# **MB RECASTER 3**

See MB RECASTER 3 Demo Version	×
MBRecaster ?	
Capture Webcast Timers Player / Converter Stats	Level
Capture card	-20-10 -6 -3 0dB
0 - Missaggio stereo (Realtek High Definition Audio)	
Input: Volume master	- Source
	💷   🛃   💂
Plugin:	Audio Card URL Auto DJ
AudioProcLite v1.82 - dsp_AudioProcLite.dll	
r Monitor Audio Card	r News
Enable monitor on this card	09:45:00 85.102.213.108:8000
[1] Altoparlanti (Realtek High Definition Audio)	started!
mercoledì 27 aprile 2011 - 9.46.41 TCP Close connection 0 mbsoft.net	

#### MB RECASTER is a multifunction audio tool featuring:

- Capture audio from any sound card or any internet URL stream (Shoutcast, Icecast, Windows Media)
- Internal Auto DJ: play and mix random files from up to 4 different folders. Automatically remove gap from begin/end of files.
- Support DSP Plugins for audio processing (AudioProc, XAP, Jammix, etc)
- Stream the final signal to any ShoutCast, IceCast or Windows Media Server with up to 4 indipendent encoders reading metadata from an external text file.
- Windows Media Pull mode allow to stream over the internet directly with your internet connection (no external server required, public ip and free tcp input port required)
- Integrated Audio Logger: non stop record saving up to 180 days with automatic deletion of older files.
- Recording scheduler: schedule up to 255 record timers by time, day and/or date. Each record can also be started/stopped usign external relay (require Velleman USB k8055 Interface)
- When a record end, automatically upload the file to a FTP server
- Convert any audio file to the following formats; MP3, OGG, WMA, WAV, AAC, ACM. Allow to convert the full audio length or a selected range.
- Send email notifications when "missing audio" or "connection lost"

#### Free Demo Version has the following limitations:

- Auto DJ play function is limited to 1 hour and must be manually reactivated once expired
- All the recorded files are created with the fixed name "Demo Version"
- "MB RECASTER" is added to the title of webcast streams
- FTP and Email functions are disabled

# CAPTURE

See MB RECASTER 3 Demo Version	×
MBRecaster ?	
Capture Webcast Timers Player / Converter Stats	Level
Capture card 0 - Missaggio stereo (Realtek High Definition Audio)	-20-10 -6 -3 OdB R
	Source
<u>г</u> Рlugin:	严   🔩   🧏
AudioProcLite v1.82 - dsp_AudioProcLite.dll	Audio Card URL Auto DJ
Monitor Audio Card —	News-
Enable monitor on this card	09:45:00 85.102.213.108:8000 started!
[1] Altoparlanti (Realtek High Definition Audio)	Statua.
mercoledì 27 aprile 2011 - 9.46.41 TCP Close connection 0 mbsoft.net	

From the **capture** window you can Record/Stream audio from any **sound card**, **url** or use the internal **Auto DJ** to play your music and jingles.

To capture audio from your computer or from a microphone or line input click Audio Card and choose a Capture Card, an Input channel (Windows XP only) and set the the audio Level.

If you want to capture all the sounds that are played on the computer you should choose the "stereo Mix" device or channel.

Sometimes in Windows 7/Vista, first you must enable this device in the Windows Control Panel / Audio and restart MB RECASTER.

To capture audio from an internet stream click **URL** and enter the stream internet address; direct ip:port, asx, pls, m3u playlist are accepted. Ex: 123.456.789.123:8000, www.myradio.com/listen.pls, www.myradio.com/listen.asx, etc

Once you entered the address click the CONNECT button to start the stream.

To play your own audio files click **Auto DJ**, you will be prompted to select from 1 to 4 folders of audio files on your computer. Note that subfolders are not touched by this function, so you should take care to put all the desired files into a single folder. Auto DJ will cycle through any folder choosing one random file.

The **Plugin** selector allow you to select one DSP audio processor. The **configuration** button open the setup window of the selected plugin. The **refresh** button renew the list of plugins in case you added new DSP in MBRECaster\Plugins folder.

