

### Recorder / player- 32 messages of 3,2 sec and 4 priority messages of 4,4 sec.

Recorder / Player of 32 messages of 3,2 sec. which can be controlled by BCD signals, and 4 priority messages more of 4,4 sec. with controlled by negative-going clock transition.

It has a direct output to a loudspeaker with maximum power of 5 W. as well as volume control.

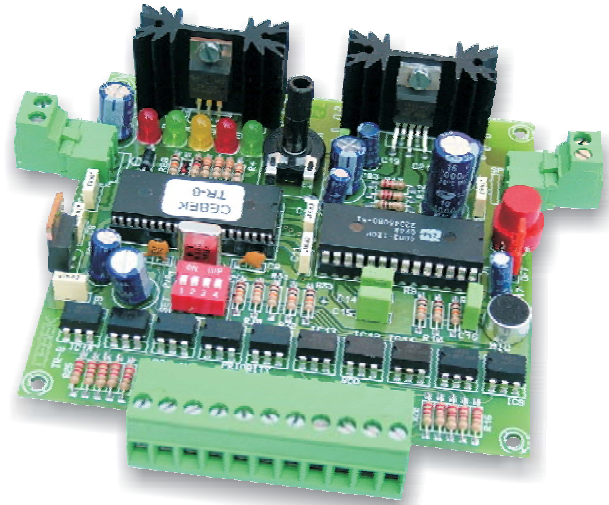
Control inputs at 24 Vdc, opto-coupled with electrical insulation.

It accepts the auto repeat function of each message.

It also includes an inhibition input, a microphone, operating indicators Leds, play, rec, run and repeat.

#### TECHNICAL CHARACTERISTICS.

- Voltage : 24 VDC (50-60 Hz).
- Min./max. Consumption: 80mA/ 140mA.
- Control Inputs signals: 3 up to 24 VDC.
- Minimum Inputs control current: 10 mA
- Sampling Frequency : 8 KHz.
- Output Impedance : 4 8 Ohms.
- Output power : 5W. (RSM at 4 Ohms).
- Automatic Gain Control : It can be selected by a jumper placed on the circuit.
- Protection against polarity inversion Voltage input.
- Operating temperature: -25°C à +55°C
- Max. wire diameter for connection terminals : 2,5 mm.
- Net weight: XXXX g.
- Fixing : DIN-Rail / screws with fixation in 4 points
- Indicator for Operating mode : 5mm Red Led, (PWR)
- Indicator for recording selection: Led 5mm Red, (REC).
- Indicator for Playing selection: 5mm Green led, (PLAY).
- Indicator for Activation function : 5mm Green Led, (RUN).
- Indicator for Repeat Messages mode: 5mm Orange Led, (REPEAT).
- Rules, EMC Electromagnetic Compatibility 89/336/CCE as well as its modifications 32/31/CCE and 93/68/CCE.



TR-8

#### INSTRUCTIONS.

##### Description.

The TR-8 module has 5 inputs indicated as ABCDE and controlled by binary signal from 3 up to 24 V dc. Thanks to the correspondent binary combination, the 32 resulting messages can be recorded or played, during a maximum time of 3,2 sec for each one. All inputs can be inhibited thanks to an independent input.

The module also includes 4 supplementary inputs, numerated from 1 up to 4, which can be directly activated by a 24 Vdc positive signal and with a priority play regarding any other previous selection or a selection at the same time. The maximum capacity accepted by these supplementary inputs is 4,4 sec.

The device incorporates a volume control, a push button as well as a microphone for recording.

##### Installation.

The module's installation has to be preferably done into an enclosure or a rack, correctly ventilated, avoiding any contact between the circuit and metal objects.

Do not install the device in humid places, under high temperatures, or in contact with liquids.

Do not supply the module before to finish its installation. Please carefully read this instruction manual.

**Control Signals.** Composed by 11 connection inputs (5 x BCD, 4 priority, 1 inhibition and the negative), they are electrically insulated from the rest of the circuit. For this reason, it is necessary to connect the negative of the signal with the signal which had to excite inputs and the common negative of control inputs.

It is recommended to minimize at the maximum, the cable length for theses inputs, using if possible shielded cable.

**Loudspeaker Output.** The maximum power supplied by the module is 5 W. It is better to use a loudspeaker with a minimum of 10W. with an impedance from 4 up to 8 Ohms. For this output, you can use a standard shielded cable.

**Suggestion.** The device has 4 holes of 3.5 mm to be fixed. More over, thanks to Cebek C-7587 guides, it can be install in a DIN-RAIL.

##### Power Supply.

The module's feed, independently of the feed used for control inputs, has to be done through a 24 VDC voltage perfectly stabilized; for that, we strongly recommend you to use a short-circuit power supply with a low ripple level. Do never use standard a power supply, neither rectifiers, who can damage the module operating mode.

**Note:** To be in accordance with the EEC regulations, a switch and a 200 mA fuse have to be installed on the positive of the feed input. Both are necessary for the module's protection.

##### Recording.

To configure the device in recording mode, you have to put in ON position the switch N°3 of the battery for the functions control, and the REC Led will light.

