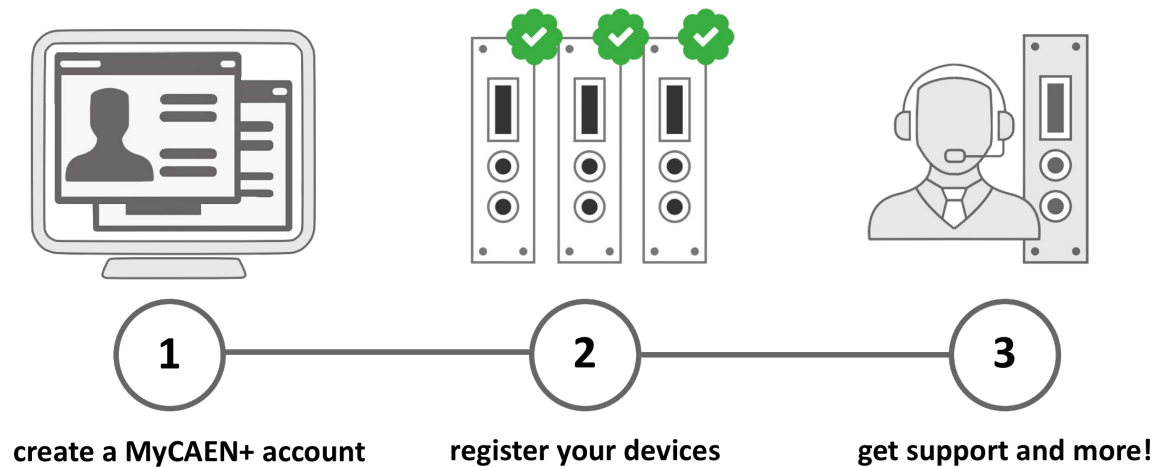




Register your device

Register your device to your **MyCAEN+** account and get access to our customer services, such as notification for new firmware or software upgrade, tracking service procedures or open a ticket for assistance. **MyCAEN+** accounts have a dedicated support service for their registered products. A set of basic information can be shared with the operator, speeding up the troubleshooting process and improving the efficiency of the support interactions.

MyCAEN+ dashboard is designed to offer you a direct access to all our after sales services. Registration is totally free, to create an account go to <https://www.caen.it/become-mycaenplus-user> and fill the registration form with your data.



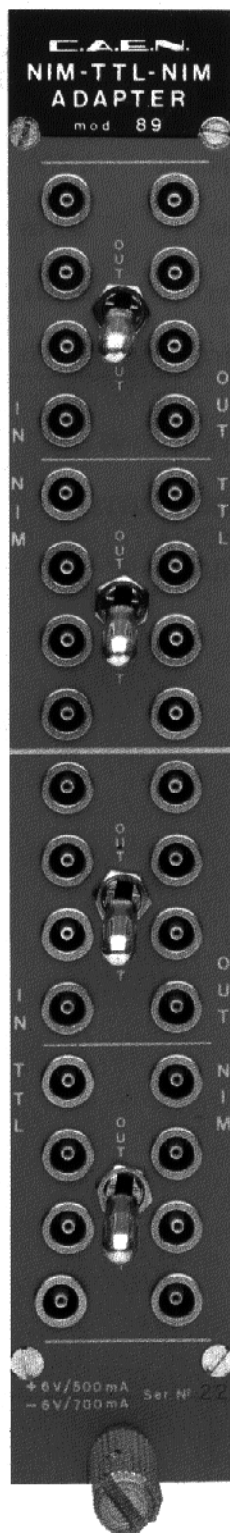
<https://www.caen.it/become-mycaenplus-user/>

Technical Information Manual

MOD. N 89

*NIM-TTL-NIM
ADAPTER*

30th August 1991



CAEN will repair or replace any product within the guarantee period if the Guarantor declares that the product is defective due to workmanship or materials and has not been caused by mishandling, negligence on behalf of the User, accident or any abnormal conditions or operations.

CAEN declines all responsibility for damages or injuries caused by an improper use of the Modules due to negligence on behalf of the User. It is strongly recommended to read thoroughly the CAEN User's Manual before any kind of operation.



CAEN reserves the right to change partially or entirely the contents of this Manual at any time and without giving any notice.

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DESCRIPTION

Model N 89 is a NIM-to-TTL, TTL-to-NIM Adapter and incorporates 8 channels of NIM to TTL converters and 8 channels of TTL to NIM converters in a 1-unit wide std. NIM module.

In order to increase its flexibility, the module is divided into four sections: the two upper sections perform the NIM to TTL conversion; the two lower sections, the TTL to NIM conversion. In each section a two-position switch allows logic inversion.

