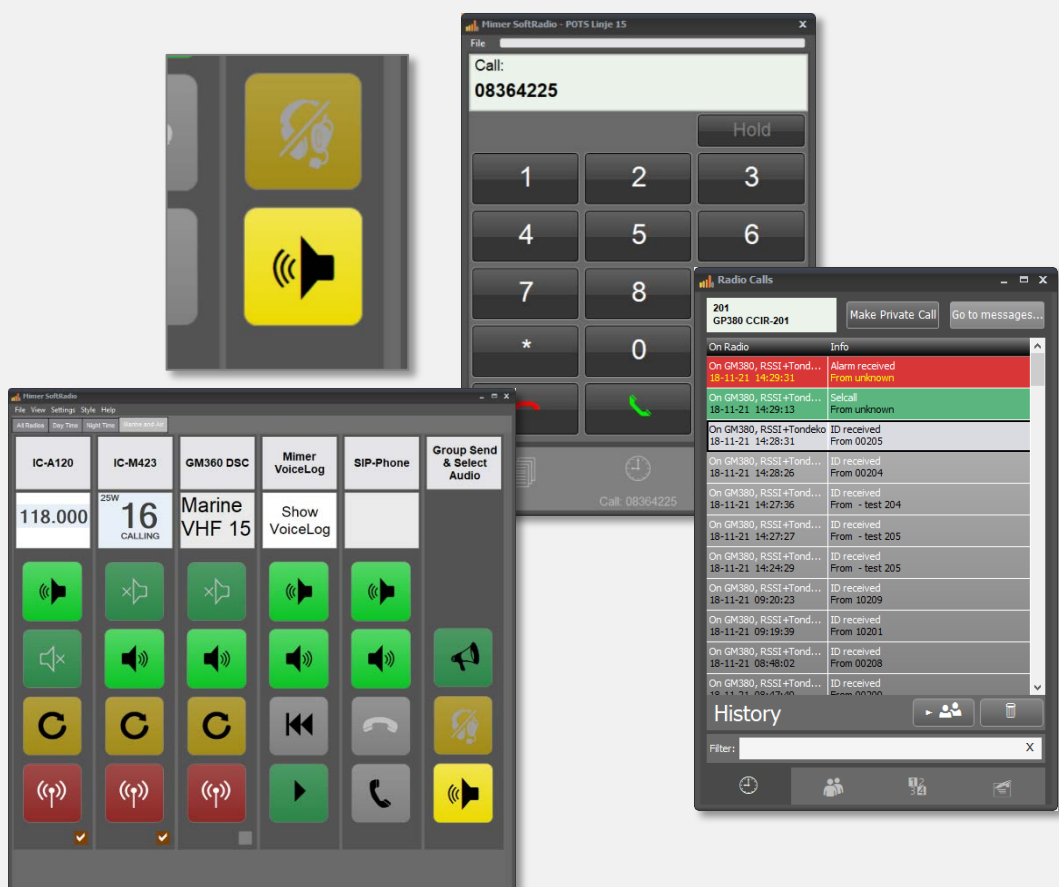


# Mimer SoftRadio

Connecting radios all over the world

## Options and Extras



November 05, 2021

# This is SoftRadio

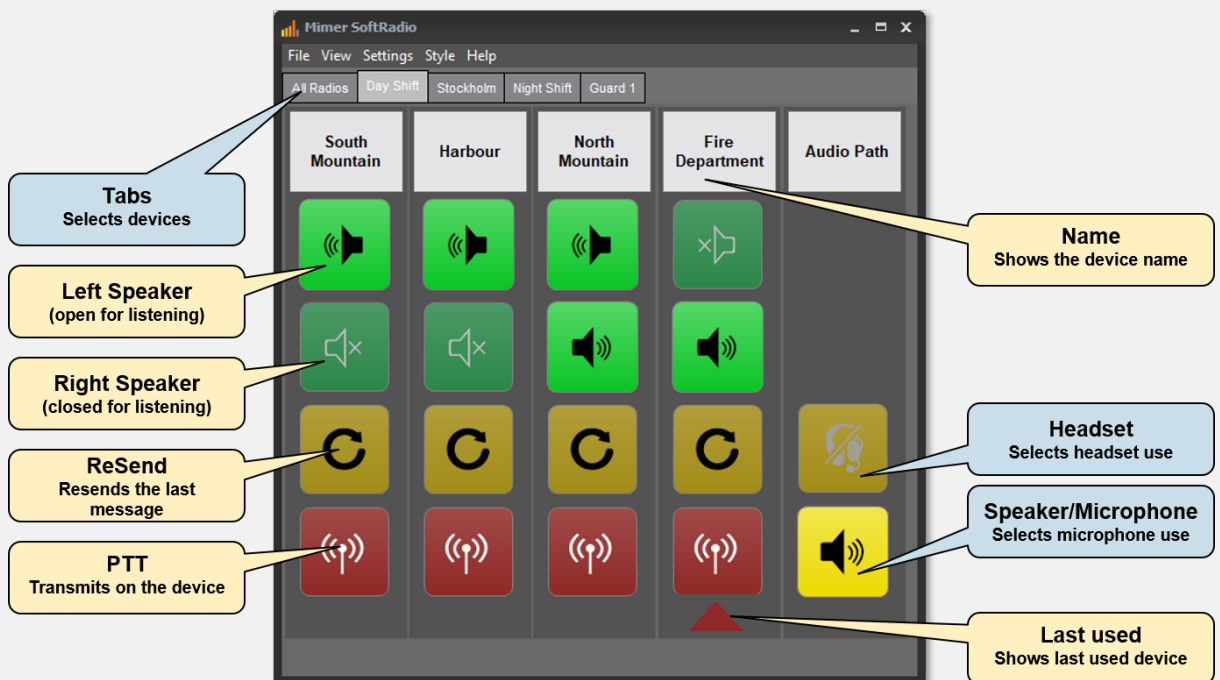
**SoftRadio is a system that will allow you to remote control one or many radios over your own IP network or over the Internet, from your PC.**

The basic functionality of SoftRadio is to be able to listen to several radios at the same time and to be able to transmit on one at a time.

The connected radios are divided into "device panels" where every radio has its own transmit button, resend button and speaker buttons. At the top of each device panel there is a name label that tells the operator which radio is which.