The **Monitor Audio Card** selector allow you to choose an audio card to listen the mixing channel of MB RECASTER. Do not "Enable monitor on this card" when you're capturing audio from the "Stereo Mix"

# WEBCAST

😤 MB RI	MB RECASTER 3 Demo Version						
MBRecaster	r ?						
Capture	Webcast Timers	Player / Con	verter Stats		Level		
I	Metadata: BROTHERS	JOHNSON - S	TOMP [1980] - seguira': D	IROTTA SL	L -20 -10 -6 -3 0dB R		
Cun	rent connections: 0		Upload ban	dwidth: 112	Source		
Encoder	Server		Profile	Curren			
idi 1	85.102.213.108:8000		WMA 48k Stereo 27/04/11 09.45	0	🔎   🎑   🌮		
2	http://mbsoft.net:3762		MP3 48k Mono 27/04/11 09.47	0	Audio Card URL Auto DJ		
<b>iii</b> 3	http://wm1.newradio.it/cast	8078	WMA 64k Stereo 27/04/11 09.48				
<b>3</b> 5	Demo Version.wma		WMA 20k Mono 27/04/11 09.49	-:01:40	PNews		
<u> 6</u> 6	Demo Version.wma		WMA 64k Stereo 27/04/11 09.49	-:01:21	09:49:42 Demo Version.mp3		
<b>2</b> 7	Demo Version.mp3		MP3 128k Stereo 27/04/11 09.49	-::59	started!		
mercoled	fì 27 aprile 2011 - 9.50.42	TCP Close connect	tion 0 mbsoft.net				

The WEBCAST window show all running encoders, current Metadata, connections and upload bandwidth. To start or stop a webcast encoder you must enter menu MBRecaster\Setup and Enable\Disable the target encoder. To start or stop a file encoder click on Timers, select the target encoder and click the RECORD or STOP button.

### TIMERS

😤 MB REC	ASTER	3 Demo Version	×
MBRecaster	?		
	Webca	ast Timers Player / Converter Stats	Level
Start	Stop	File	-20 -10 -6 -3 0dB
00:00	23:59	news - ()	- Source
00:00	23:59	multiple - ()	
08:00	08:10	weather - ()	🔎   💁   🧏
			Audio Card URL Auto DJ
			г News
			09:49:42
00	) 4		Demo Version.mp3 started!
mercoledì 2	27 aprile 20	011 - 9.51.04 TCP Close connection 0 mbsoft.net	

The TIMERS window allow to add/delete/modify scheduled records.

Click **RECORD icon** to start record immediately the selected timer disregarding the scheduled start time

Click **STOP icon** to immediately stop a running timer. The timer will also be disabled and will never restart automatically until reenabled from the EDIT window.

Click EDIT icon to change the porperties of the selected timer

Click **DELETE icon** to remove the selected timer from the list.

Click + to add a new scheduled Record

#### **EDIT TIMER**

Recorder - Edit
Properties Calendar Bits
Start         Stop           00         00         €
File: D:\myscheduledrecord
<ul> <li>Add time to filename</li> <li>Add count number to filename - Ex: file_1 file_2 file_3</li> <li>Upload to FTP server</li> </ul>
Codec: WMA 64k Stereo
Apply

From the properties window it's possible to set the **start** and **stop** time (24h format), to choose a **filelocation and filename** for the timer and to specify the following options:

- Add time to filename the program will automatically add the curent time to the filename (the time will be rounded to the nearest quarter). Ex: if a timer with filename "dance" will start at 10:10 the recorded filename will be dance1015
- Add count number to filename the program will automatically add a counter to the filename. Ex: having a timer with filename "dance", the first recorded file will be dance\_1, the second dance\_2 and so on. The counter automatically increase. To reset the counter you have to delete the existing files from the destination folder.
- **Upload to FTP server** once finished the recorded file will be uploaded to the FTP server (that you can setup using menu MBRecaster/Setup/FTP)

The **Codec** selector allow to choose the recording codec for this timer. When choosing ACM codec you should also click the **Codec Setup** icon to set more codec details

#### CALENDAR

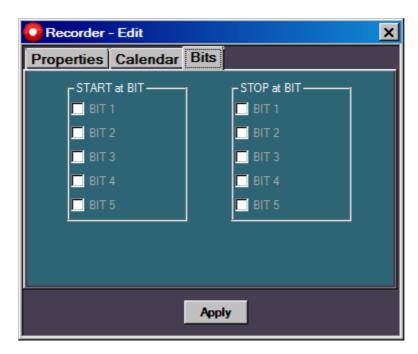
😳 Recorder - Ed	lit	×
Properties Ca	lendar Bits	
Week         ✓       <	Months Second constraints Months Second constraints Months Months Second constraints Months Second constraints Months Second constraints Months Second constraints Months Months Second constraints Months	Enabled since mercoledi 27 aprile 2011 Expiration venerdi 27 aprile 2012 Remove Expiration
	Apply	

