Consoles

Note: This installation guide applies to the following versions of SmartAV software:
Consolesoft 2.3.4.503 2009.05.14 Tango.zip or later

25 Aug 2009

INTRODUCTION

Welcome to Tango!

Tango is a unique console – a mix of tradition and new ideas. A console intended not just for mixing but also for every aspect of audio production.

With the latest software release (2.3.4), Tango is now able to control the Audient ASP510 Surround Sound Controller. This document will guide you through the process of setting up and configuring your Tango console to control the ASP510.

You should allow 30 minutes to complete this setup process once you have the 2.3.4 software (or later) installed and you have sourced all the required cables and hardware.

IMPORTANT:

The Tango Console must be running software release 2.3.4 or later to support the Audient ASP510.

IMPORTANT:

This setup procedure requires the installation and configuration of a USB to Serial converter on Tango. This document assumes the reader has some basic knowledge of installing a device and drivers within Windows XP.

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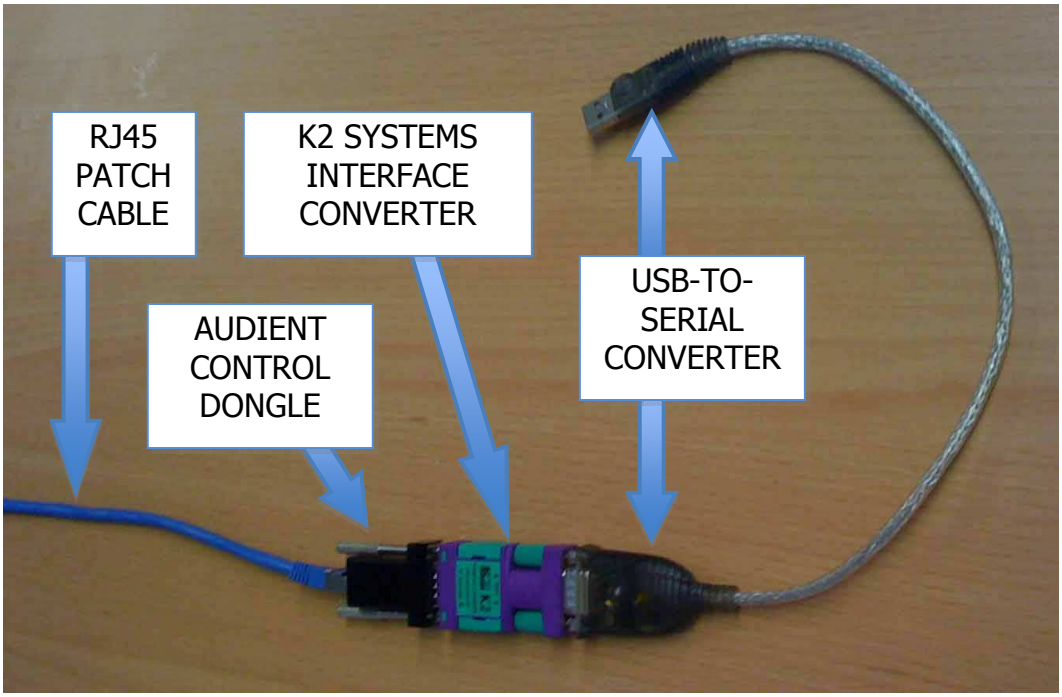
EQUIPMENT REQUIRED

The ASP510 is controlled via an RS485 serial interface. In order to connect this interface to Tango you will need to purchase a number of additional cables and converters. A list of these units is as follows:-

- USB To Serial converter. These inexpensive items are commonly available at most PC shops and will come with a disk containing drivers. The unit will have a USB Type A Male connector on one end and a DB9 Male connector on the other. An example of one such unit is shown below.
- K2 Systems Interface Converter. This unit will convert the standard RS232 serial port to RS485 required by the ASP510. The part number for this unit is K2-ADE and it is available from:-
    - www.kksystems.com
    - +44 (0) 1273 857185
    - info@kksystems.com
- Audient Control Dongle. This small dongle changes the pinout of the K2-ADE to make it compatible with the ASP510. You can easily make your own using the diagram in Appendix A or Smart AV can supply one if it is ordered with your console.
- RJ45 Cable. This is usually supplied with the ASP510 but any standard RJ45 direct patch cable is suitable.

