

XMODEM Driver Manual

Hayes Compatible Modem Dialer Driver



TAS-HMITalk modem
driver for telephone
communications



CPKSoft Engineering Process Monitoring and Industrial Automation Software

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1. Introduction

CPKSoft Engineering assumes no responsibility for any errors that may appear in this document. If you have any suggestions for improvements or amendments or have found errors in this publication, please notify us.

This driver is included with all unlimited licenses of TAS-HMITalk. It is not sold separately. It requires the TAS-HMITalk ActiveX to work, therefore it cannot be used as a stand-alone driver.

If you use this driver in your applications, you need to include the xmodem.tlk in the set of files that you distribute. This file must be located in the same folder where the hmitalk.ocx file is registered in order to be found by the activex when the applications are executed.

The source-code for the xmodem.tlk driver is available in plain-C language for additional USD 99 if you own a license of TAS-HMITalk 8.04 or higher.

Refer to the following link to visit the xmodem driver page at CPKSoft Engineering website: <http://www.cpksoft.com/tabid/55/ProductID/70/PageIndex/1/Default.aspx>.

Visit this link if you want to see a complete list of drivers that are currently available for TAS-HMITak: <http://www.cpksoft.com/Drivers/tabid/55/Default.aspx>.

Also, refer to this link if you are interested in purchasing a license of the most recent version of TAS-HMITalk: <http://www.cpksoft.com/Products/tabid/54/Default.aspx>.

We welcome your comments about this document. You can reach us by e-mail at [contact @ cpksoft.com](mailto:contact@cpksoft.com).

2. Driver details

2.1. Driver overview

The XMODEM driver allows you establish a communication through a telephone line by using a modem connected to a serial COM port in your PC.

The driver can dial a phone number and then release the COM port so it can be used by another TAS-HMITalk object that needs to communicate with a remote device.

The driver provides also a command to hang-up the modem after the phone line is no longer used.

Important note:

Most modems require the XMODEM driver to have the following

properties set to True:

- CommHoldRTSWhileTransmitting
- CommHoldRTSWhileReceiving

Any TAS-HMITalk object accessing the same port while a call is active should have the same settings for these properties.

A minimum of 5000 ms in the CommTimeout property is recommended for the XMODEM driver.

2.2. Supported devices

This driver can communicate with these devices, but is not necessarily limited to this list:

HAYES Compatible Modem

3. Command list

3.1. Dial Phone Number

Description of this command:

Dials a specified phone number using tones or pulses.

HMITalk1.CommHoldRTSWhileTransmitting = True

HMITalk1.CommHoldRTSWhileReceiving = True

Type of data handled by this command:

Digital Output

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

0

Meaning of the DriverP4 parameter:

0 for tones, 1 for pulses.

Meaning of the DriverP5 parameter:

Dialing timeout in seconds (60 seconds is assumed if left empty).

Meaning of the DriverP6 parameter:

Phone number (can include ',' to indicate extra inter-digit delays).

Meaning of the DriverP7 parameter:

Optional initialization string to be sent before the dialing command.

(AT[initializationstring]DT phonenummer) If left empty, defaults to 'V1', thus sending the following command: 'ATV1DT phonenummer'.

Values that are returned:

- OnSuccessfullySent event if the call succeeded, leaving the call connection established.
- OnErrorSending event if the call was not established, leaving the error reason in the DriverStatus property.

3.2. Hang Up

Description of this command:

Hang ups an open communication.

HMITalk1.CommHoldRTSWhileTransmitting = True

HMITalk1.CommHoldRTSWhileReceiving = True

Type of data handled by this command:

Digital Output

Number of points accepted by this command:

1

Meaning of the DriverP0 parameter:

1

Values that are returned:

- OnSuccessfullySent event if the call was hanged up successfully.
- OnErrorSending event if the call was not hanged up or if there wasn't a call active, leaving the error reason in the DriverStatus property.

4. Appendices

4.1. Error messages

The following list shows all the possible error messages that can be returned by the protocol driver during a failed communication in the 'DriverStatus' property.

This list does not include some error messages that can be returned by the activex component while attempting to establish a connection.

- [1005] DRIVER (Internal): Invalid driver stage
- [1300] PROTOCOL (Timeout): No answer
- [2000] CONFIG (DataType): Analog inputs are not supported by this driver
- [2001] CONFIG (DataType): Analog outputs are not supported by this driver
- [2002] CONFIG (DataType): Digital inputs are not supported by this driver
- [3002] CONFIG (P0): Invalid command (0 or 1 only)
- [5007] CONFIG (P4): Invalid dialing mode (0 or 1)
- [5503] CONFIG (P5): Invalid dialing timeout (1-180)
- [6004] CONFIG (P6): Dial number not specified

4.2. Keywords list

The following list shows a set of words directly related to this driver.

"Compatible, Dialer, HAYES, Modem".