With the speaker buttons the operator can select which radio to listen to, one or many, and if it is preferred to listen in the left or in the right speaker, or in both speakers, for each radio.

The PTT key will give transmission on each radio and the resend key will retransmit the last message. The red arrow points out to which radio an external PTT goes.



*Yellow bubbles are standard and blue are optional*

On the following pages you can read about many options and add-ons to the system that makes it into a fully tailor made system for every dispatch central.

**Please also take a look at the web pages at: [www.lse.se](http://www.lse.se)**

# Radio Calls

**Making it much easier to do  
private calls and to send text**

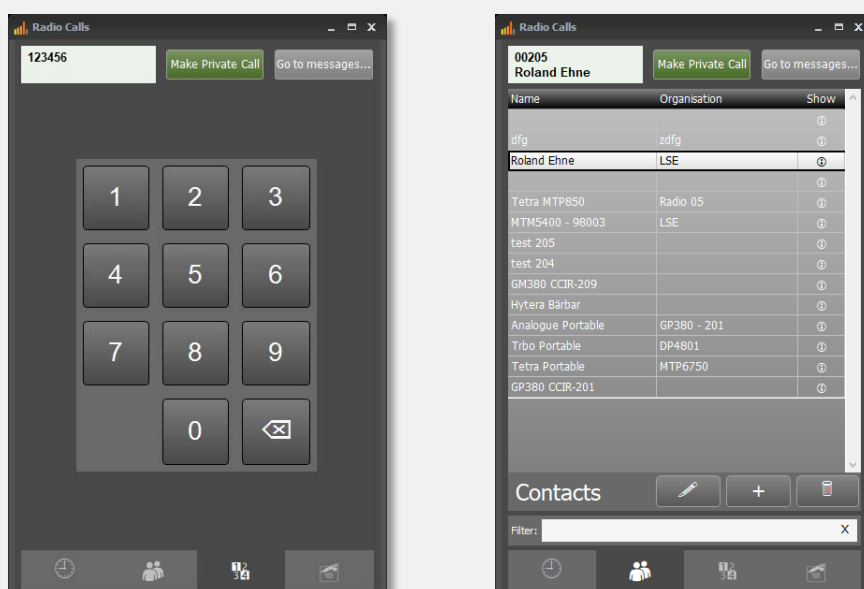
Radio Calls combines:

