

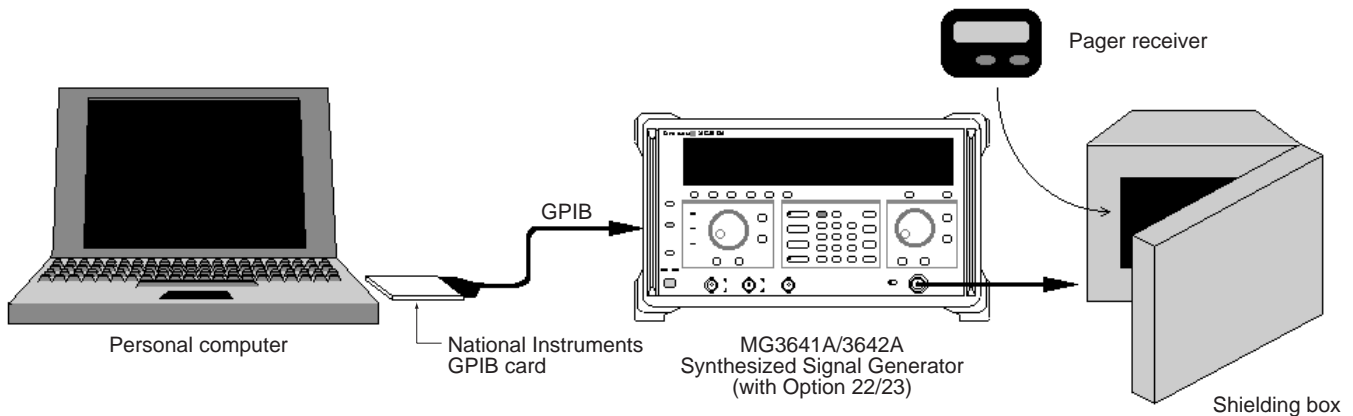
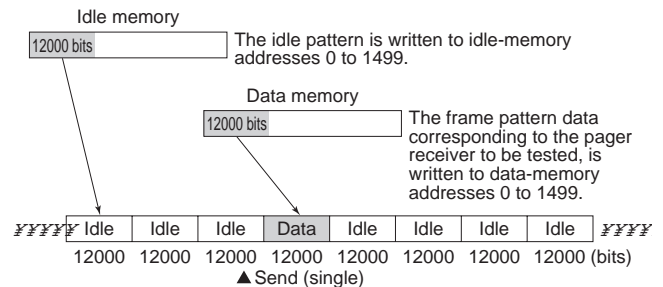
Pattern Generator (Option 23) MX364001B Software for Pattern Generator Data Write (For MG3641A/3642A Synthesized Signal Generator)



Pattern Generator Application Example

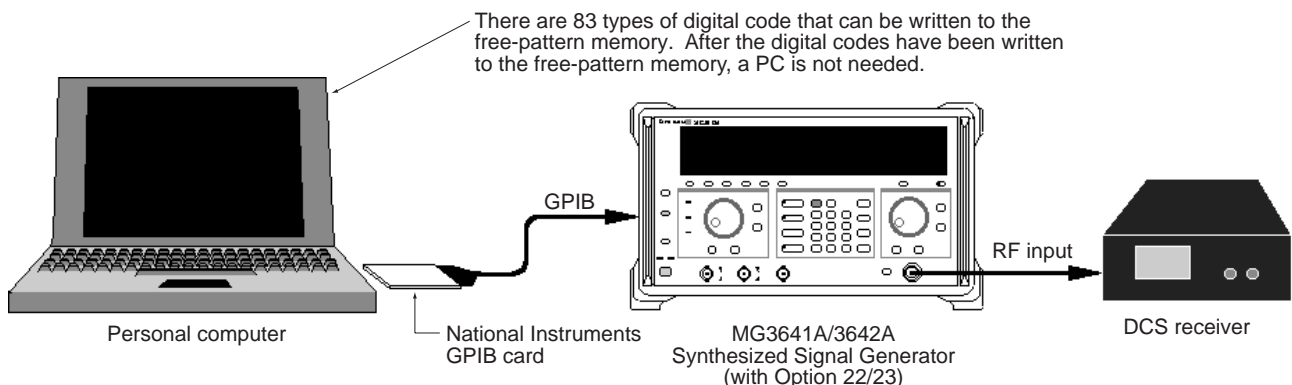
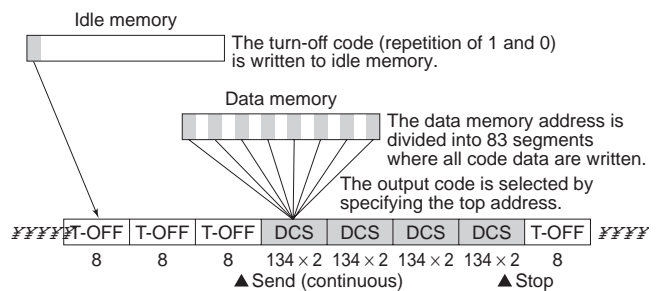
● Pager Receiver Test