WARNING:

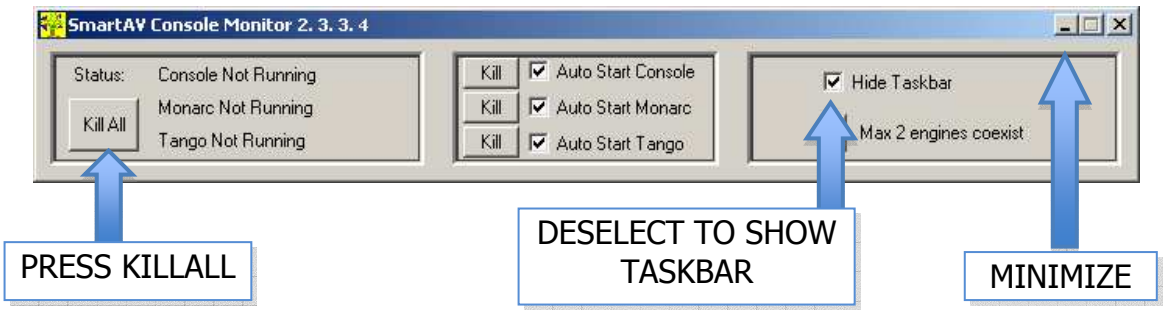
Do not use an RJ45 cross-over cable. The use of a cross-over cable may damage your Audient unit as described in the instruction manual for the Audient unit.



EXIT TANGO SOFTWARE

To install the driver for the USB-To –Serial Converter you will need access to the Windows desktop so you will need to close the Tango software. To close the software, connect a USB keyboard and mouse and proceed as follows:-

- Press the Alt+Tab key combination repeatedly until you select the "Console Monitor" application. This will open the Console Monitor window.
- Press the "Kill" button in the Console Monitor window. This will close the Tango software applications.
- De-select the "Hide Taskbar" checkbox so that the taskbar is displayed.
- Minimize the Console Monitor window by clicking on the Minimize button.



COPY DRIVERS

The USB-To-Serial Converter you purchased will have come with a disk containing the drivers for the device. As Tango does not have a CD ROM Drive you will need to copy the contents of this disk onto the Tango hard disk. You can transfer these files

across using either a USB Memory Stick or via your network if you have Tango networked to other PCs in your studio.

Copy the files into a directory called C:\Temp.

CONNECTION

To connect the ASP510 to your Tango, proceed as follows:-

- Connect the USB-To-Serial Converter to the K2 Systems Interface Converter as shown above.
- Connect the Audient Dongle to the K2 Systems Interface Converter as shown above.
- Connect one end of the RJ45 Patch Cable to the Audient Dongle as shown above.
- Ensure the DIP switches on the KK Systems Interface Converter are set as follows:-
    - SW1, SW4, SW6 ON
    - SW2, SW3, SW5 OFF
- Connect the free end of the RJ45 Patch Cable to the port marked “Remote” on the ASP510.
- Connect the USB Type A Male connector of the USB-To-Serial Converter to one of the USB ports on the rear of Tango. It is not important which one but once you select one you should keep the connection in the same port.

At this point the “Found New Hardware” wizard will start on your Tango and you will need to proceed to the following section to install the drivers.