- Contact list
- Private calls
- Local CallLog
- Text sending

Radio Calls makes it much easier to handle all the contacts that you have for your radios, than it is from the radios front panel.

If your radios also handles text messaging you will be able to send free text and pre defined text messages.

Works with DMR, Tetra, MPT, CCIR, DTMF, MDC etc.



*Number pad and Contact List window  
with preprogrammed names and  
numbers*

Read more: [www.lse.se/radiocalls](http://www.lse.se/radiocalls)

# Radio Calls

## For logging of calls in Tetra, DMR, 5-tone systems

Each operator gets a log function that saves all incoming calls in a log file on the PC hard drive. A new file is started for each day.

A CallLog window displays the latest incoming calls and high lights emergencies in red. You can see which radio in the Mimer system that received the call, who sent it and what type of call it was.

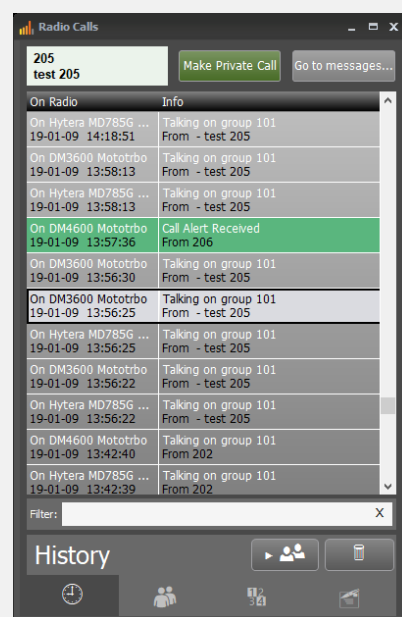
In 5-tone systems decoding of the calls are done in the Network Interface, so the radio does not need to be equipped with a decoder. This also means that each operator can have his own selective call number for every radio that he has connected.

In DMR and in Tetra systems the decoding is done in the radio, so all operators will need to have the same call number.

Local CallLog is a very useful function in systems that use PTT-ID (ANI) signaling. The operator will always have at the top of his list, the last radio that transmitted.

*CallLog window with  
a private call in green*

In 5-tone systems this function also requires an option in the NetworkInterface.