The Calendar allow to set the weekdays, months, initial and expire date and the following options:

\_

- ED = Even days only
- EW = even weeks only
- $\in \in =$  working days only

- OD = Odd days only OW = Odd weeks only
- ++ = Holidays only



BITS

The BITS window allow to synchronize start and stop of this timer throught the Velleman USB I/O Card K8055(menu MBRECaster\Setup\Options\flag USB Velleman k8055 should also be enabled) or through bits sent by MB STUDIO radio automation software.

# **PLAYER / CONVERTER**

See MB RECASTER 3 Demo Version	×
MBRecaster ?	
Capture Webcast Timers Player / Converter Stats	Level
File: DJ Spen - Defected In the House - Miami 09 Pt 2 (Continuous DJ Mix)	-20 -10 -6 -3 0dB
Position:	- Source
sabato 25 aprile 2009 00.53	Audio Card URL Auto DJ
CONVERT     File: Demo Version       File: Demo Version     Convert to this format: WAV Stereo	09:49:42 Demo Version.mp3 started!
mercoledi 27 aprile 2011 - 9.52.30 Result: D:\Canzoni\Canzoni\DJ Spen - Defected In the House - Miami 09	Pt 2 (Continuous DJ Mix).mp3 MP3 44 Khz

In this window you can select an audio file, set IN point, OUT point and convert it to another format. You can also fine tune and prelisten the IN/OUT points.

The left\right arrow allow to move the play position by 1 hour, 1 minute or 1 second

To convert the fileclick the file selector in the CONVERT frame and choose the location and the filename for the converted file then click the CONVERT icon.

## **SETUP – ENCODER**

You can set up to 4 encoders for webcast streaming. Using **Type** selector you can choose between:

- Shoutcast connect to a shoutcast server
- Icecast connect to a icecast server
- Windows Media Pull receive connections directly on your computer
- Windows Media Push connect a Windows Media Server

🥂 Setup						×
Metadata Encoder 1	Folders Encoder 2	Options	Em er 3		FTP coder 4	Network Logger
Enable		·				
T Server: <mark>85.10</mark>	Type: Shoutcast		Code	ec: <mark>M</mark> F	23 96k Sten	eo 🔽 Port: <mark>8000</mark>
		Pa	ssword	mypa		
					Public	
		Close				

#### SHOUTCAST ENCODER SETUP

- Set Type to shoutcast
- Choose a Codec (Shoutcast only accept MP3 or AAC+ codec)
- Enter the server address
- Enter the port number
- Enter the password
- Enable the flag "Public" flag if you would like your station to be listed at <u>www.shoutcast.com</u>
- Enable the encoder by click "Enable" flag

### ICECAST ENCODER SETUP

🥂 Setup					×
Metadata Encoder 1	Folders Encoder 2	Options 2 Encode		I FTP Encoder 4	Network Logger
	ype: Icecast ver.com:8048/pl		Codec: ssword: m	OGG 96k Ste ypass ⊻ Pdak	
		Close			

- Set Type to Icecast
- Choose a Codec (Icecast only accept OGG or MP3 or AAC+ codec)
- Enter the server address, port and mounting point in the Server text box
- Enter the password
- Enable the flag "Public" flag if you would like your station to be listed at dir.xiph.org
- Enable the encoder by click "Enable" flag

📽 Setup						×
Metadata	Folders	Options	Em	ail	FTP	Network
Encoder 1	Encoder 2	Encode	er 3	End	coder 4	Logger
Enable						
FEncoder 3						
Т	ype: Windows M	edia Push 🔽	Code	ec: <mark>W</mark> I	MA 64k Ste	ereo 🔽
Server: wm1.r	newradio.it/cast:8	078				
User: <mark>cast_</mark>	3078	Pa	ssword	: <mark>mypa</mark>	SS	
s	itats:					
		Close				