Then, you have to select the number of the message in which you want to make the recording. See paragraph "To activate control signals". Pressing the push button "push", and during its pressure, the module will record through the microphone. If you stop to press the push button, or if you exceed the maximum allowed time by the message, the recording will automatically stop.

During the recording process, the RUN Led will intermittently light from the beginning to the end.

**AGC.** The module has an Automatic Gain Control (AGC), which allows to stabilize the signal level received by the microphone. To activate the AGC function, the ON jumper has to be closed or joined. At the opposite, to deactivate this function, the OFF jumper has to be closed or joined.

Attention: Both jumpers can never be closed at the same time.

The device is supplied with the AGC function activated, mode that we suggest to maintain.

**Specifications to record.** Before to start to record, it is better to reduce at the maximum the volume control, to be close to the microphone and to clearly speak.

**INSTRUCTIONS.**

**To activate the Control signals.**

The activation of the inputs control signals is done by high level (positive between 3 and 24 VDC), regarding the common negative of these inputs. It is necessary to connect this negative to the negative of the control signal that you want to excite inputs.

To select the message between 0 and 31 has to be done in BCD, where the terminal E correspond to bit with the higher weight (Msb) and the terminal A to the lower weight (Lsb).

The four priority messages are activated by direct application of the signal at high level, following a hierarchical order; the N°1 being the more important and the N°4 being the less important.

The inhibition signal (INH) prevent the recording and the playing of messages (from 0 to 31) if the signal is maintained at high level. It never affect the four priority messages.

**To activate the control signals (message Selection).**

A	B	C	D	E	1	2	3	4	INH	Activated Message
X	X	X	X	X	0	0	0	0	1	Aucun
X	X	X	X	X	1	X	X	X	X	Priorité 1
X	X	X	X	X	0	1	X	X	X	Priorité 2
X	X	X	X	X	0	0	1	X	X	Priorité 3
X	X	X	X	X	0	0	0	1	X	Priorité 4
0	0	0	0	0	0	0	0	0	0	Message 0
1	0	0	0	0	0	0	0	0	0	Message 1
0	1	0	0	0	0	0	0	0	0	Message 2
1	1	0	0	0	0	0	0	0	0	Message 3
0	0	1	0	0	0	0	0	0	0	Message 4
1	0	1	0	0	0	0	0	0	0	Message 5
0	1	1	0	0	0	0	0	0	0	Message 6
1	1	1	0	0	0	0	0	0	0	Message 7
0	0	0	1	0	0	0	0	0	0	Message 8
1	0	0	1	0	0	0	0	0	0	Message 9
0	1	0	1	0	0	0	0	0	0	Message 10
1	1	0	1	0	0	0	0	0	0	Message 11
0	0	1	1	0	0	0	0	0	0	Message 12
1	0	1	1	0	0	0	0	0	0	Message 13
0	1	1	1	0	0	0	0	0	0	Message 14
1	1	1	1	0	0	0	0	0	0	Message 15
0	0	0	0	1	0	0	0	0	0	Message 16
1	0	0	0	1	0	0	0	0	0	Message 17
0	1	0	0	1	0	0	0	0	0	Message 18
1	1	0	0	1	0	0	0	0	0	Message 19
0	0	1	0	1	0	0	0	0	0	Message 20
1	0	1	0	1	0	0	0	0	0	Message 21
0	1	1	0	1	0	0	0	0	0	Message 22
1	1	1	0	1	0	0	0	0	0	Message 23
0	0	0	1	1	0	0	0	0	0	Message 24
1	0	0	1	1	0	0	0	0	0	Message 25
0	1	0	1	1	0	0	0	0	0	Message 26
1	1	0	1	1	0	0	0	0	0	Message 27
0	0	1	1	1	0	0	0	0	0	Message 28
1	0	1	1	1	0	0	0	0	0	Message 29
0	1	1	1	1	0	0	0	0	0	Message 30
1	1	1	1	1	0	0	0	0	0	Message 31

- X = High or Low level.
- 1 = High level. (3 - 24 V. D.C.).
- 0 = Low level. (0 V. D.C.).

**Playing.**

The operating TR-8 module in playing mode requires that the switch N°3 of the function control battery is maintained in OFF position. The PLAY Led will light.

**Repetitive Playing.** The module allows to play a message in a repetitive and constant mode till this one is selected. If the switch N°1 is placed in ON position, the repetitive play is activated for priority messages. For messages from 0 till 31, if you place the switch N°2 in ON position, the repetitive mode. When these switches are in OFF position, the correspondent repetitive function will be deactivated. The REPEAT Led will light when the repetitive playing is activated for priority messages as well as for message 0 to 31. It will light off if the repetitive function is not assigned to any kind of these messages.

**Playing.** Messages from 0 to 31 are activated according to the binary code introduced into the corresponding control inputs. Nevertheless, the playing won't be activated till the inhibition input (INH) is not at a low level. Then, the module will play the message corresponding to the introduced binary code. When the message is finished, if the repetitive option is activated and if the same binary code is maintained, the message will be played an other time. The cycle will be maintained, till you change the binary code or the INH input reach a high level.