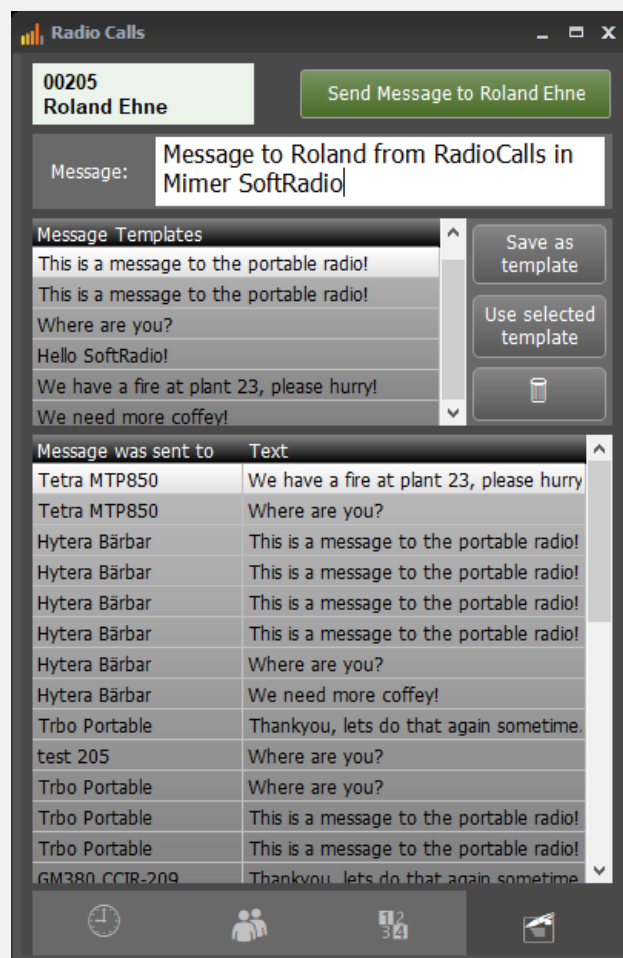
Read more: [www.lse.se/radiocalls](http://www.lse.se/radiocalls)

# Radio Calls

## Text sending function

Radio Calls also has a page for sending text messages. The messages can be stored as templates or written on the fly.

A log list shows all sent messages.



*Text messaging page*

# CrossPatch

**When you have a need to patch two or more radio channels together.**

Mimer CrossPatch is a software option to Mimer SoftRadio that will allow you to patch different radios together.

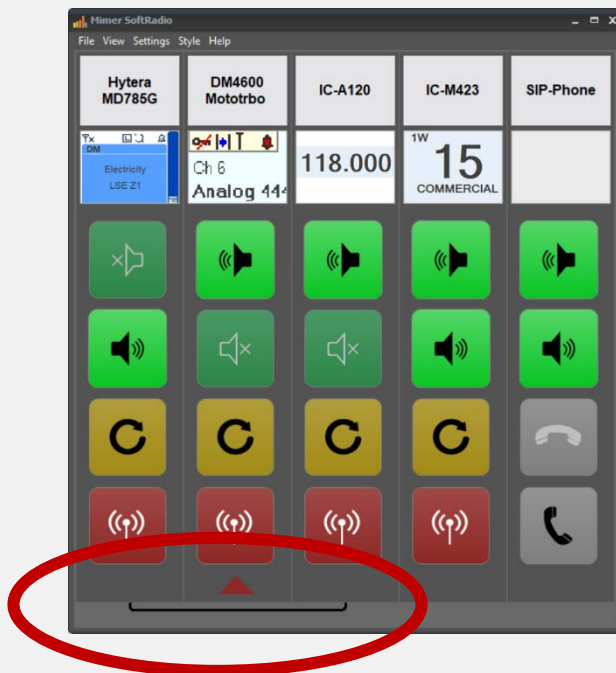
For example;

- a VHF radio can be connected to a UHF radio
- an analogue channel can be connected to a Tetra Talk Group
- radios at different sites can be connected to make up a larger radio area

If you have Mimer PhoneConnect, Mimer Intercom or a PA-system then these can also be patched to your radio channels.

Mimer CrossPatch is flexible and can set up patches which are permanent, temporary or automatically disconnected. Every operator can set up their own set of Cross Patches.

A patch can be just two radios or many radios. And you can set up many patches at the same time.



