



Setup and Programming for the Drake MEQ1000 / SDM1000
Multiplexing Hybrid QAM Modulator
for QT Plus Transmodulation of ANIK G1 Transponders

Note: The basic SDM1000 single tuner install uses the leftmost slot (Input A) when viewed from the rear panel. The MEQ1000 must have firmware V2.0 or later. Use front panel select buttons to cycle between MEQ1000 Host QAM Modulator and SDM1000 Satellite Demodulator. To enter program mode press the ENTER button that is located in the center of the four arrow buttons and hold in for several seconds until the bottom line of the display begins to flash.

MEQ1000 Programming

Unit ID: # (0 thru 63)

- MEQ1000 may be accessed through the front panel at any time
- Assign a unique ID # from 1 to 63 to each MEQ1000 in order to distinguish them for remote access from the Drake Digital Headend Control Program or through the SCTeci ethernet control interface.
- ID # 0 allows front panel access only.

RS-232 Baud Rate: corresponds to baud rate from a computer or SCTeci ethernet interface.

MULTIPLEX: Enabled

INPUT B OFFSET: 0 (only required if you have a second module in the rightmost slot)

MPEG PROGRAMS: Select Programs

Program filtering may be necessary for ANIK G1 in order to reduce the transponder multiplex to fit in a 38.8 Mbit/s 256QAM channel. Confirm the MPEG program numbers of the desired services to be included in the output and select them as follows:

MPEG PROGRAMS: Select Programs should be flashing if in program mode.

Press ENTER button

Shows MPEG PROG 00001: The default will be Not Selected

Use the left / right arrow buttons to scroll to MPEG program number to be selected and then the up /down arrow to select Input A. Repeat this for all MPEG program numbers of the services that are to be included in your output multiplex.

NOTE: The Drake Digital Headend Control Program is a valuable tool here. It allows you to read the PAT table from Input A and display the list of all services on the transponder. You can then select the programs to be included in the output multiplex. SDM1000 access is not included in the current Drake Digital Headend Control Program and parameters must be entered through the front panel.

DRAKE CANADA, 655 The Queensway, Peterborough, Ont. K9J 7M1

Phone: (705) 742-3122 Fax: (705) 742-2838

www.drakecanada.com/

<http://www.rldrake.com/catv-digital.php>



Setup and Programming for the Drake MEQ1000 / SDM1000
Multiplexing Hybrid QAM Modulator
for QT Plus Transmodulation of ANIK G1 Transponders

CA FILTER: Disabled
 PSIP: Disabled
 QAM Mode: QAM-256B
 QAM SymRate: Preset (5.3606 for QAM-256B)
 Interleaver: I128, J4 recommended for QAM-256B or I128, J1
 OUTPUT FORMAT: Normal
 Output ChannelMap: CATV
 Output Channel: select EIA Ch. 2 to 158 (54 to 1,002 MHz) from channel map
 RF LEVEL: + 45.0 to + 62.0 dBmV in 0.5 dBmV steps to balance with other modulators
 DTA CONTROL: Disabled

SDM1000 Programming

DEMODO MODE: Turbo Scan (self adjusts for Modulation FEC)
 FREQUENCY: L-band frequency in MHz to match transponder to be received
 SYMBOL RATE: 22.0 Msym/Sec for ANIK G1 Tr 1 to 15 and 20.5 Msym/Sec for Tr 16

Anik G1 xKu Band Transponders

Pol	Spot Beam	Transponder	L-band	Modulation FEC	Symbol Rate (Ms)
V	Nat	G1 X1	1091.50	8PSK--8/9	22
V	Nat	G1 X2	1122.00	8PSK--8/9	22
V	Nat	G1 X3	1152.50	8PSK--8/9	22
V	Nat	G1 X4	1183.00	8PSK--8/9	22
V	Nat	G1 X5	1591.50	8PSK--5/6	22
V	Nat	G1 X6	1622.00	8PSK--5/6	22
V	Nat	G1 X7	1652.50	8PSK--5/6	22
V	Nat	G1 X8	1683.00	8PSK--5/6	22
H	Nat	G1 X9	1091.50	8PSK--8/9	22
H	Nat	G1 X10	1122.00	8PSK--8/9	22
H	Nat	G1 X11	1152.50	8PSK--8/9	22
H	Nat	G1 X12	1183.00	8PSK--8/9	22
H	Nat	G1 X13	1591.50	8PSK--8/9	22
H	Nat	G1 X16	1683.00	8PSK--2/3	20.5

DRAKE CANADA, 655 The Queensway, Peterborough, Ont. K9J 7M1

Phone: (705) 742-3122 Fax: (705) 742-2838

www.drakecanada.com/

<http://www.rldrake.com/catv-digital.php>



Setup and Programming for the Drake MEQ1000 / SDM1000
Multiplexing Hybrid QAM Modulator
for QT Plus Transmodulation of ANIK G1 Transponders

Using the MEQ1000 to cherry pick from 2 multiplexes:

The MEQ1000 is capable of holding two input modules. The leftmost module, when viewed from the rear panel is Input A and the rightmost input B. Any combination of SDM1000 satellite demodulator cards, DTD1000 ATSC/QAM tuner cards and HDE24 HD or SDE24 dual SD local encoder cards may be installed as input modules. The MEQ1000 provides the ability to cherry pick individual services from the multiplex's of both Input A and Input B. However, the total amount of data from all services can not exceed the 38.81 Mbits/s maximum limit for a 256QAM RF channel. Please consult Drake Canada if you have any questions.