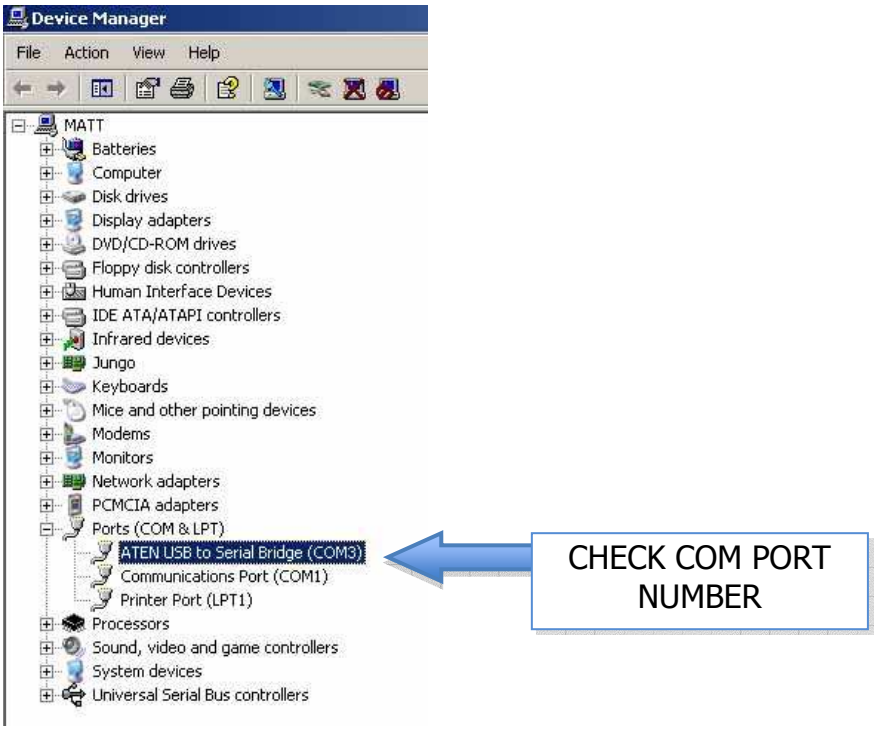
INSTALL DRIVERS

The “Found New Hardware” wizard has executed to help install the drivers for the USB-To-Serial Converter. The installation procedure for each brand of converter will be slightly different so you should refer to the instructions that came with your particular model for help. You need to remember to specify “C:\Temp” as the location where the driver files are to be found (not the CD Rom Drive).

SET COM PORT OF CONVERTER

The installation of the USB-To-Serial Converter should see it set as COM3 within Windows. If you wish to check this setting to be sure you can proceed as below. If you find you are having problems with your installation you should perform this check as a first step.

- On Tango goto Start -> Control Panel.
- Select System and then select the Hardware tab.
- Click on the Device Manager button.
- Once the Device Manager opens, click and expand the "Ports" category. You should see an entry corresponding to your USB-Serial Converter showing COM3. You can now skip to the next section of this manual.



If your device is not listed at all you have not installed the driver correctly. Try disconnecting your converter, rebooting Tango and then re-connecting and re-installing the driver.

If your device is listed with a different serial port you should take note of the COM number for use in the next section.