The data pattern generated by the Pattern Generator (Option 23) is sent to the FSK Encoder (Option 22) where it is modulated by 2-level or 4-level FSK modulation. The frame pattern data corresponding to the pager receiver to be tested is written to memory using a PC and the MX364001B software via the GPIB interface.



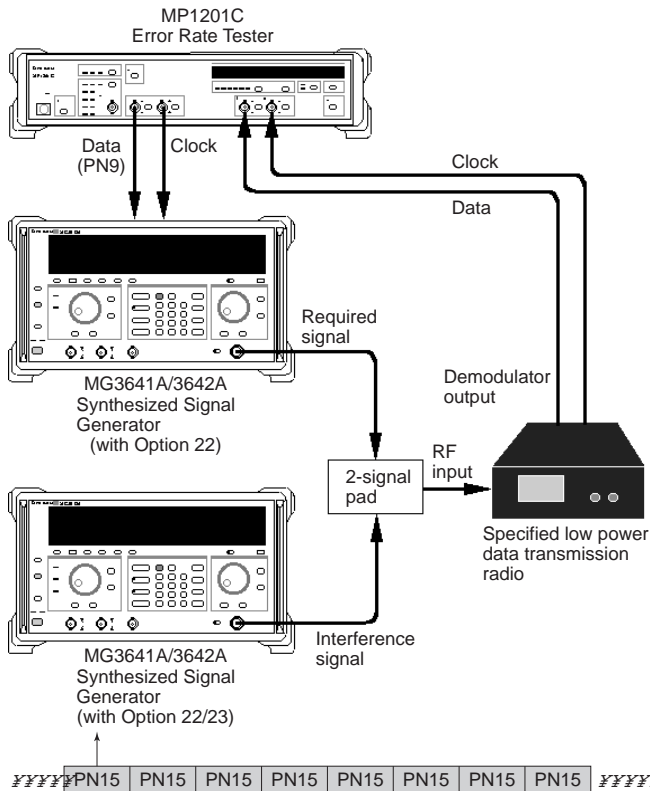
● DCS (Digital Code Squelch) Radio Communications Test

The data pattern generated by the Pattern Generator is sent to the FSK Encoder (Option 22) where it is modulated by 2-level FSK modulation. The data pattern to be written is generated by an external PC, and is written via the GPIB interface using the MX364001B software.



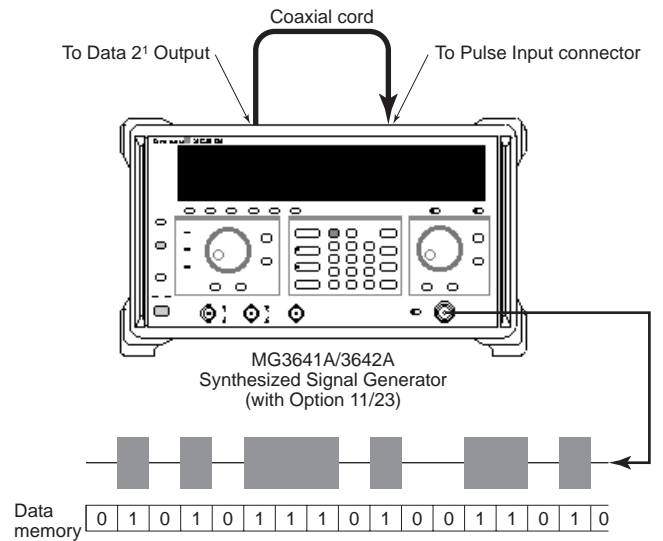
● **Specified Low Power Data Transmission Radio Receiver Test**

