1. Crestron Module Information

Partner: Yamaha Corporation

Model: all Yamaha Amplifier of the XMV product range

Device Type: Amp control

2. General Information

SIMPL Windows Name: Yamaha_Xmv4_V.1.1.usp, Yamaha_Xmv8_V.1.1.usp

Category: Device Interface

3. General Notes:

This module is designed to control a Yamaha XMV Amplifier with a Crestron Control System via Ethernet.

Because the core routines are written in SIMPL# the module only runs on Crestron System3 devices!

The archive contains the following files:

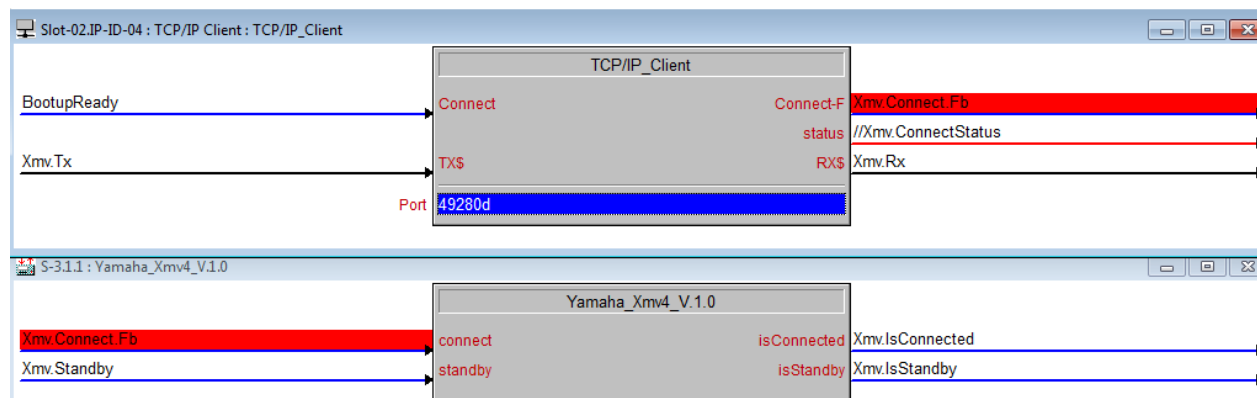|	
Yamaha_Xmv4_V.1.1.usp	The SIMPL+ wrapper for the XMV SIMPL# module
Yamaha_Xmv8_V.1.1.usp	The SIMPL+ wrapper for the XMV SIMPL# module
Yamaha_Xmv_V.1.0.1.clz	The SIMPL# module as an interface for the XMV
Sample App XMV4XXX_V1_1.smw	Sample Application for controlling XMV4XXX via Ethernet
XMV4SampleUI.vtp	XPanel UI for XMV4XXX Sample App
ToggleWithFeedback.umc	A helper Macro to realize a Toggle Function with feedback

4. Tested software versions

- Crestron Simple Windows 4.14.31
- Crestron Simple+ 4.05.01
- Crestron Cross Compiler 1.3
- Crestron Database 202.05.002.00
- Crestron Device Database 200.40.004.00
- Crestron VT-Pro-e 6.2.02
- Crestron Smart Graphics Controls 2.17.00.05
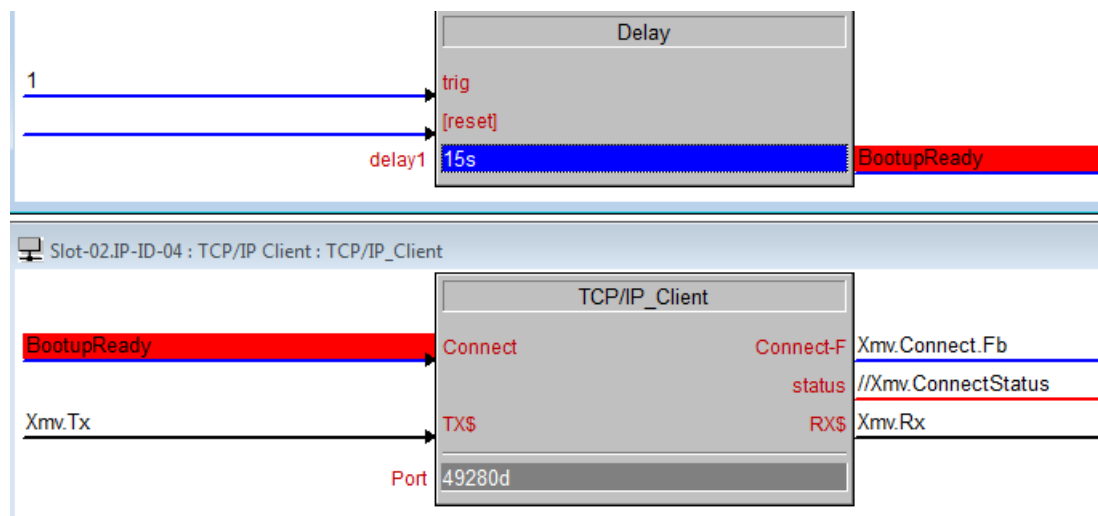
5. Wiring:

We recommend to use the "Connect-F" signal (feedback if TCP/IP connection is successful) as an input for the connect signal of the module:

(in the sample app we use a manual connect/disconnect just for demo purposes)

It is not recommended to use a "1" signal at the "Connect"-input of the TCP/IP-Client module. Because of the heavy work load for the Crestron-CPU during the boot-up phase, some signal may not have a consistent state.

Use a small delay instead (approx. 10-30s):

The module uses the keep-alive function of the XMV. The time period is about 10s. If there is no answer after that time, the Crestron CPU assumes a broken connection and tries to re-connect.
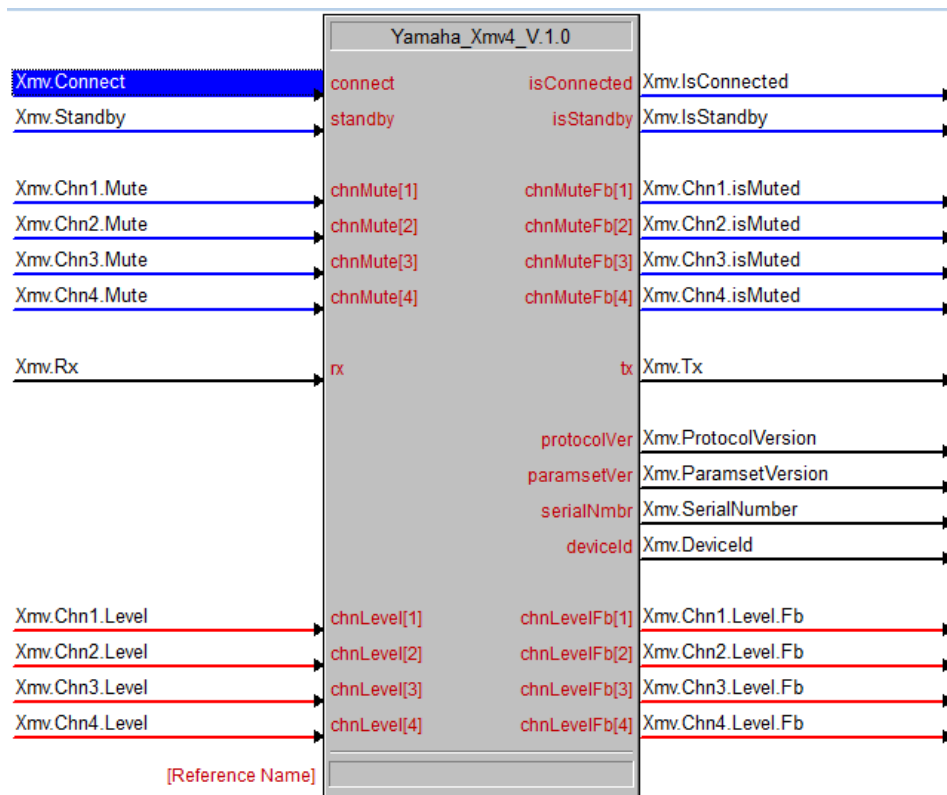
The default TCP/IP Port Number of the MTX is "49280"

Please keep in mind the XMV Dante Versions (XMVXXXX-D) have only one Network-Port but 3 IP-Addresses (Dante Primary, Dante Secondary and XMV Control). The connections has to go to the XMV Control Port. To set those IP-Address consider the manual of the XMV how to do that and how to set the DIP-Switches.