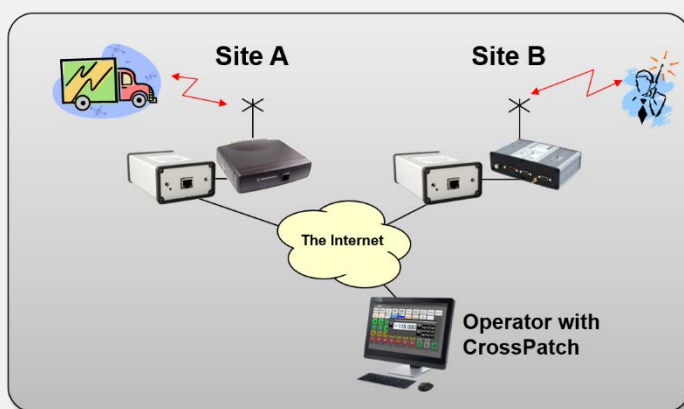
*Two radios are cross patched together*

# CrossPatch

In the example below the car is in the area of Site A using an analogue radio system and the portable radio is under Site B using a Tetra radio.

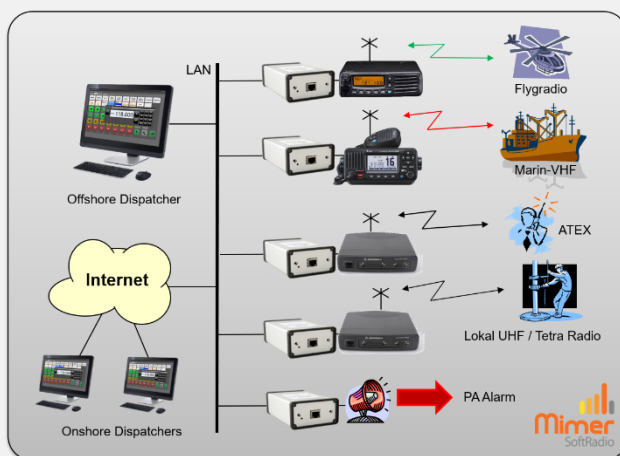
The operator can cross patch the two radio systems together, making both a system patch between analogue and Tetra, and a geographical patch between Site A and Site B.

The patch can be used just for one call, for a time period or made permanent, it's up to the operator.



*To the left a simple system example of Cross Patch use.*

*To the right a more advanced system where different radio types can be cross patched to each other. For example ATEX UHF radio to Airband radio.*



Selectable functions:

- Set a time for how long the patch may be connected
- Set up the patch in only one direction
- Let the operator transmit on all radios in a patch at the same time

Read more: [www.lse.se/crosspatch](http://www.lse.se/crosspatch)

# Custom Functions Panel

**Sometimes you need more function keys than is found on each of the device panels.**

The Custom Functions Panel can be equipped with keys that in the background run scripts. This opens for a wide variety of future functions. Please ask if you have ideas of functions you would like to see.

The first implemented functions, that also are included in the basic package if you order the option to your SoftRadio system are:

- GroupSend
- Audio Device Select
- Show System time
- Clean touch screen



*SoftRadio with the Custom Functions Panel activated*

The colour of the keys and the symbols on the keys can be changed by the system administrator.

The custom keys can also be used to make use of the I/O-functions that many of the Network Interfaces have.

Read more: [www.lse.se/cfp](http://www.lse.se/cfp)



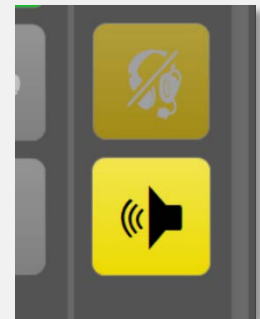
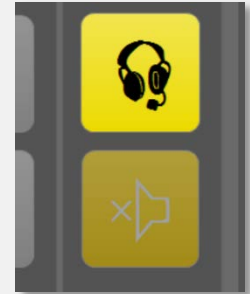
# Custom Functions Panel

## Audio Device Select

Many operators have the need to change between using a speaker/microphone combination over to a headset or a handset, all depending of the noise situation and what is comfortable.

With the Audio Device Select function you change easily between two audio cards connected in Windows. The audio cards can be built into the PC or be USB connected.

Many headsets today are also delivered with a built in audio card and then connects directly to the PC via USB.



