

Data I/O Corporation ChipWriter Gang Programmer CWGANG.EXE Command Line Batch Software Users Guide

Command Line Software Introduction

CWGANG.EXE for Windows 95/98/ME contains a utility that allows the ChipWriter Gang to be operated using command line software at the DOS prompt. All ChipWriter functions featured in CWGANG.EXE, such as Program, BlankCheck, Verify etc., can be invoked directly from the DOS prompt by using simple typed commands. The command line software provides the user with an alternative quick and efficient interface with the ChipWriter Gang programmer which in turn can speed up production of large batches of the same device.

The command line software works by using a previously saved ChipWriter Environment file (*.TSK) and a collection of single word commands and command options to operate the ChipWriter hardware.

Commands & Options

Typing:

```
CWGANG Usage/Help : GLV32 HELP/-HELP/?/-?
```

displays this message:

Menu Driven Mode:

```
CWGANG [EnvName[.TSK]] [/NM] [/DEMO] [/NOEMS]
EnvName => is a previously defined device environment
/NM      => No mouse installed
/NOEMS   => disable EMS usage
/DEMO    => for DEMO version
```

Command Line Mode:

```
CWGANG [Opts] EnvName[.TSK] -PROG|VERIFY|ERASE|BLANK|READ|CHKSUM
performs specified action using device/info/file contained in EnvName.TSK
```

Opts:

```
-eq  error quiet mode, i.e. error returned only via ERRORLEVEL (default)
-e   displays error or status message on next line of screen
-eR,C displays error or status message at screen row=R, col=C (no spaces)
-a   displays current device address on next line of screen (default)
-aR,C displays current device address at screen row=R, col=C (no spaces)
-cF,B uses colour F (0..15) for foreground, B (0..15) for background
-bB  blanks display with colour B(0..15)
-i   ignore electronic signature
-zn  where n = ZIF Socket when reading (0-7,8 = master)
```

Setting up an .TSK file in CWGANG

As previously mentioned, the CWGANG command line software requires that an environment file (*.TSK) has already been previously set up and saved. Follows these steps to save an environment file:

1. Connect the ChipWriter Gang to your PC and run the CWGANG.EXE software
2. Select the required device in the normal way
3. Load the data file to be used in the usual way. The contents of the file can be changed later, it is only the actual name that will be stored in the .TSK file.
4. Once the data has been loaded into the programming buffer you must programme one device using the CWGANG software. This ensures that all the device start and end address parameters are configured correctly. **The .TSK file will not perform correctly if this has not been done.**
5. Once a device has programmed and verified correctly create an environment by selecting **Save environment** from the **File** menu. Make a note of the name and location of the environment file you have created - this is the environment file you will need to specify when using the command line software.

Once you have completed the above the environment is ready to be used in conjunction with the single word commands and options in the command line software.

Using The Command Line Software

All commands using the CWGANG command line software must take the following form:

```
CWGANG [Options] Environment_File_Name[.TSK] -[Command]
```

Where Command = PROG, VERIFY, ERASE, BLANK, READ, CHKSUM

“CWGANG” must be typed first followed by the specific command options, then a space followed by the environment file that is to be called during the command, another space and finally the actual command function. The command options are not always required although the environment name (*.tsk) and command function are.

Command Line Examples

Some example commands may read like this:-

- `CWGANG environment_1.tsk -prog`
Invokes:- Programme devices in all occupied ZIF sockets with the data and device type specified in the environment_1.tsk environment file.
- `CWGANG -i eprom.tsk -blank`
Invokes:- blank checks all devices ignoring their electronic signature using the device type specified in eprom.tsk environment file.
- `CWGANG -v0 develop.tsk -read`
Invokes:- reads back the data from the device in ZIF socket 0 on the GLV-32 into the last file that was opened specified in the develop.tsk environment file.
- `CWGANG flash.tsk -erase`
Invokes:- erases all devices using device type specified in flash.tsk. Remember in order to erase a device it must support an erase feature, e.g.:- flash EPROMs etc.

Implementing The Command Lines In Batch Software

Once you are familiar with the command line software you may wish to include these commands in a batch file (*.bat) that will perform a more complex collection of commands and routines to provide a more efficient, automated production utility. For example, the following batch software performs a blank check on all devices in the ChipWriter and then programs and verifies.

Device selected:- AMD 27C128
Environment File:- AMDTEST.TSK

```
Rem check that the devices are blank
CWGANG AMDTEST.TSK -BLANK
If errorlevel=0 go to program
Echo Device not Blank
Rem program devices if blank
:program
CWGANG AMDTEST.TSK -PROG
Echo Devices programmed ok
```