STABILOCK 4031 | 4032

POCSAG NRZ

Software Option   897 080

Operating Instructions

28_pocsg   Doc. Version: 9401-270-B

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Function test

Entries

`RF Frequency`	Input field for carrier frequency.
`512 Bd`	Input field for baud rate (acceptable input values: 0 to 4000 baud). Bd rates larger than 4000 baud are setting automatically to 4000 baud after `RUN`.
`Dev.`	Input field for modulation deviation (acceptable input values: 0.0 to 9.9 kHz).
`RF Level`	RF output level. Select dimension (`mV/µV, dBµ, dBm`) and set `Level/50` Ω or `Level/EMF` on RX mask.
`CALL NO.`	Input field for pager calling number.
`PRAEAMBLE`	Input field for number of preamble bits (The preamble is sent out before the actual message).
`FUNCTION`	Selection of "function". If the message data should be inverted, add the value 4 to the function value.

Function value	Function
0	Numeric only
1	Tone only
2	Tone only (different tone sequence and timing)
3	Alphanumeric

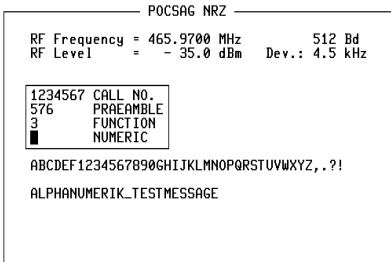|	
`NUMERIC`	Scroll field to select numerical messages: Numerical message: Scrollvariable = `X`. Alphanumerical message: Scrollvariable = Space.
`ABCDEF123....`	First of the three message-input fields located at the lower part of the screen. Each one can take up to 40 characters. Upon opening one of the input fields (for instance with `ENTER`) text can be entered the same way using the soft-keys as described in chapter 7, paragraph "Naming Files". Before opening another one of the three input fields, the actual input field has to be closed by `ENTER`.

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Test mask

```
            ────── POCSAG NRZ ──────
   RF Frequency = 465.9700 MHz        512 Bd
   RF Level    =  - 35.0 dBm   Dev.: 4.5 kHz

   ┌───────────────────┐
   │1234567 CALL NO.   │
   │576     PRAEAMBLE  │
   │3       FUNCTION   │
   │█       NUMERIC    │
   └───────────────────┘
   ABCDEF1234567890GHIJKLMNOPQRSTUVWXYZ,.?!

   ALPHANUMERIK_TESTMESSAGE

```

Fig. 10.1: Test mask.

RF-DIR ▮▮▮▮ CONT"10" ▮▮▮▮ RUN RETURN

Meaning of the softkeys

(RF–DIR)   Alternative function RF. This permits, like in the basic masks, connection on the RF or RF DIRECT input.

(CONT"10")   Sends out continuously a 1-0 sequence (interruption by (STOP)).

(RUN)   Sends out the entered message.

(RETURN)   Leads back to OPTION CARD mask.

Steps to run the test procedure

1. Enter test parameters.
2. Input message (max. 120 characters).
3. (RUN)

System specifications

POCSAG = Post Office Code Standardisation Advisory Group

Carrier-frequency range	70-cm/2-m-band
Channel spacing	20 kHz
Deviation	0 to 9.9 kHz (standard: 4.5 kHz)
Data rate	512 (1024) bit/s
Data modulation	Direct NRZ-carrier frequency shift keying (Non Return to Zero)

Preambel	1.Batch		2.Batch		Following
	SC		SC		Batches

Data format

SC = Synchronisation code word

Preambel

10101010101010.....10101010101010

The preambel consists of at least 576 bits (Length of 18 code words); The preambel is to ensure the synchronisation of the pager.

Signaling according to "Standard Message Formats for Digital Radio Paging"

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Lifeline

The chronological lifeline tells you what modifications have been made to the software (SW) and the operating instructions. After a software update the lifeline helps you to find out quickly about all major changes (see code) in the updated operating instructions that are supplied.

Code: C = Correction, IN = Important Note, NF = New Feature

SW	Doc. Version	Δ pages	Code	Changes
2.60	2.6-0	all		First edition of manual.
2.70	9305-270-A	10-3	NF	Evaluation/output of inverted message data.
	9401-270-B	all	NF	Layout changed to small pages.