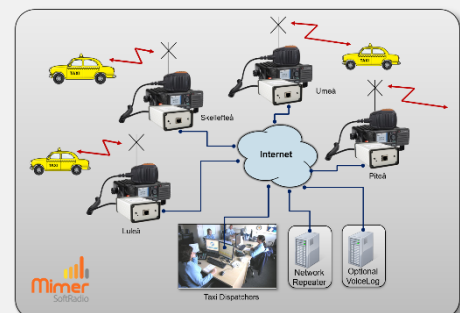
*Select buttons for the audio device*

## GroupSend

GroupSend comes with the Custom Functions Panel and will allow you to simultaneously transmit on more than one radio. In the example below each site represents a geographical area with a number of cars.

The operator can transmit to all cars at the same time by using the option GroupSend. Useful if you don't know in what area a car is.

In for example a factory or an airport the base radios are often in the same site but working on different channels. If you then need to reach out with an emergency message on all channels, GroupSend can also be very useful.



*A simple system example of GroupSend use.*

Read more: [www.lse.se/cfp](http://www.lse.se/cfp)

# PhoneConnect

**When your operators have a need to make telephone calls.**

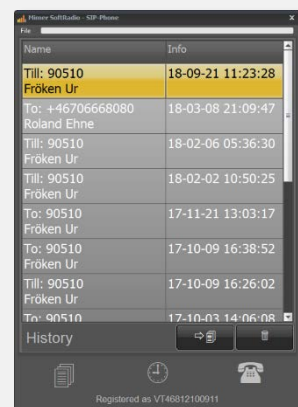
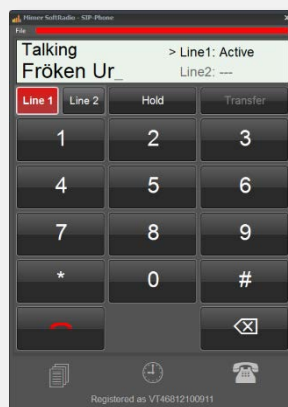
With Mimer PhoneConnect your Mimer dispatcher can mix phone calls with radio calls and use the same headset.

With the addition of Mimer PhoneConnect, one or more of the standard device panels can be used as a telephone device. This gives the operators the ability to make phone calls using the same dispatcher system and headset interface as they use for radio calls.

Also if Mimer CrossPatch is installed, calls can be patched between radio and phone users. This is all carried out under supervision from the operator.



*SIP phone with a call connected*



*Keypad and history list in Mimer PhoneConnect*

There is both a contact list and a history list of old calls.

Mimer PhoneConnect can be built in three ways:

- POTS Shared resource
- GSM/3G Shared resource
- IP-phone (SIP) Personal for each operator

Read more: [www.lse.se/phone](http://www.lse.se/phone)

# Marine Calls

## Making and receiving DSC Calls in Marine VHF systems.

Marine Calls will log all incoming DSC and ATIS calls with time and date. It will also allow sending of DSC calls.

You can set up the dispatcher with his own MMSI number or set up the system with many separate MMSI's for each connected radio site.

Perfect solution for harbors, coast stations, oil rigs, and many more. *Not suited for on board ship use.*

This function also requires an option in the NetworkInterface.

Make DSC Call - IC-M423 (765432109)

Individual Routine Call to 123456789 Use CH:88

Category: ☒ Individual Call, ☐ Group Call, ☐ All Ships Call

Format: ☒ Routine, ☐ Safety, ☐ Urgency, ☐ Position Request, ☐ Polling Request, ☐ Test Call

Address Source: ☒ Favourites List, ☐ Enter manually

Select Channel: ☐ 78, ☒ 88, ☐ Enter manually

Favourites: Svea Sandö - 12345

MMSI: 123456789

Channel: 88

Send Call

Close

DSC Call window.

