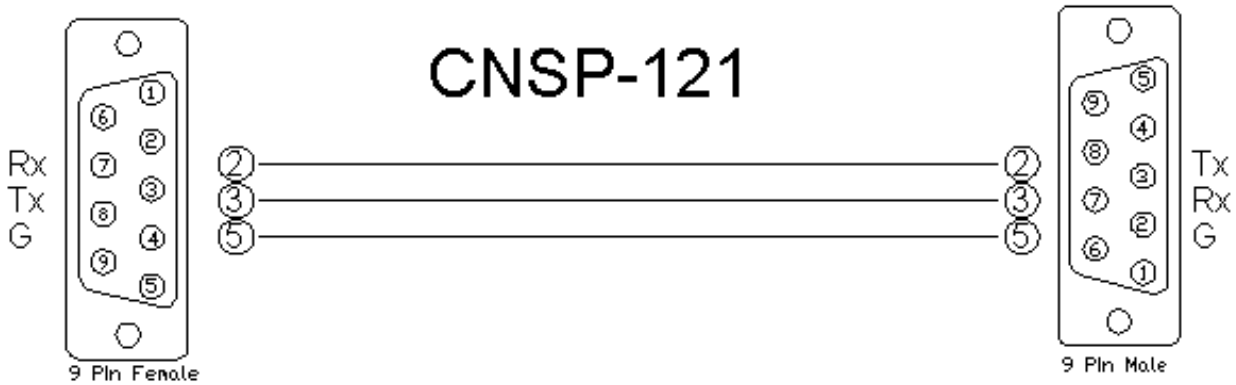
Partner: Polk Audio
Model: XRt12 XM Tuner
Device Type: Tuner

GENERAL INFORMATION

SIMPLWINDOWS NAME:	Polk Audio XRt12 XM Tuner
CATEGORY:	Tuners
VERSION:	1.0
SUMMARY:	This module provides control and true feedback for the Polk Audio XRt12 XM tuner.
GENERAL NOTES:	This module provides all control commands available at the time this module was written. It also provides all feedback available at the time.
CRESTRON HARDWARE REQUIRED:	C2I-COM6, CNXCOM-6, CNXCOM-2, ST-COM, C2COM-2, C2COM-3
SETUP OF CRESTRON HARDWARE:	RS232 Baud: 9600 Parity: None Data Bits: 8 Stop Bits: 1
VENDOR FIRMWARE:	None
VENDOR SETUP:	None
CABLE DIAGRAM:	CNSP-121



©2004 Crestron Electronics, Inc.
15 Volvo Drive • Rockleigh, NJ 07647
800.237.2041 / 201.767.3400

Partner: Polk Audio
Model: XRt12 XM Tuner
Device Type: Tuner

CONTROL:

Channel_Direct	A	Analog value of the channel you want to go to. YOU MUST PULSE THE Channel_Enter INPUT FOR THIS CHANNEL TO TAKE AFFECT.
Channel_Enter	D	Pulse to go to the channel number entered using the Channel_Direct input.
Change_Display	D	Pulse to cycle through the different display modes. This is the same as the “display” button on the IR remote.
Last_Channel	D	Pulse to jump back to the last channel.
Mute_On/Off	D	Pulse to turn the mute on and off.
Category_Left/Right	D	Pulse to change categories. The categories will be displayed on the front panel of the tuner and on its video output. The categories will NOT be displayed on the touch panel.
Select_Up/Down	D	Pulse to move up and down in the category or menus.
Menu	D	Pulse to turn the menu on and off.
Menu_Enter	D	Pulse to select the highlighted. This is the same as the “enter” button on the front panel of the tuner.
Preset_*	D	Pulse to go to the preset channel.
Poll_Enable	D	Hold high to poll the tuner for the signal strength, channel information and song information. The module will poll the tuner once every 2 seconds. If you wish to get the song information more frequently than every 2 seconds, you may set this input low and use an Oscillator on the “Get_Song_Information” input. The frequency should not be more than every 1 second.
Get_*	D	Pulse to poll the tuner for the information desired. This will poll only for the specific information, Song Information, Channel Information, Signal Strength or Hardware Radio ID. The Hardware Radio ID is the XM Radio id that you would need when you apply for activation. The Hardware Radio ID is NOT polled for unless you pulse the “Get_Hardware_Radio_ID” input.
Refresh_Current_Data	D	Pulse to refresh the song title, artist name, channel name, category name and channel number.
From_Device$	S	Serial signal to be routed from a 2-way serial com port.

©2004 Crestron Electronics, Inc.
15 Volvo Drive • Rockleigh, NJ 07647
800.237.2041 / 201.767.3400

Partner: Polk Audio
Model: XRt12 XM Tuner
Device Type: Tuner

FEEDBACK:

Channel_Number	A	This is the current channel number. It should be displayed using a digital gauge.
Current_*_$	S	Serial signals indicating the current channel name, category name, artist name and song title.
Hardware_Radio_ID$	S	Serial signal indicating the hardware radio id. This is the radio id that would be needed for activation of the radio.
Signal_*	D	High to indicate the current antenna signal strength.
Signal_Strength_Bar	A	Analog value indicating the antenna signal strength. This should be displayed using a bar graph on a touch panel.
Signal_Strength_Number_of_Bars	A	Analog value indicating the signal strength in number of bars. The values are 0, 1, 2, and 3. This corresponds to the number of bars on displayed on the front panel of the tuner.
To_Device$	S	Serial signal to be routed to a 2-way serial com port.

TESTING:

OPS USED FOR TESTING:	PRO2: 3.137 CNMSX-Pro: 5.14.02x
COMPILER USED FOR TESTING:	2.05.22
SAMPLE PROGRAM:	Polk Audio XRt12 Tuner Demo
REVISION HISTORY:	V. 1.0

©2004 Crestron Electronics, Inc.
15 Volvo Drive • Rockleigh, NJ 07647
800.237.2041 / 201.767.3400