The PN9-stage pseudorandom pattern generated as the required signal by the MP1201C Error Rate Tester is sent to the FSK Encoder (Option 22) where it is modulated by 2-level FSK modulation. Also the PN15-stage pseudorandom pattern generated as the interference signal by the Pattern Generator (Option 23) is sent to the FSK Encoder where it is modulated by 2-level FSK modulation. The error rate of the data modulated to the required signal is measured by the MP1201C Error Rate Tester.



● **Generation of Pulse Modulation Signal**

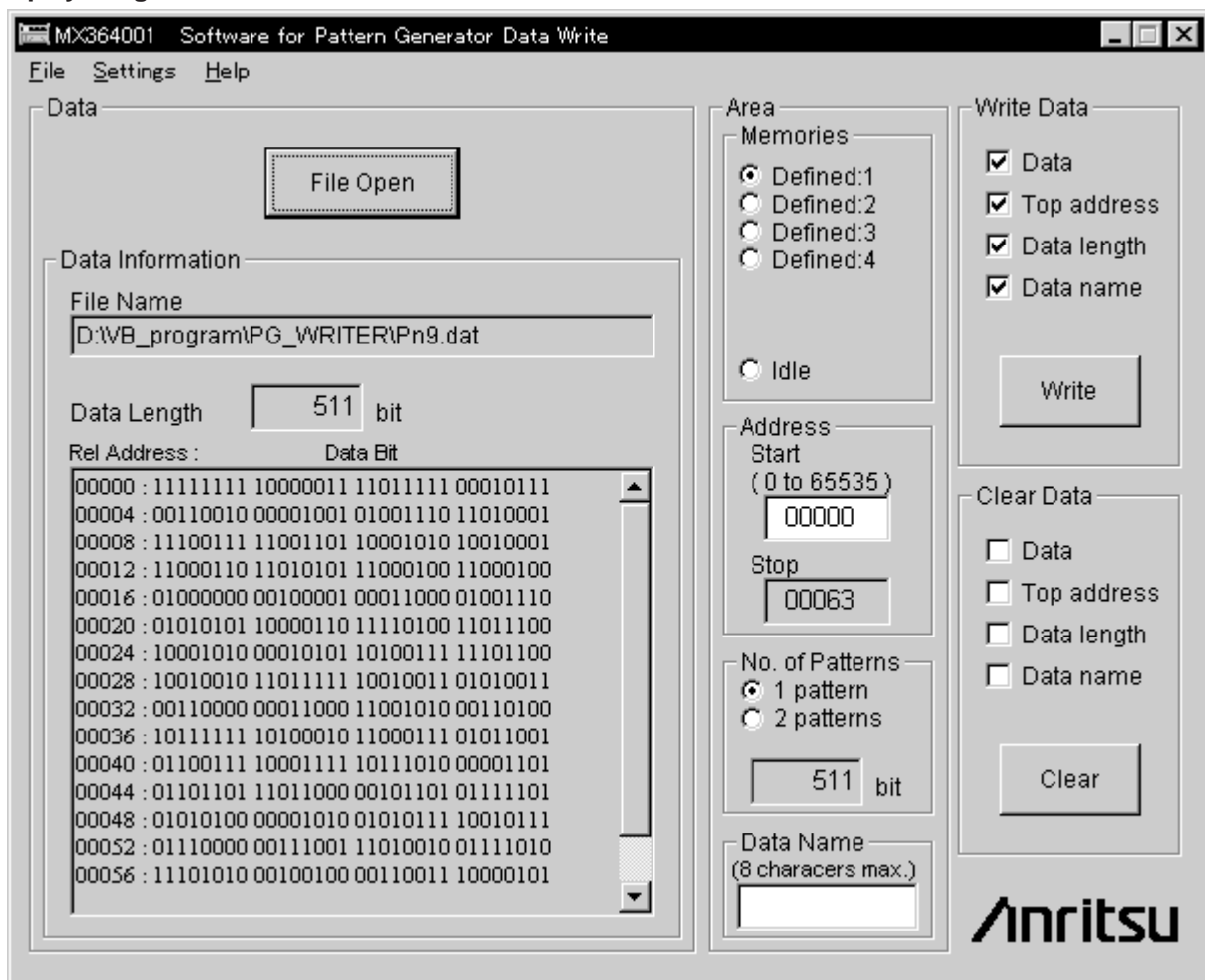
The repetition pattern generated by the Pattern Generator (Option 23) is sent to the Pulse Modulator (Option 11) where it is pulse modulated. The required pattern is written to idle memory using either the fixed pattern of 01010101 (50% duty) or an external PC.



