

**SIMPLWINDOWS
NAME:**

Gentner XAP TH2

CATEGORY:

Conferencing

VERSION:

1.0

SUMMARY:

Gentner XAP TH2 functions including dialing, presets, mute and privacy

GENERAL NOTES:

The module uses real feedback from the Gentner unit for hook status, auto answer status, mute status, privacy status, firmware version number and hook duration status. They should be updated automatically whenever any parameter changes on the Gentner. If it is desired to update the status any other time, the POLL input could be pulsed. This will request the status of all parameters.

Before using any other functions on this module, you should pulse the RS232-ON input. This will enable feedback from the Gentner system so that the Crestron system can know the correct state of all parameters.

In normal use, the phone line will be on hook (hung up). A number will be dialed on the keypad, and it will be displayed in the display field. When DIAL is pressed, the phone line will be taken off hook, and the currently displayed number will be dialed. Any additional digits entered after the phone line is off hook will be sent out immediately, and will not be displayed on the touch panel. This is primarily for voice mail and paging systems. The maximum number of characters that can be entered for the phone number is 40. This is a function of the XAPTH2, not a Crestron limitation.

The Crestron system can be connected to the XAP TH2 in two ways.

1. A direct RS232 connection between a Crestron com port and the com port on the XAP TH2, or
2. A connection between the Crestron system and an XAP 800. The XAP TH2 can be connected to the XAP 800 over the Gentner bus. SO the Crestron system can communicate with the XAP TH2 through the XAP 800. Multiple XAP TH2's can be linked together, so each one is assigned an address from 0 to 15. You must enter the address of the unit you wish to control using the Unit ID Hex parameter field. The ID must be entered as the hex representation of the ASCII characters for 1-9 and A-F. So for a unit ID of 0, enter 30. For an ID of 4, enter 34. For an ID of 9, enter 39. For an ID of 10, enter 41. For an ID of 15, enter 46.

During testing at Crestron, all functions worked properly when connected directly to the XAP TH2. When communicating with the TH2 through an XAP 800, auto-answer-on/off, and RX-boost-enable/disable did not control/report feedback correctly. All other functions worked correctly. Firmware used on the XAP 800 was version 1.1.0. Firmware used on the XAP TH2 was 1.0.0. Gentner is aware of the problem, and it is expected that this will be corrected in the next release of XAP 800 firmware.

**CRESTRON
HARDWARE
REQUIRED:**

CNXCOM,
ST-COM

**SETUP OF CRESTRON
HARDWARE:**

Tested and verified at the following settings:

Baud Rate -38400

Parity - None
Data Bits - 8
Stop Bits - 1

VENDOR FIRMWARE: 1.0.0
VENDOR SETUP: Serial mode should be set to "Text". This is the default.
CABLE NUMBER: CNSP-141

CONTROL:

RS232-ON	D	Pulse to enable proper RS232 communications between the Crestron and Gentner systems
AUTO-ANS-ON	D	Turn on auto answer
AUTO-ANS-OFF	D	Turn off auto answer
AUTO-DISCONNECT-ON	D	Turn auto disconnect on
AUTO-DISCONNECT-OFF	D	Turn auto disconnect off
MUTE-ON	D	Mute incoming audio (telco)
MUTE-OFF	D	Unmute incoming audio (telco)
PRIVACY-ON	D	Mute outgoing audio(telco)
PRIVACY-OFF	D	Unmute outgoing audio(telco)
ON-HOOK	D	Place phone line on hook (hang up)
OFF-HOOK	D	Take phone line off hook (pickup)
FLASH	D	Momentary interruption to phone line connection
NULL-PHONE-LINE	D	Sends a short noise burst down the phone line and forces the XAPTH1 to adapt
HOOK-DURATION-*MS	D	Sets flash hook duration to the time specified
RX-BOOST-ENABLE	D	Pulse to enable receive boost at the level specified with RX-BOOST-LEVEL
RX-BOOST-DISABLE	D	Pulse to disable receive boost
RX-BOOST-LEVEL-*DB	D	Pulse to set the desired level of the receive boost function
KEYPAD-0-9, *, #	D	Allow the entry of standard touch tone digits
KEYPAD A-D	D	Allow the entry of additional touch Tone digits
KEYPAD-PAUSE	D	Insert a pause in the phone number to be dialed. This will be represented as a ,
KEYPAD-CLEAR	D	Clear the phone number currently displayed
KEYPAD-BACKSPACE	D	Backspace one digit
DIAL	D	Dial the phone number currently displayed
REDIAL	D	Redials the last number dialed
PRESET-1-10	D	Store/recall up to 10 speed dial preset numbers. If a preset is pressed while PRESET-STORE-FB is low, the preset number will be recalled. If pressed while PRESET-STORE-FB is high, the number displayed will be stored into the preset
PRESET-STORE	D	To store a preset, enter the number on the keypad, press PRESET-STORE, and then press the preset number.
POLL	D	Used if it is desired to update the state of the Crestron to match the XAPTH2. Updates should happen automatically, so this can usually be defined as 0

From_Device\$	S	Serial data string to be routed from a CNCOMH-2, ST-COM, or CNXCOM
LENGTH<41D	P	Determines the maximum number of digits that can be entered in the display field. This number can be between 1d and 40d. The TH2 does not support dialing numbers longer than 40 digits.

FEEDBACK:

PHONE-NUMBER\$	S	Serial data string containing the phone number entered. Should be routed to a touch panel serial field
AUTO-ANS-ON-FB	D	Real feedback indicating that auto answer is on
AUTO-ANS-OFF-FB	D	Real feedback indicating that auto answer is off
AUTO-DISCONNECT-ON-FB	D	
AUTO-DISCONNECT-OFF-FB	D	
MUTE-ON-FB	D	Real feedback indicating that mute is on
MUTE-OFF-FB	D	Real feedback indicating that mute is off
PRIVACY-ON-FB	D	Real feedback indicating that privacy is on
PRIVACY-OFF-FB	D	Real feedback indicating that privacy is off
ON-HOOK-FB	D	Real feedback indicating that the phone line is on hook (hung up)
OFF-HOOK-FB	D	Real feedback indicating that the phone line is off hook
HOOK-DURATION-MS-FB	D	Real feedback indicating the current flash hook duration
RX-BOOST-ENABLE-FB	D	Real feedback indicating that receive boost is active
RX-BOOST-DISABLE-FB	D	Real feedback indicating that receive boost is inactive
RX-BOOST-LEVEL-FB	D	Real feedback indicating the level of the receive boost function
PRESET-1-10-FB	D	Indicates which preset was last chosen
PRESET-STORE-FB	D	Indicates that store mode is active. Will time out after 5 seconds if a preset isn't pressed first
RING	D	One second pulse whenever a ring is detected on the phone line
VERSION\$	S	Serial data string indicating the firmware version as reported back from the XAP TH1
To_Device\$	S	Serial data string to be routed to a CNXCOM, or ST-COM

OPS USED FOR TESTING:	5.12.26x
COMPILER USED FOR TESTING:	SimplWindows Version 1.61.12
SAMPLE PROGRAM:	Gentner XAP TH2 demo
REVISION HISTORY:	None