### WINDOWS MEDIA PUSH ENCODER SETUP

- Set Type to Windows Media Push
- Choose a Codec (only WMA codecs are accepted)
- Enter the server address and publishing point in the Server text box
- Enter the user and the password
- Enable the encoder by click "Enable" flag

📽 Setup					×
Metadata	Folders	Options		FTP	Network
Encoder 1	Encoder	2 Encode	er 3 En	coder 4	Logger
Enable					
FEncoder 4					
1	Type: Windows I	Media Pull 🔽	Codec: W	MA 20k Mo	no 💌
					Port: 8000
					1 UIL. 0000
9	Stats:				
Max liste	ners: <mark>5</mark>				
		Close			

### WINDOWS MEDIA PULL ENCODER SETUP

- Set Type to Windows Media Pull
- Choose a Codec (only WMA codecs are accepted)
- Enter the port number at your choice (the port must be unused by other programs and must be routed from the router to this computer)
- Select the max number number of concurrent listeners (min 1 max 50)
- Enable the encoder by click "Enable" flag

Note that you need a public IP in order to be listened by outside of your LAN network.

Use the **menu'** ? / **what is my IP** to know your current internet IP address and the **menu'** ? / **TCP Port test** to check if the port is correctly open and mapped to this computer.

If all is ok, give the following url to your listeners mms://yourip:port, entering that address in windows Media Player / Open URL they should be able to listen your stream.

# LOGGER

🥂 Setup					×
Metadata	Folders	Options	Em	ail FTP	Network
Encoder 1	Encoder 2	Encode	er 3	Encoder 4	4 Logger
Enable					
Logger					
			Code	c: WMA 20k N	lono 🔽
Folder: C:\ME	Recaster\Logger	\			<b>G</b>
c	lose File every 🙎			Archive	until 90 days
		Į			
				Code	ec Setup: 🎇
		Close			

This window allow to start a non stop audio record.

The files will be saved in the selected Folder.

The length of each file could be set from 1 hour to 1 day and up to 180 days can be archived. Once the days length is reached the older files are automatically deleted.

The codec setup icon should be used when ACM codec is set.

### METADATA

🧟 Setup					×
Encoder 1 Metadata	Encoder 2 Folders	Encode	er 3 Ema		Logger Network
Description:	RADIO MAURI2 Broadcasting fro	m New York	TIONAL	-	
	Pop, Dance, Ital http://www.mbr				
Reading data fro	m				
<u> </u>		Close	I		

This window allow to setup the webcast informations like stream title (usually your station name), a description text (usually your station slogan), a list of genres, and the home page of your station.

In **Reading data from** you can set a text file to read the current metadata (usually the title of the current playing song or show). Most of radio automation softwares produce a text file that is costantly updated. MB RECASTER autodetect file changes and reload the file at every change. External metadata are loaded only when capturing from audio card.

### **FOLDERS**

🧟 Setup		×
Encoder 1         Encoder 2         Encoder 3         Encoder 4           Metadata         Folders         Options         Email         FTP	Log	gger vork
D:\Canzoni\Canzoni\	12	
	12	5
	12	<b>5</b>
	14	<b>x</b>
Gap detection 20		
Close		

Here you can set up to **4 folders** containing audio files that will be played by Auto DJ function. The folders will be used in sequential order while the files will be played in random mode.

All the files will be played once before the queue is restarted.

Note that internal subfolders are not considered by the player so you should keep your files together in the selected folders. Exemple: you can set a folders of songs in the first position, a folder of jingles in the second position, another folder of songs in the third position and a folder of advertisements in the fourth folder.

The **Gap Detection** slider allow to set an automatic gap killer used to remove near silence from the beginning and end of tracks. 0 means the gap detection is disabled while 20 means the gap killer will set the start/stop position at a high level of sound. For faster performance, the gap detector only check the first and last 15 seconds of the track, so larger gaps are not detected.

