MIOS supports internally **Hitachi HD44780** compatible character displays

It's 'so called' industry standard for the character displays, but not all “standard” displays have this particular chip.

HD44780 compatible LCD controllers:

Controller:	**Manufacturer:**
HD44780	Hitachi
KS0066	Samsung
KS0076(b)	Samsung
KS0070	Samsung
S6A0069	Samsung
LC7985NA	Sanyo
SED1278	Epson
NT3881D	Novatek
SPLC780	Sunplus
MSM6222	OKI
NJU6408B	NJR
NJU6468	NJR
NJU6470	NJR
Probably:	
UM3881B [1)]	UMC
T7934 [2)]	Toshiba
ST7036 [3)]	Sitronix

If your LCD has one of these chips, there are good changes to get it work. These chips have similar instruction set, data bus and timings are like original HD44780 (or faster, which shouldn't matter)

BUT this only means controller chip is compatible with the driver designed for HD44780

It's simply easier to get a display, that has a datasheet available.

Common problems, *if it isn't your soldering*:

- **First**: There is no common standard for the display connector - You should get your LCDs **datasheet** to see the correct pinout.
- **Second**: Your display may need negative contrast voltage. [4)]
- **Third**: Backlight not working? Maybe it's Electroluminescent (EL) type. [5)]

And it's also good to know at least HD44780 displays can be initially programmed to different character sets - maybe your dirt cheap surplus display just talks greek to you 😬

More:
MBHP LCD module page at uCApps.de
HD44780 Info and Links

HD44780 Compatible eBay search

1)

I haven't found any reports about this chip

2)

instruction set compatible, has extra characters in CG ROM, it shouldn't matter

3)

instruction set compatible, did **not** work for me, although it should; I couldn't get the pinning right: see http://www.midibox.org/forum/index.php?topic=9317.0

4)

Watch out for V_{ee} pin. (Usually found in 'extended temperature range' displays)

5)

might need 'so called' inverter circuit to drive backlight

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