

Application Note APNT-0001 Adapting the Zoom Fax/Modem V.34X Plus (Model 2836) for use with Monroe's R-149 and R-153 Timers

We believe the Zoom Model 2836 modem will meet current and future requirements for these Series 3000 timers. This external modem is readily available at a reasonable price.

Timer Preparation:

Two preliminary steps are necessary with the R-149 timer. These steps are not necessary with the R-153 timer:

- 1) Check the firmware version. It should be either version GERS80134-3.04 or PSI V1.15 or higher. If not, contact Monroe Electronics. To check the firmware version:
 - a) ENTER or EXIT to the "SET EDT VUE LOG LST" menu
 - b) Press VUE
 - c) Press VER
 - d) Note firmware version and exit back.
- 2) Check the communication protocol:
 - a) At the opening menu, select SET
 - b) Press CMP
 - c) Proper protocol is "NON, 8, 1, 1200" (1200 BAUD)

Modem Preparation:

Connect the Zoom Model 2836 to your computer's communication (COM) port and invoke your data communication program (examples: COMit™, PROCOMM, BitCom, etc.). At the prompt (usually a "blink-block" cursor), type the following six lines of AT commands. Use all upper case letters and ENTER (↵) at the end of each line. An "OK" should return following each line:

AT&F%C0&C1&D2

AT&Q6 +MS=1,0,1200,1200

AT S95=0

AT S0=1

AT&W0

AT&Y0

AT&V (optional)

Disconnect the modem from the computer. It is now programmed with a new set of values to allow it to be transported to and used with your timer.

Software Change:

In the on-screen Location, Edit menu, change the Modem String to:

AT&F&C1&D2E0Q0V1X1 S0=0 S7=60 S8=2 H1

This string should work with high-speed modems that conform to Hayes 1200 bps simple protocol. If there are problems consult your modem manual or contact the modem manufacturer for technical support.

What the AT Commands Mean to Your External Modem

&F	Restore factory default configuration.
%C0	Disable data compression.
&C1	The RLSD (<u>R</u> eceived <u>L</u> ine <u>S</u> ignal <u>D</u> etect) output follows the state of the carrier: ON when the remote modem's carrier is detected. OFF when the remote modem's carrier is not detected.
&D2	If the DTR (<u>D</u> ata <u>T</u> erminal <u>R</u> eady) signal goes inactive, the modem disconnects. Autoanswer is inhibited when the DTR signal is inactive.
&Q6	Connect in the Normal Mode. Error correction and data compression are disabled.
+MS=1,0,1200,1200	Disables automode and forces connection rate to <u>only</u> 1200 bps.
S95=0	Result code control.
S0=1	Number of rings to autoanswer (1). A value of 0 would prevent modem from autoanswering.
&W0	Store the current configuration into User Profile 0.
&Y0	Set User Profile 0 to default for the Z command.

NOTE: Commands can be verified by issuing AT&V.