# **OPTIONS**

🧟 Setup					×
Encoder 1	Encoder 2	Encode	r 3	Encoder 4	Logger
Metadata	Folders C	Options	Ema	il FTP	Network
🔲 Run with Win	dows				
🔲 In case of faile	ure Send Notification	n			
🔲 🗌 In case of fail	ure Network Test				
Notification of	missing sound				
🔲 🗌 In case of mis	sing sound switch to	D AUTODJ			
USB Velleman K8055					
After a bit wait 0 sec.					
CPU: 1 🔽					
Instance n. 0					
Close					

- Run with windows automatically start the program when windows startup
- In caso of failure Send notification when a connection die you'll be notified by an email
- In case of failure Network Test when a connection die or slow down the ping and tracert are automatically executed (you'll see some DOS Type windows displaying on the screen). The results are saved in the debug folder. You can use the ping and tracert results to narrow down the problems between your computer and the remote server.
- Notification of missing sound when capturing audio from audio card or URL you'll be notified by email if audio is missing.
- In case of missing sound switch to Auto DJ when there is no sound incoming from Audio Card or URL automatically switch to Auto DJ mode and revert back to the previous source when the sound is back again
- USB Velleman K8055 activate the BIT detection on the Velleman I/O USB card (see <a href="http://www.velleman.eu/distributor/products/view/?id=351346">http://www.velleman.eu/distributor/products/view/?id=351346</a>)
- After a bit wait when a bit is received you can set a delay before the corresponding action take place.
- **CPU** if your computer is a multicore CPU system you can set a different cpu to load. If you run multiple MB RECASTER instances on your computer, it's best to set a different CPU for each instance.
- **Instance n.** when running multiple instances of MB RECASTER, each program must be set to a different instance number. If you use only one instance of MB RECASTER leave this value to 0. To use multiple instances you must purchase additional licenses.

# **EMAIL**

🧟 Setup				×
Encoder 1	Encoder 2	Encoder 3	Encoder 4	Logger
Metadata	Folders	Options Em	ail FTP	Network
_ Smtp				
Send Email to	b:			
Sende	r:			
Reply to	b:			
Serve	r:			
Use	r:			
Password	d:			
Authentication	n: AUTH PLAIN	<b>V</b>		Test 🖳
		Close		

Email service is used to send notifications about failures of webcast encoders or input missing sound.

- Send Email to enter here the destination email address to notify the problem
- Sender enter here your name or your station name
- **Reply to** enter your email or the email of your radio station
- Server enter the smtp server of your internet carrier. If the smtp port is different then 25 you can specify a different port number using the following syntax server:port
- User/Password if your smtp server require authentication enter here username and password
- Authentication if your smtp server require authentication select here the type of authentication to use. You can try all the 3 types to discover the one that work with your server
- Test once entered all the required parameters click this button to test the smtp connection

#### FTP

🕮 Setup					×
Encoder 1	Encoder 2	Encod	er 3	Encoder 4	Logger
Metadata	Folders	Options	Em	ail FTP	Network
FTP Upload					
		Host:			
		Port: 21			
	Remote	e folder:			
		User:			
	Pa	ssword:			
🗹 Usa passivan	node on FTP				Test 🍢
		Close			

The FTP service upload a record to your ftp server once the record finished (the timer must have the Upload to FTP flag switched on)

- Host ftp server address or ip
- **Port** the port number
- **Remote folder** the folder where to store the file (ex: myrecords/)
- User / Password the account to access the ftp server
- Use passive mode on FTP usually must be switched on if you're behind a router or firewall
- Test once entered all the required parameters click this button to test the ftp connection

#### **NETWORK**

🥂 Setup					×
Encoder 1	Encoder 2	Encode	r 3 Er	ncoder 4	Logger
Metadata	Folders (	Options	Email	FTP	Network
TCPIP conne	ctions ———				
		Lister	n on port:	9916	
	Limit connections	to this address	s / range:		
	Encrypt co	nnections with	this key:		
-Remote titles					
Accept remo					
CryptoBox Se	rver				
Close					

This window allow to setup some advanced services.

MB RECASTER can receive some commands by MB STUDIO radio automation software using a TCP connection (current metadata or BIT signals).

- Listen on port the port number to listen for incoming connections. If you plan to receive connections from outside your lan network remember to open and redirect that port from your internet router.
- Limit connections to you can limit accept connections from a single IP or a range (ex: enter "192.168" if you plan to limit connections from 192.168.0.0 to 192.168.254.254
- Encrypt connections with this key a password to protect the connection (remember to enter the same password into MB STUDIO External titles window)
- **Remote Titles** activate this option if you accept to receive the current metadata title from MB STUDIO
- **CryptoBox server** this box is used for emergency license activation udner our instructions. Unless you have specific instructions, always leave blank this box.