

Universal Mobile Controller TC100 Quick Start Instruction

1. Getting started

- Connect JP6 of the TC100 to the serial interface of a PC (TXD-Pin2, RXD-Pin3, GND-Pin5 of the 9-pin Sub-D Conn.)
- Run a Terminal program (COM-setting 1200 Baud, 8 data bits, 1 stop bit, no parity, echo off)
- Connect supply voltage to the TC100 (+8...15VDC at Pin 8, GND at Pin 2 of the Mini DIN Socket)
- Bridge JP8 (PGM) briefly
- Menu appears on the screen ("RAM Mode...")
- TC100 is now in RAM program mode: Enter instructions line by line. „run“ as a last line will start the program. Shorting JP8 (PGM) briefly will stop the program and switch into program mode
An error message will appear with memory overflow or wrong syntax of instructions
- Short programs can easily be tested that way
- Caution! Program will be lost in RAM Mode after switching off the power supply!

2. Typing instructions line by line

- Bridge JP8 (PGM) briefly
- Enter instruction "burn" (Menu "BURN Mode..." appears on the screen)
- Starting from now every instruction line will be stored into the non volatile memory (only correct syntax accepted)
- Terminate by typing „end“ as a last line (total number of lines will be shown afterwards)
- Program will start either by typing „run“ or after every time switching the TC100 OFF and ON again

3. Uploading the „txt“ file

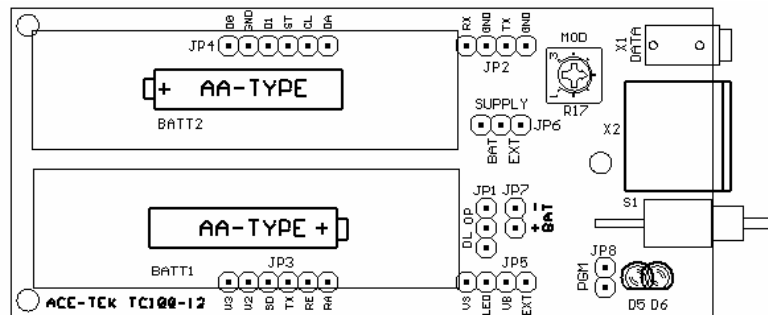
- Write the instructions line by line using any Text Editor
- Depending on the desired mode use „ram&“ or „burn&“ as first line. In BURN Mode terminate by using instruction „end“ as a last line
- Use your Terminal software to send the „txt“-file to the TC100 (total number of lines will be shown afterwards)
- Program will start either by typing „run“ or after every time switching the TC100 OFF and ON again (BURN Mode)

4. Reading the non volatile memory

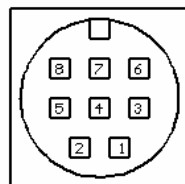
- Bridge JP8 (PGM) briefly
- Enter instruction "burn" (Menu "BURN Mode..." appears on the screen)
- Enter instruction „list“ (Content of the non volatile memory will appear on the screen)

Instruction Set for Universal Controller UC100 is also valid for the Mobile Controller TC100 (only difference is the number of available ports, port 0, 17, 18 and 19 are possible in TC100) So please use the UC100 Manual for detailed programming information until the English version of the TC100 Manual is released. All information provided on our Website www.ace-tek.com . Please send your enquiry to e-mail office@ace-tek.com

Connection Info TC100



X2 (Mini-DIN 8-pin):



- 1...RXD / GPS Data in (+-3...15V)
- 2...GND
- 3...V1 (0...2,5VDC)
- 4...MOD (0...250mVpp)
- 5...PTT (max. 25V, 200mA)
- 6...V0 (0...2,5VDC)
- 7...+Vs out (3,3VDC / max. 10mA)
- 8...Vext (+8...15VDC)

X1 (Jack socket 2,5mm): Base = GND, Ring = TC100 TXD, Tip = TC100 RXD

Switch S1: On / Off Switch

Indicators: Lower LED (D6) = Sleep / active mode, Upper LED (D5) = TX-Indicator

R17: Mod.-Level adjust (Standard 0...250mVpp)

JP1: Battery access (TC100B)

JP2: Serial Interface Connector (for Extension Board)