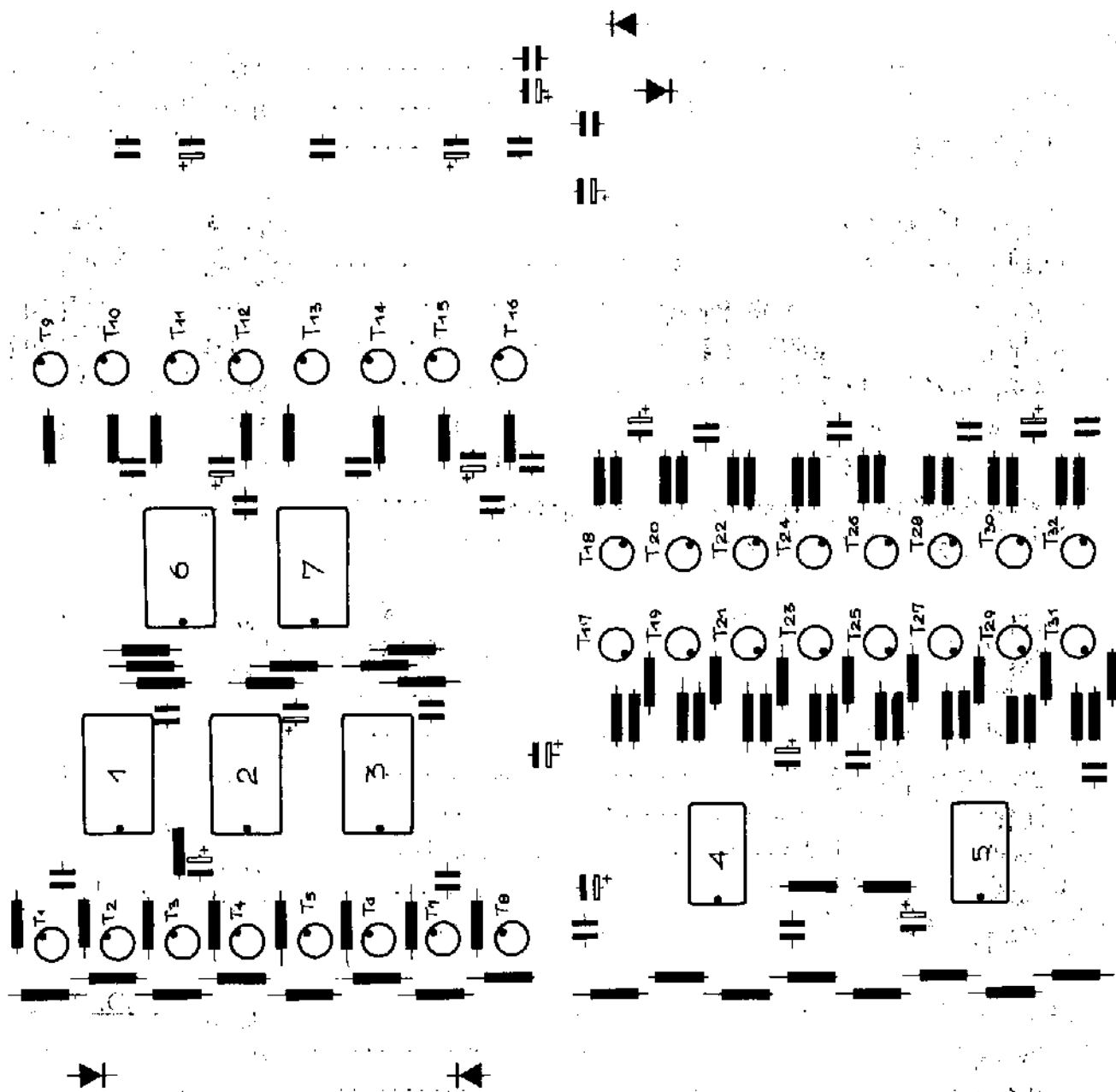
All the channels are DC coupled and have no duty-cycle limitations. The TTL output can deliver 2V on 50 Ω and can therefore be connected to remote 50 Ω loads through 50 Ω coaxial cable with minimum signal degradation. Fast rise-and-fall times ensure reliable operations with minimum pulse width and maximum frequency.

SPECIFICATIONS

PARAMETER	NIM-TTL	TTL-NIM
Number of channels	8	8
Input impedance	50 Ω	50 Ω
Min. input pulse width	10 ns	12 ns
Output pulse amplitude	≥ 2 V	800 mV
Output impedance	50 Ω	50 Ω
Rise- and fall-time	≤ 3 ns	≤ 2 ns
Input-Output delay	≤ 8 ns	≤ 10 ns
Max. operating frequency	60 MHz	40 MHz

All connectors are **LEMO 00** type

Power requirements: + 6V 0.23 A
 - 6V 0.23 A



Mod. N89

LIST OF COMPONENTS

I.C.s

(IC4) x 2	.....	SN7486	(2)
IC1,IC2,IC3	.....	MC10107	(3)
IC6,IC7	.....	MC10125	(2)

TRANSISTORS

(T18,T20,T22,T24) x 2	.....	2N918 Ph.	(8)
T1+T8	.....	2N918 Mot.	(8)
T9+T16	.....	2N2369A	(8)
(T17,T19,T21,T23) x 2	.....	BSX 29	(8)

DIODES

D1,D2	.....	1N4007	(2)
D3,D4	.....	1N914	(2)

RESISTORS 1/4 W 5%

R1,R3,R5,R7,R11,R13,R15,R17 (R39,R42,R51,R54) x 2	.....	51 Ω	(16)
(R41,R47,R53,R59) x 2	.....	178 Ω 1%	(8)
(R37,R44,R49,R56) x 2	.....	220 Ω	(8)
(R40,R46,R52,R58) x 2	.....	215 Ω 1%	(8)
R19+R26, (R38,R45,R50,R57) x 2	.....	560 Ω	(16)
R2,R4,R6,R8+R10,R12,R14,R16,R18	.....	1 K Ω	(10)
R27+R34, (R35) x 2	.....	2.2 K Ω	(10)
(R36,R53,R48,R55) x 2		6.8 K Ω	(8)

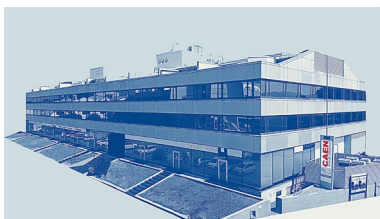
CAPACITORS

C*		10 nF	(22)
C**		> 6.8 μ F > 6V	(14)

C*,C**: Filter Capacitors

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