

DTMF/MF/MFC-R2 Detector and Generator

Ability to transmit and receive DTMF/MF/MFR2B/MFR2F

MFC R2/R1 Wink Call Simulation

Detailed analysis for Digit Capture

User-Defined tones option

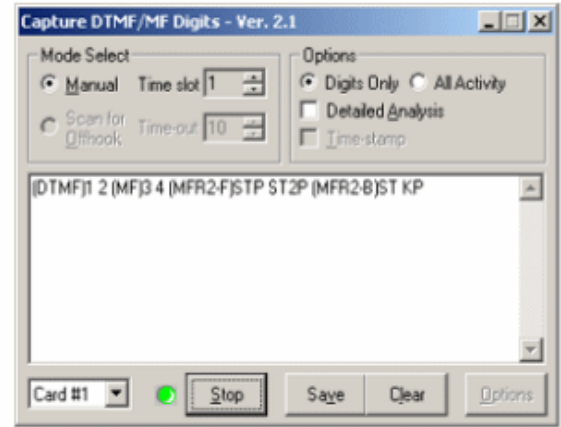
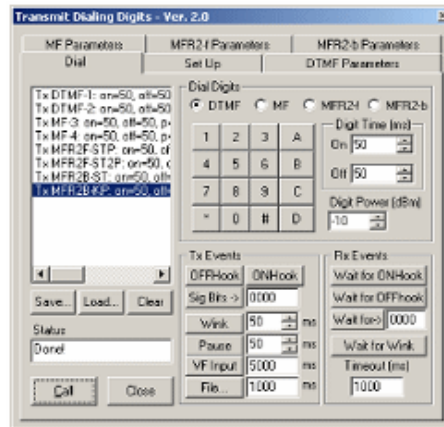
Capture digits to a log file

Save script to a file

Modify frequencies of standard digits

Detailed analysis for Digit Capture

Real-time Voice Insertion



Capture Dialed Digits

The Capture Dialed Digits application provides the capability to capture and display DTMF and MF digits as they are received on one or several time slots. Multiple Capture application boxes may be opened, each with different operating modes and options. The two different basic modes of operation are: Manual and Scan for Offhook Modes. In Manual mode, the capture operation simply stays on the selected time slot, displaying the digits received, where as in 'Scan for Offhook Mode', the scanning of successive time slots takes place and a detection of a onhook to offhook transition at a time slot would mark the beginning of the capture activity.

There are different options with which the capture application can be performed.

- The 'Digits only' would enable the capturing of the digits on a time slot.
- The 'All Activity' displays the digits and X for unrecognized bursts.
- The 'Detailed Analysis' would record precise time measurement of each digit or burst, component frequencies and power.

There is a separate option button, which has the following tabs: Enable tab, Parameters tab, Signaling tab, User-defined tab and Logging tab. Using these tab options user can set different parameters.

The application shows a green LED indicator to indicate that the capture is in progress and the start button changes to stop at this time.

Transmit Dialing Digits

The Transmit Dialing Digits application provides the capability to transmit DTMF, MF, MFR2-forward, MFR2-backward as well as transmitting signal data from files or from the GL board's VF input, applying signaling bits control, and performing other functions related to call establishment, progress, and termination.

The features of Transmit digit application are:

- A Keypad that changes to display the digits in accordance with various standards DTMF, MF, MFR2-f and MFR2-b.
- The Digit on-time/off-time can be changed and digit power that can be varied.
- The feature for saving call script in a desired directory that can be retrieved later.
- The transmit events feature which provides transmit onhook, off-hook, wink, pause for a specified duration, route data from a file as a part of conversion and GL boards VF input onto the selected transmit time slot both for a specified amount of time settable by the user.
- The receive events awaits a transmit card to receive events to such as to wait for on hook/off-hook signaling pattern to be transmitted from the other end as a part of call establishment.

For more details, please visit our web page <http://www.gl.com/dtmfml.html>.

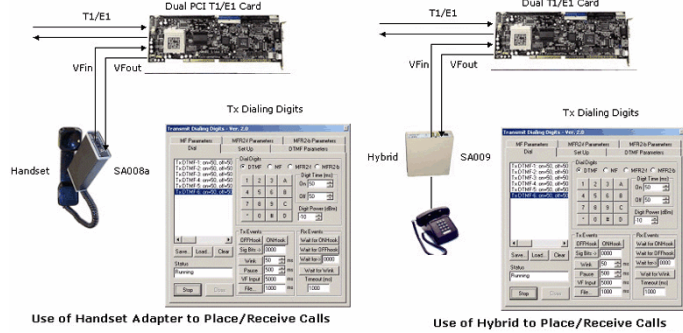


GL Communications Inc.