Time	Ra Name	Type	ID	Message	Ack...
19-01-17 13:28:26	North Coastal Radio Site	INDIVIDUAL from	123456788	ROUTINE to 000000011, , Radio Telephone	
19-01-17 13:14:50	South Island Radio Site	Self Cancel by	123456788	of DISTRESS From:123456788 ?9999?99999 UTC8	
19-01-17 13:14:33	South Island Radio Site	DISTRESS From	123456788	?9999?99999 UTC8:88 Undesignated distress	Ack...
19-01-17 13:10:22	South Island Radio Site	INDIVIDUAL from	123456788	ROUTINE to me , Ch08, Radio Telephone	Ack...
19-01-17 13:08:38	South Island Radio Site	INDIVIDUAL from	123456788	ROUTINE to 123456789, Ch08, Radio Telephone	
19-01-17 13:06:09	South Island Radio Site	INDIVIDUAL from	123456788	ROUTINE to 222333444, RxCh08 , Tx , Radio Telep	
19-01-17 13:05:14	South Island Radio Site	INDIVIDUAL from	123456788	ROUTINE to me , RxCh06 , Tx , Radio Telephone	Ack...
19-01-17 11:53:33	GM360 DSC	INDIVIDUAL from	123456788	ROUTINE to 123456777, RxCh08 , Tx , Radio Telep	
19-01-17 11:49:08	GM360 DSC	INDIVIDUAL from	123456788	ROUTINE to me , RxCh77 , Tx , Radio Telephone	Ack...
19-01-17 11:46:57	GM360 DSC	INDIVIDUAL from	123456788	ROUTINE to me , RxCh08 , Tx , Radio Telephone	New Ack...

DSC Call

Marine CallLog

Read more: [www.lse.se/marine](http://www.lse.se/marine)

# Diversity

## Receiver Voting - Diversity

In radio systems with multiple receivers on the same channel you will often receive the same audio from several receivers at the same time, but with different signal strengths.

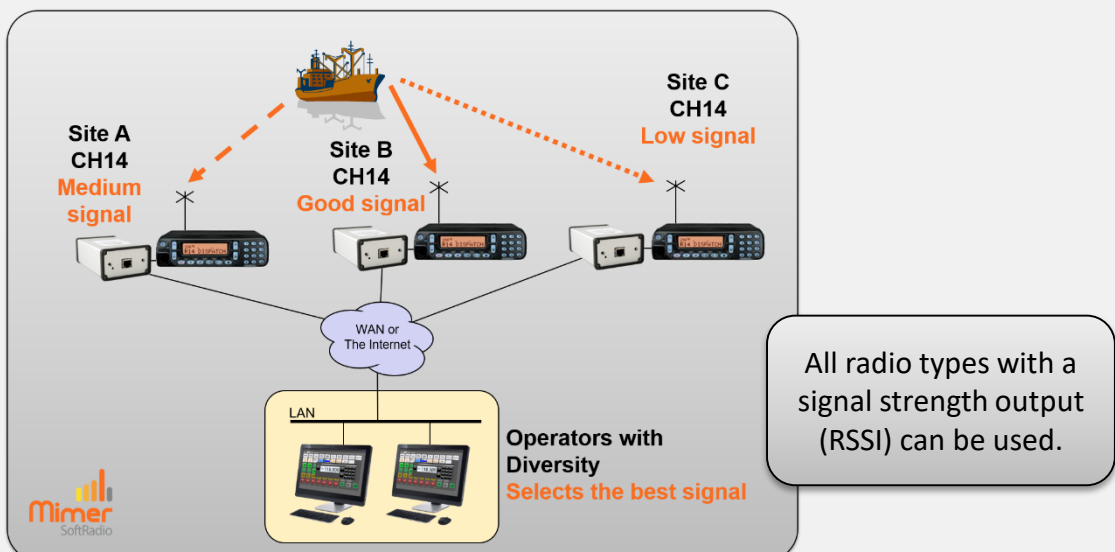
Using a voting system (diversity) it will select the best of the audio signals and you will always hear the best possible signal from all of your base station receivers.