If the playing is "Normal" (without repetition), the message will be played only one time, even if you maintain the signal of the code into control inputs.

We recommend you to maintain the INH input at high level when you change the selection of the binary code or after the activation of a normal playing; otherwise with the INH at low level and all inputs opened, the message N°0 will be selected.

If a priority message is selected, the circuit will automatically stop any message playing and start to play the priority message.

If several priority messages are selected at the same time, the module will play only the message with higher hierarchical order. (See "To activate Control Signal" paragraph).

**Warranty and Technical Incidences**

All cebek modules have a total warranty of 3 years as concern components and labour man.

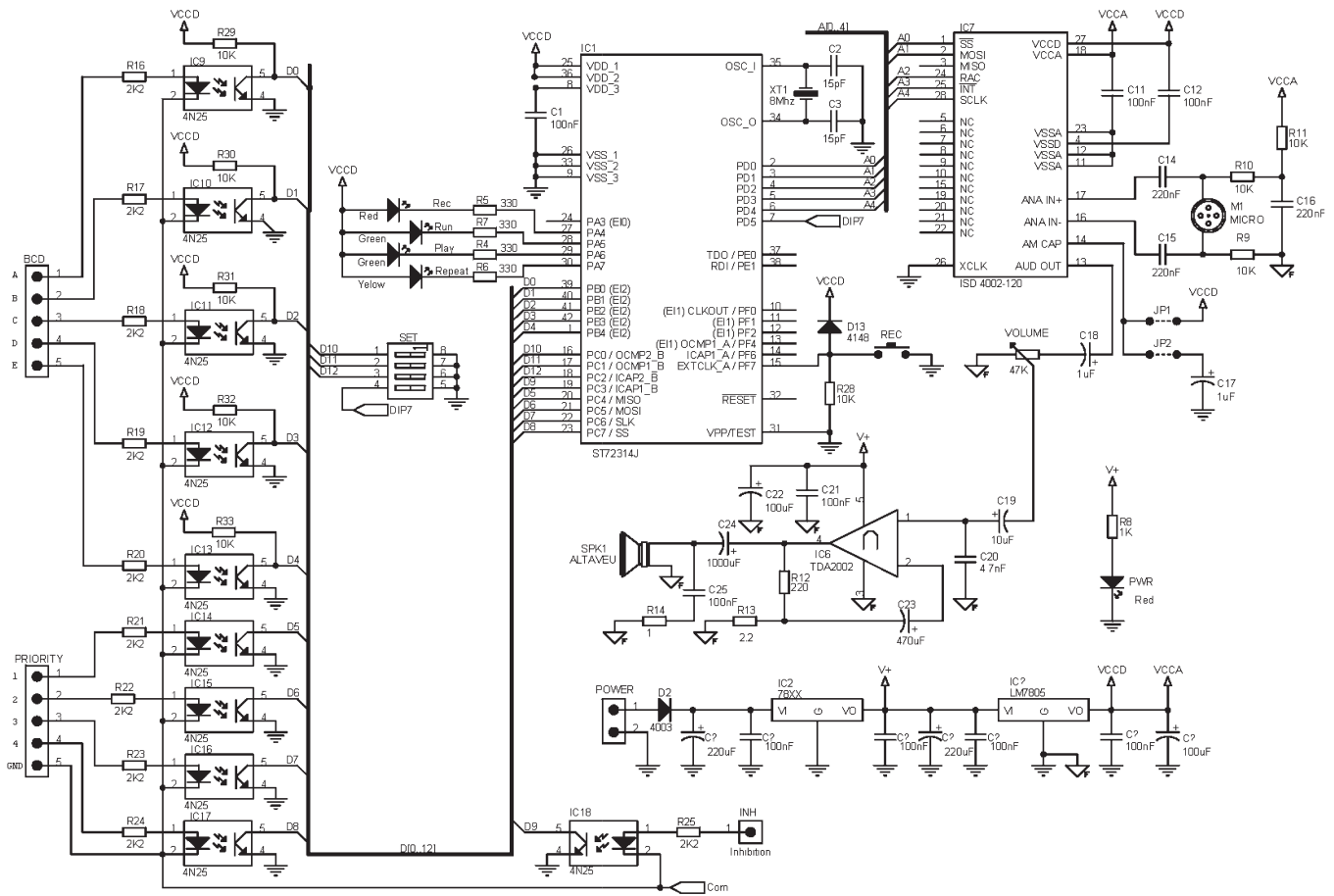
All damage, error or mistake due to problems independent from the circuit, connection, installation or operating mode, as well as wrong handling are not included in this warranty. More over it will be necessary the purchase invoice of this module for any claim.

This manual (documentation) can be reviewed or modified without any preavis, and it doesn't involve FADISEL. S.L.

The use of any of the FADISEL modules' mentioned in this manual provoke the acceptance of these commercial terms and correspondent warranty.

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ELECTRICAL DIAGRAM.



MECHANIZING and CONNECTIONS.