6. Signals:

The module is looking like this:

(number of Mute- and Level-signals depends if it's a XMV4XXX or XMV8XXX:

Description:

Controls		
connect	digital	1: causes the module to connect to the XMV 0: causes disconnect
standby	digital	Sets the XMV in standby mode
chnMute[1] .. [X]	digital	Mutes the respective channel
chnLevel[1] .. [X]	analog	Amp Level of the respective channel. Valid range: -99 .. 0
rx	serial	RX-Data (usually connected to the RX Signal of the TCP/IP-Client Module.
Feedback		
isConnected	digital	"1" if the module is successfully connected to the MTX
chnMuteFb[1] .. [X]	digital	Current status of the respective Mute
chnGainFb[1] .. [XX]	analog	Current gain level
protocolVer	serial	The protocol version of the connected device
paramSetVer	serial	The Parameter Set Version of the connected device
serialNmbr	serial	The Serial Number of the connected device
deviceId	serial	The Device ID of the connected device
tx	serial	TX-Data (usually connected to the TX Signal of the TCP/IP-Client Module or the Serial-Driver Module)

7. Parameter Range:

The Gain Level is in the range -99 to 0. You have to pay attention to this fact in your Touchpanel Design if you using a Gauge or a Slider (set the appropriate parameters for "Min Value" and "Max Value"):

Also observe these parameters if you use a Ramp, Analog Increment or something like this in SIMPL Windows: See here the parameters "LowerLimit" and "Upper Limit" in an Analog Increment:
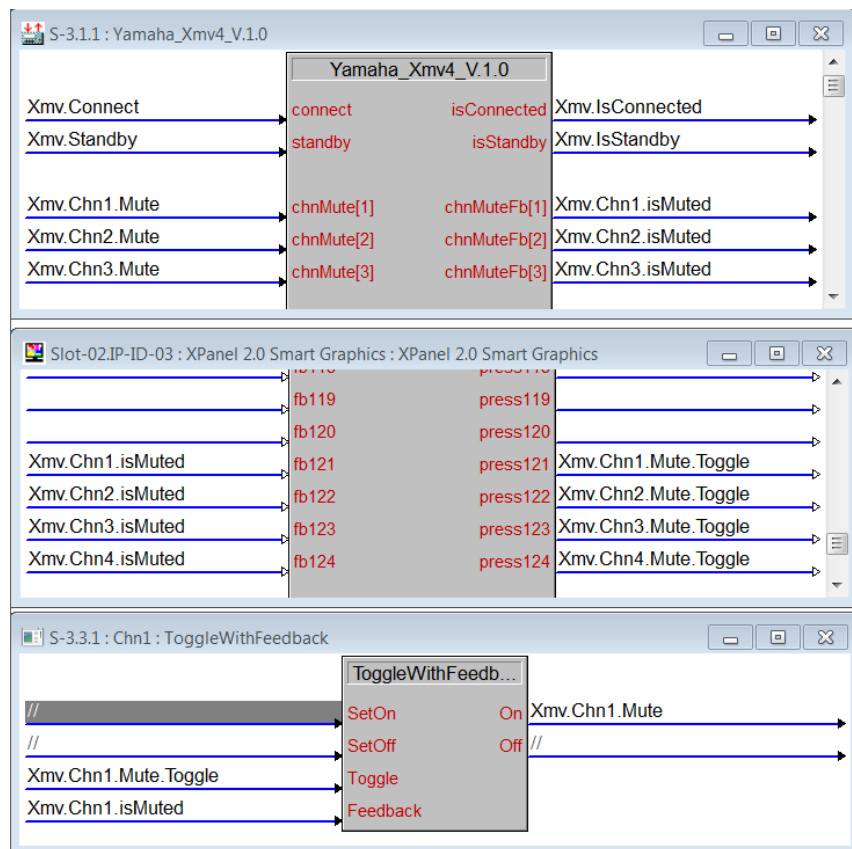
8. ON's and OFF's (Mute and Standby):

You can set these two parameters just by set to respective signals to ON or OFF .

If you want to use a toggle, you have to pay attention to the real status in the XMV (feedback). To make this more easier for you, we provide a small helper macros for that.

These macros is called "ToggleWithFeedback" You can use it for setting parameters on, off or just use toggeling. In the sample application you can see and test how it works:

9. Other Documents:

In case you are encounter any errors (you may see them on the rx signal in the debugger coming from the XMV) please also have a look at the other documents as:

- latest Release Notes
- FAQ
- XMV Series Remote Control Protocol Specifications