JP3: Connection to Extension Board

JP4: Connection to Extension Board

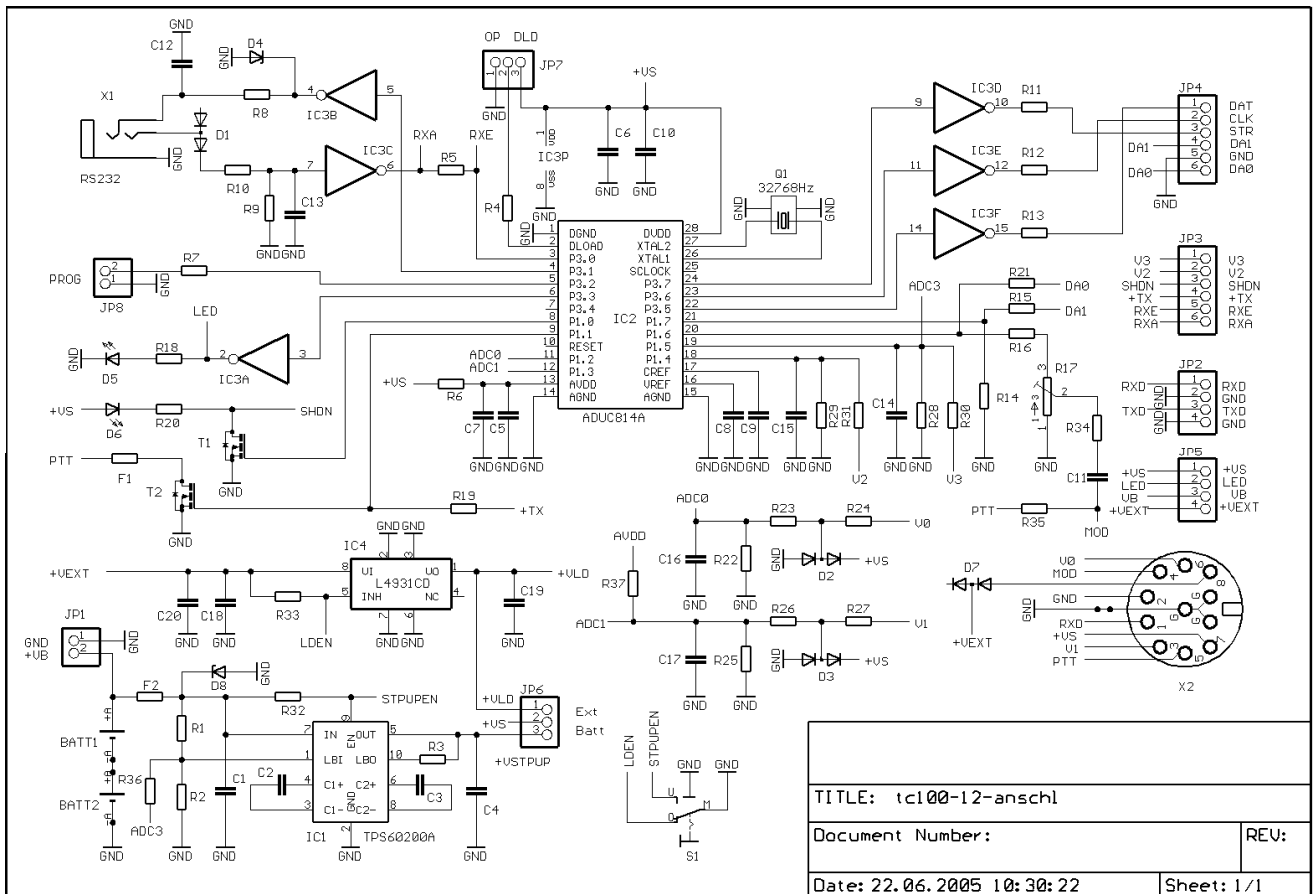
JP5: Connection to Extension Board

JP6: Jumper for selecting power source (Ext. / Batt.), Position Ext. for TC100A

JP7: Jumper for Firmware Update, Position OP for standard use

JP8: Jumper for Program Mode, short briefly for switching to program mode

TC100A / TC100B Circuit Diagram



Not placed in TC100A version: IC1 and associated components