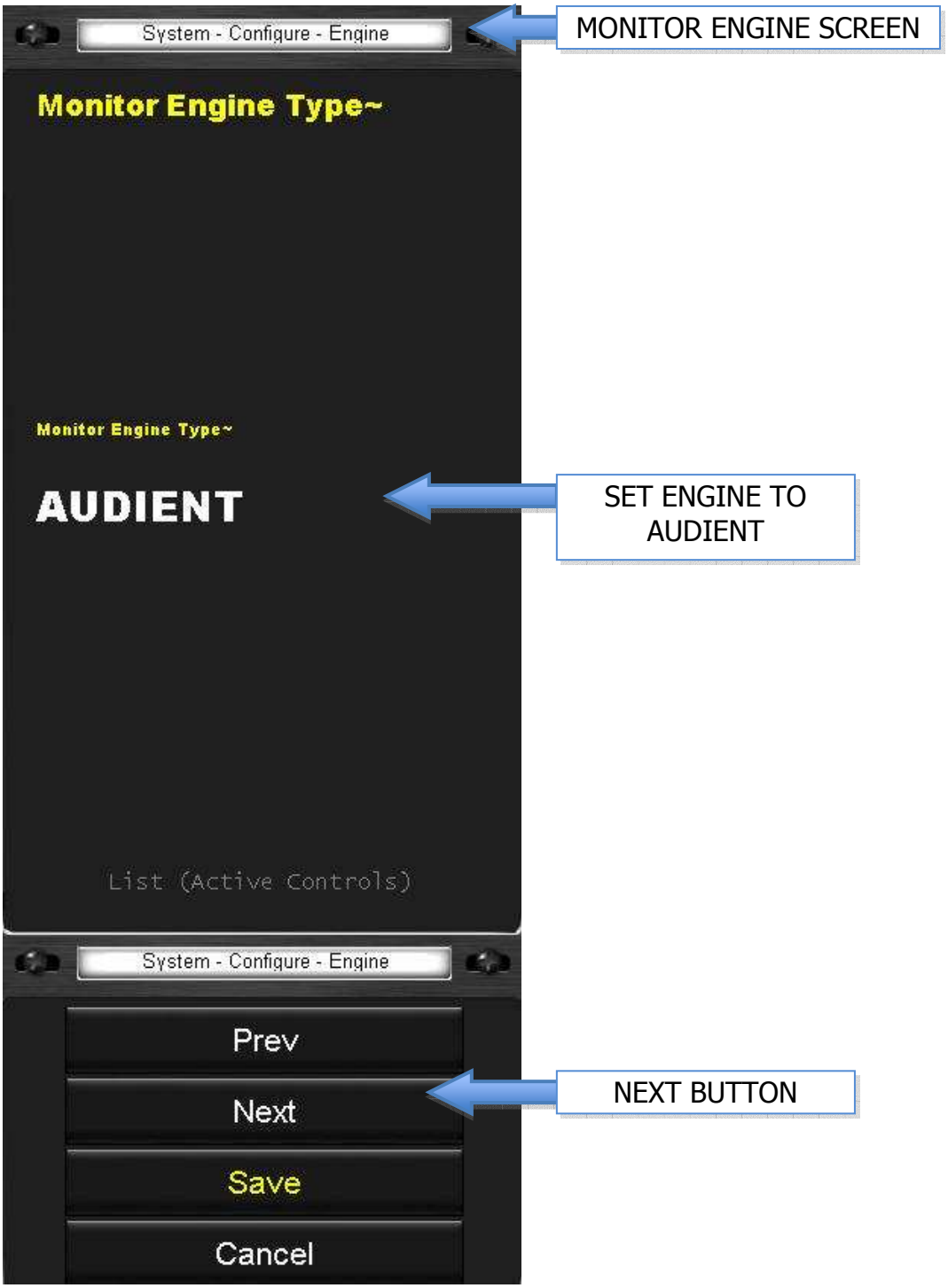
CONFIGURE TANGO

The final step is to configure the Tango software. This is done as follows:-

- To restart the Tango software, press ALT-TAB and bring up the "Console Monitor" application and re-select the "Hide Taskbar" checkbox as well as the

three “Auto Start” checkboxes and once again minimize Consolemon. The Tango software will restart after a few seconds.

- Select the “System” menu tab on the LHS of the Tango display.
- Select “Configure” from the system menu and then select “Engine”.
- Use the “Next” button to scroll through to the “Monitor Engine” screen.



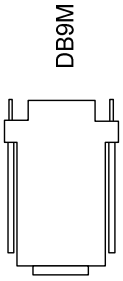
- Use the Active Knob to set the Monitor Engine to “Audient”.
- Use the “Next” button to scroll through to the “Monitor Engine COM Port” screen.

- Use the Active Knob to set the COM port. This should be set to COM3 or the alternate COM port that was identified in the section above.
- Select "Save" to save these settings.

Tango should now be able to control the ASP510. To test this control, simply press the "Mono" button and you should hear a relay click in the ASP510.

APPENDIX A – AUDIENT CONTROL DONGLE

Label = Audient Control



NOTES:

To control the Audient Box this cable must be used in conjunction with an RJ45 patch cable and the RS232 - RS485 converter available from KK Systems as specified below.

Part Number K2-ADE
Manufacturer KK Systems
www.kksystems.com
+44 (0) 1273 857185

The DIP switch settings should be set as follows:-

SW1, SW4, SW6 - ON
SW2, SW3, SW5 - OFF

CONNECTORS:

Part	Description	Part #	Manufacturer
RJ45F	RJ45 Female Connector		
DB9M	DB9 Male Connector		
DONGLE	DB9M - RJ45F Dongle Style Backshell		

CABLES:

Part	Description	Part #	Manufacturer

PINOUT / PAIR SCHEDULE:

Signal	RJ45F	DB9M
GND	1	1
RS485 B	7	8
RS485 A	8	3

Unless otherwise specified
Dimensions are in millimetres
DO NOT SCALE DRAWING

Drawn: Matt Johnston
Date: 4/07/05
Design: Matt Johnston
Date: 4/07/05

SMART AV PTY LTD
A.B.N. 69 105 869 127

Title: CBL10055 - Audient Control Dongle - Rev 03

Scale N.T.S
Sheet 1 of 1
Drawing Number: CBL10055

APPENDIX B – AUDIENT CONTROL MAPPING ON TANGO

Audient Remote Control	Supported	Equivalent Tango Control
Monitor Format		
bypass	NO	
5.1	YES	Mix B
5.1 FILM	NO	
LCRS	NO	
stereo	YES	Mix A
mono	YES	Mono
alt	YES	Big / Small
Stereo record source		
bus	YES	Mix A
downmix	YES	Mix C
encoder output	NO	
Monitor source		
stereo - rec	YES	Mix A
stereo - play A	YES	Ext1
stereo - play B	YES	Ext2
encoder/decoder in	NO	
surround - rec	YES	Mix B
surround - play A	YES	Ext3
surround - play B	YES	Ext4
Guide		
on	NO	
Volume control		
level	YES	volume encoder
ref	YES	ref *(see note)*
cut	NO	
dim	YES	dim *(see note)*
Mode		
isolate/cut	NO	Cut only
L	YES	L

C	YES	C
R	YES	R
Ls	YES	Ls
Rs	YES	Rs
Sub	YES	Sub
Other		
Pink noise	NO	
Lock	NO	
Gang	NO	
120Hz filter	NO	

Note: Dim and Ref level functionality is implemented by Tango, and does not use the Audient controlled dim and ref levels.