MX364001B Software for Pattern Generator Data Write

The MX364001B software enables writing of data easily from a PC to the Pattern Generator (Option 23) installed in the MG3641A/3642A Synthesized Signal Generator via the GPIB interface. The data written to the Pattern Generator (Option 23), is edited using a text editor on the PC. The edited data can be transferred to the MG3641A/3642A using this software.

● Display Image



Step 1:
Reads data file

Step 2:
Specifies write area

Step 3:
Executes data write

Specifications

● Pattern Generator (Option 23)

Data pattern	Free	<p>Number of memories: 4 (defined: 1 to 4) Memory capacity: 524,288 bits/memory Pattern output Range: Top address and data bit length can be set for the respective free-pattern memories. Top address setting range: 00000 to 65,535 Data bit length setting range: 2 to 524,288 bits (Final address of output: 65,535 or less) Memory: Saves 1-byte units via GPIB interface Saves when pattern generator output off, or idle pattern being output</p>
	Fixed	<p>PN9 pseudorandom pattern (conforming to ITU-T V.52), PN15 pseudorandom pattern (conforming to ITU-T O.151), 01 fixed pattern</p>
Idle pattern		<p>Number of memories: 1 (idle) Memory capacity: 524,288 bits Pattern output Range: The top address and data bit length can be set. Top address setting range: 00000 to 65,535 Data bit length setting range: 2 to 524,288 bits (Final address of output: 65,535 or less.) Memory: Saves 1-byte units via GPIB interface Saves when pattern generator output off</p>
Output method		<p>Single: Specified data pattern output once only (PN9 and PN15 are output twice.) Continuous: Specified data pattern output continuously When the data pattern is not output, the idle pattern is output continuously.</p>
Output rate		<p>Range: 1 to 99,999 bps (resolution: 1 bps) Accuracy: Same as reference oscillator of MG3641A/3642A</p>
Output system		<p>1-bit NRZ output (corresponding to binary data output): Data is output to the Data 2¹ Output sequentially, one bit after another starting from the top bit. The logic of Data 2⁰ is fixed to 0. 2-bit NRZ output (corresponding to quadrature data output): Data is output to the Data 2¹ Output and Data 2⁰ Output sequentially, two bits after another, starting from the top bit.</p>
Output level		<p>Data 2⁰ Output: TTL level Data 2¹ Output: TTL level Clock Output: TTL level, rising</p>

● MX364001B Software for Pattern Generator Data Write

Read-out data format	DOS text file
Write memory	Data pattern memory (defined: 1 to 4), idle pattern memory (idle)
Contents of write data	<p>Pattern data: 2 to 524,288 bits/memory (text format file) Top address of output: 0 to 65,535 (any settable) Data bit length: 2 to 524,288 bits (Bit length of pattern data automatically calculated and written) Data name: Maximum eight characters (Idle pattern memory cannot be named.)</p>
PC	IBM PC/AT compatible
Supporting OS	Microsoft® Windows 95
Interface	GPIB (National Instruments PCI-GPIB or PCMCIA-GPIB)

Ordering Information

Please specify the model/order number, name and quantity when ordering.

Model/Order No.	Name	Remarks
MG3641A* ¹	Main frame Synthesized Signal Generator	125 kHz to 1040 MHz
MG3642A* ¹	Synthesized Signal Generator	125 kHz to 2080 MHz
	Optional units	
MG3641A/3642A-23	Pattern Generator	
	Application software	
MX364001B* ²	Software for Pattern Generator Data Write	Microsoft® Windows 95
	Standard accessories	
W1389AE	MG3641A/3642A-23 operation manual:	1 pc Supplied with MG3641/3642A-23
Z0351A	Label:	1 pc Supplied with MG3641/3642A-23
W1459AE	MX364001B operation manual	1 pc Supplied with MX364001B

*¹ For the MG3641A/3642A in which the options are installed, and for the other options, refer to the individual catalog.

