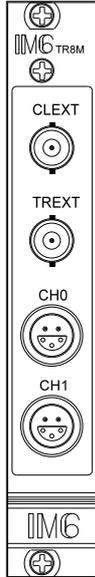


TR8M Transient Recorder

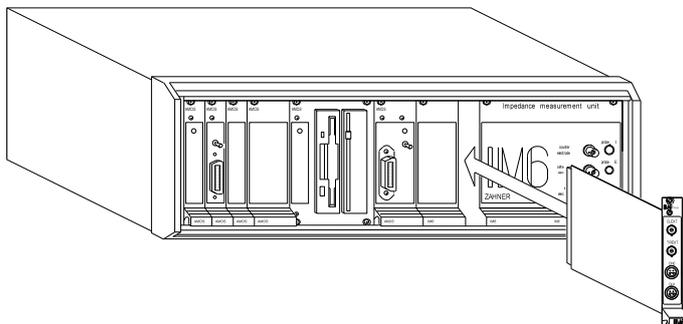


The hardware extension module TR8M for the Electrochemical Workstations IM6 and IM6e is optimized for the investigation of fast electrical events which need to be measured with a high time resolution and fixed phases in two channels. A typical application is the investigation of pulse and transient responses.

As soon as the module is plugged into the IM system it is detected by the Thales software. When starting the program modules *PVI*, *Pulse* or *TRC* located in the *Time Domain* menu the programming of the transient recorder is available. In *PVI* and *Pulse* the ranges and menus are extended accordingly, in *TRC* parameters are input directly in the program window.

The outlets for connection of the measuring signals, trigger and clock are located on the front panel of the module. On the other hand, the measuring signals may also be the potential and current channels of the IM system. These are connected internally, so that no external connections are necessary. For feeding external probes and instrumentation amplifiers the outlets provide a power supply of $\pm 15V / 50mA$.

Installation



- **Disconnect the IM system as well as the PC from mains!**
- Remove the front panel named "IM6 Extensions".
- Plug in the TR8M module in one of the free slots and fix it with the screws.

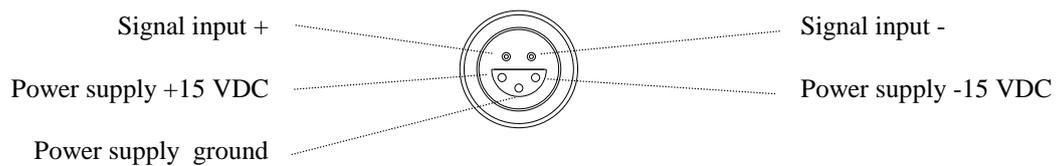
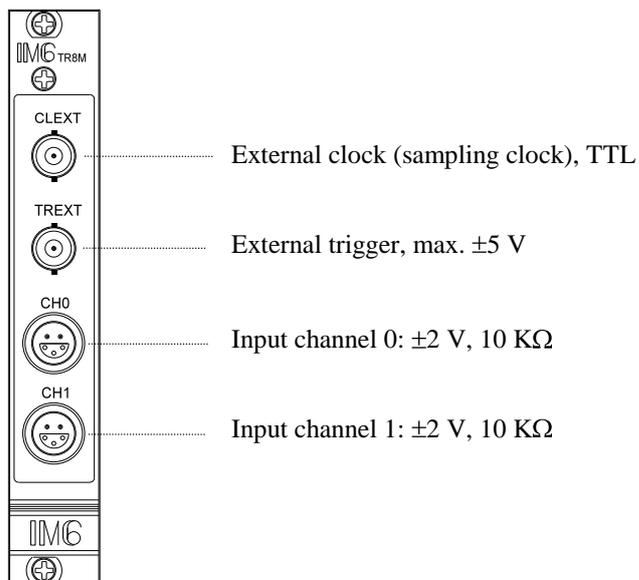
Functional Test

- Connect the IM system to the mains and switch it on
- Press the key in the startup menu to jump to the andiBASIC input window
- Input the following line:
`ST%=ink(0,hex("4600")):printST% <RETURN>-Taste`
- A "1" must be returned for the older version of the TR8M or a "0" for the newer version

In case of defect (displayed value $\neq 1$):

- Write down the displayed value
- Switch off the system
- Contact your local Zahner representation
- Before you switch on the IM system again, please remove the TR8M module.

Outlets



Software Installation

In case your system is not ready for the TR8M, please install the software update included. Only the the extended ranges and menus are available. Currently, the TR8M is supported by the software modules *PVI*, *Pulse* and *TRC*. How to install the software update please read in the IM manual.

Specifications

Max. sampling rate	40 MHz one channel, 20 MHz two channels
Channels	2
Max. input voltage	± 2 V (external), ± 2 V (internal)
Input impedance	10 K Ω
Resolution	12 Bit
Power supply outlet	± 15 VDC / 0.05 A
Onboard sample memory	8 MWords
Trigger modes	Level, slope, pre-trigger, source (internal/external)
Max. trigger level	± 5 V (60 Ω)
Clock	max. ± 5 V
Configuration	By software
Power supply	+5 V / 0.55 A, +15 V / 0.07 A, -15 V / 0.1 A
Dimensions	4 TE (one IM slot)

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