818 West Diamond Avenue - Third Floor. Gaithersburg, MD 20878 • (V) 301-670-4784 (F) 301-670-9187
Web Page Address: <http://www.gl.com/> • E-Mail Address: gl-info@gl.com

Basic Call Emulator

The Transmit Dialing Digits application can also allow the T1/ E1 Analyzer to be used as a very basic Call Emulator. Using a simple, easy to create script, this application can manually place (originate) actual phone calls to a switch. This works on T1 systems using R1 (wink) protocol, and on E1 systems using MFC-R2 protocol. For T1-systems using R1, this application can also receive (answer) simple calls. Inserting the 'Tx VFin' command into the script allows the use of an optional [Telephone Handset](#) to actually talk and listen on the established call. (Optional GL [Handset Adapter](#) is required for GL PCI Card Analyzer products - NOT required for GL Laptop Analyzer products.)



Standard Frequencies for MF/DTMF Digits

The table depicts the standard low and high frequencies used for indicating DTMF and MF digits.

The Transmit dialing digit application provides the flexibility to the user to change these frequencies.

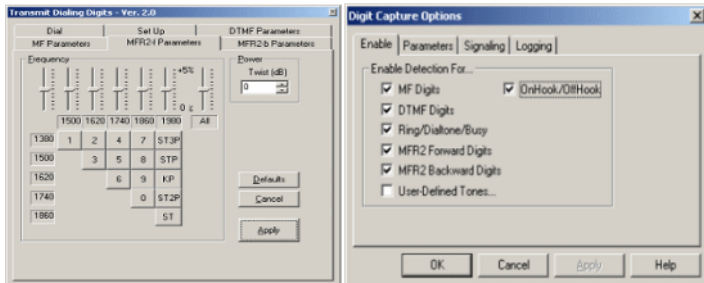
The user can also provide twist between low and high level powers of each digit. Latency parameter value can also be varied on necessity.

Standard Frequencies for MF Digits:

Frequencies	900	1100	1300	1500	1700
700	1	2	4	7	ST3P
900		3	5	8	STP
1100			6	9	KP
1300				0	ST2P
1500					ST

Standard Frequencies for DTMF Digits:

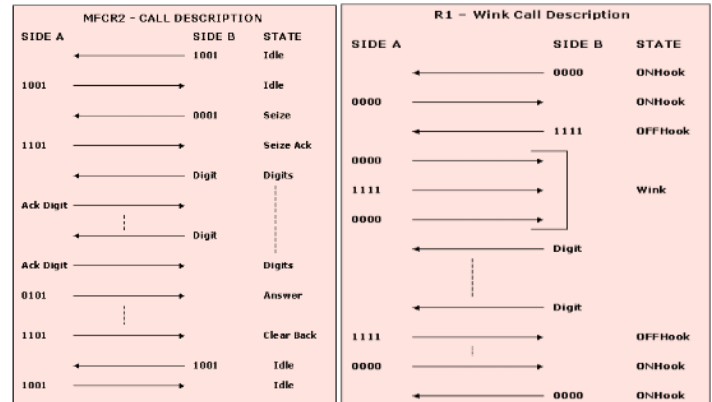
Frequencies	1209	1336	1477	1633
697	1	2	3	A
770	4	5	6	B
852	7	8	9	C
941	*	0	#	D



MFC-R2 and CAS R1 Call Simulation

MFC-R2 uses a compelled signaling protocol. The Transmit Dialing Digits application has no receive capability, therefore the received digits have to be assumed to occur. The MFC-R2 calls have the calling and called digits in weird order.

You can visit the [link](#) provided for the "Sample scripts for CAS R1 and MFC-R2 call placing and answering". Ready-to-go sample scripts are provided for T1 (R1) and E1 (MFC-R2 CCITT) operation. The scripts can be easily modified to meet the requirements of a particular system.



Buyer's Guide

[XX022](#) DTMF/MF/MFC-R2 Detector & Generator Software

Related Software

- [SA048](#) - Goldwave Software
- [SA026](#) - Adobe Audition
- [XX020](#) - Record/Playback File software
- [XX030](#) - Call Capture and Analysis
- [XX050](#) - Signaling Bits Recorder Software

Related Software (contd)

- [XX024](#) - Real-Time Strip Chart
- [SA021](#) - File Edit Software

Platforms

- [UTE001](#) - Portable USB based Dual T1 or E1 Laptop Analyzer
- [UTA001/UEA001](#) - Portable USB based Dual T1 or E1 Laptop Analyzer
- [HTE001](#) - Universal HD T1 or E1 PCI Cards
- [HUT001/HUE001](#) - Basic Universal HD T1/E1 Software

*Specifications and features subject to change without notice.