*² The following items are required to use the MX364001B, and must be provided by the user.

IBM PC/AT Personal computer	486DX4 (75 MHz or higher), with memory of 32 MB or more (recommended) on which Windows 95 3.5-inch FD drive (for program installation)
GPIB interface	PCMCIA-GPIB or PCI-GPIB or equivalent GPIB interface manufactured by National Instruments Inc., supporting NI-488.2

Microsoft Windows 95 is a registered trademark of Microsoft Corporation in the USA and other countries.

IBM AT is a registered trademark of International Business Machines.

NI-488.2™ is a registered trademark of National Instruments Inc.



Specifications are subject to change without notice.

ANRITSU CORPORATION

5-10-27, Minamiazabu, Minato-ku, Tokyo 106-8570, Japan
Phone: +81-3-3446-1111
Telex: J34372
Fax: +81-3-3442-0235

Overseas Subsidiaries

● **U.S.A.**

ANRITSU COMPANY

North American Region Headquarters

1155 East Collins Blvd., Richardson, Tx 75081, U.S.A.
Phone: +1-972-644-1777
Fax: +1-972-644-3416

● **Canada**

ANRITSU ELECTRONICS LTD.

Unit 102, 215 Stafford Road West
Nepean, Ontario K2H 9C1, Canada
Phone: +1-613-828-4090
Fax: +1-613-828-5400

● **Brazil**

ANRITSU ELETRÔNICA LTDA.

Praia de Botafogo 440, Sala 2401 CEP 22250-040,
Rio de Janeiro, RJ, Brasil
Phone: +55-21-5276922
Fax: +55-21-537-1456

● **U.K.**

ANRITSU LTD.

200 Capability Green, Luton, Bedfordshire LU1 3LU, U.K.
Phone: +44-1582-433200
Fax: +44-1582-731303

● **Germany**

ANRITSU GmbH

Grafenberger Allee 54-56, 40237 Düsseldorf 1,
Germany
Phone: +49-211-96855-0
Fax: +49-211-96855-55

● **France**

ANRITSU S.A.

9, Avenue du Québec Z.A. de Courtabœuf 91951 Les
Ulis Cedex, France
Phone: +33-1-60-92-15-50
Fax: +33-1-64-46-10-65

● **Italy**

ANRITSU S.p.A.

Via Elio Vittorini, 129, 00144 Roma EUR, Italy
Phone: +39-06-502-26-66
Fax: +39-06-502-24-25

● **Sweden**

ANRITSU AB

Botvid Center, Fittja Backe 1-3 145 84 Stockholm,
Sweden
Phone: +46-853470700
Fax: +46-853470730

● **Singapore**

ANRITSU PTE LTD.

6, New Industrial Rd., #06-01/02, Hoe Huat Industrial
Building, Singapore 536199
Phone: +65-282-2400
Fax: +65-282-2533

● **Hong Kong**

ANRITSU COMPANY LTD.

Suite 719, 7/F., Chinachem Golden Plaza, 77 Mody
Road, Tsimshatsui East, Kowloon, Hong Kong, China
Phone: +852-2301-4980
Fax: +852-2301-3545

● **Korea**

ANRITSU CORPORATION

Room No. 901, Daio Bldg., 26-5, Yeoido-Dong,
Young Deung Po-Ku, Seoul, Korea
Phone: +82-2-782-7151 to 7156
Fax: +82-2-782-4590

● **Australia**

ANRITSU PTY LTD.

Unit 3/170 Forster Road Mt. Waverley, Victoria, 3149,
Australia
Phone: +61-3-9558-8177
Fax: +61-3-9558-8255

● **Taiwan**

ANRITSU COMPANY INC.

6F, 96, Sec. 3, Chien Kou North Rd. Taipei, Taiwan,
R.O.C.
Phone: +886-2-2515-6050
Fax: +886-2-2509-5519