In the drawing below three radio sites with the same Marine-VHF radio channel are connected to one PC operator.

If a ship is between site A and site B both receivers will pick up the signal, maybe also site C. The voting system will then determine which of the two (or three) signals that is the strongest and present only the audio from that radio to the operator.

This gives the operator two advantages:

- He will only hear audio from one receiver (the best one), meaning no distortion.
- He will get a visible indication on his screen telling if it was site A, B or C that had best reception. He will then know on which transmitter to respond to get best possible transmission back to the ship. He will by this also know roughly where the ship is located.



Read more: [www.lse.se/voting](http://www.lse.se/voting)

# SoftRadio XL

**Mimer SoftRadio XL** is for users with large systems or special functional needs.

With the XL version you can connect up to 30 devices, or even more, the standard software handles eight devices.

This means that you can monitor all your radios and also connect telephones, VoiceLog etc without having to reduce the number of radios.

Your SoftRadio XL can easily be set up in different configurations for easy access to your devices. You can even move the devices around freely to make up groups of devices.

All standard options can be added like CrossPatch, GroupSend and PhoneConnect.

The device panels can be configured to suit the users needs, allowing buttons to be added or removed.



*Mimer SoftRadio XL with many radios  
+ InterCom, Phones and VoiceLog*

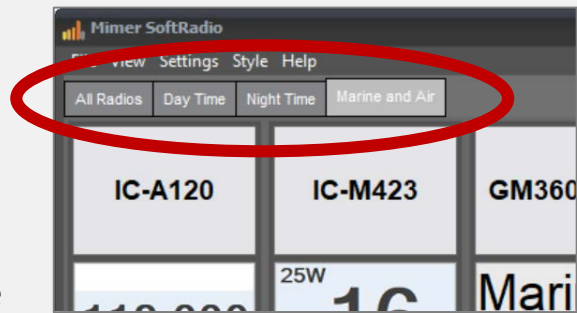
# SoftRadio XL

## Grouping devices in Tabs

In **Mimer SoftRadio XL** you can group your devices into **Tabs**, so that each operator can have his/her own tab or different user groups can have different tabs. For example all the radios at the Stockholm Airport on one tab and all the radios at the Copenhagen airport on another.

Each tab can have up to 30 devices and you can have as many tabs as you need. Each device can also be active on several tabs.

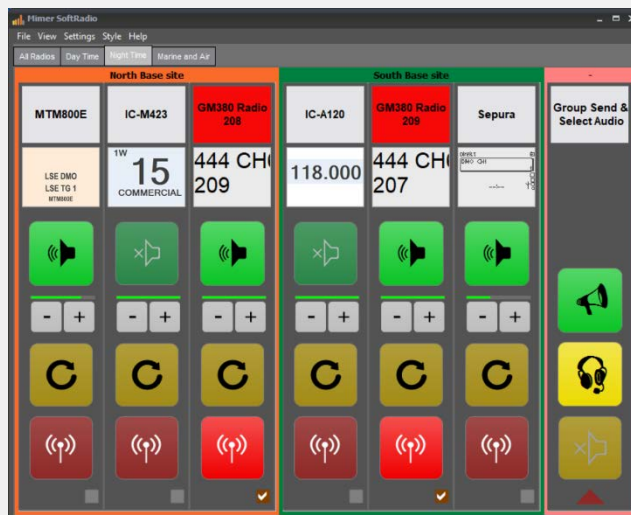
All tabs but the first one can be password protected.



*SoftRadio XL with Tabs activated*

## Using frames and movable panels

In **Mimer SoftRadio XL** you can select to move your device panels around and also sort them into frames with different colours and names, so that it easier to find the radios.



# SoftRadio XL – Options

## Multi Speakers

With an extra option to XL you can have up to eight speakers connected to the dispatcher PC, and select per device what radio to listen to in which speaker or headset.

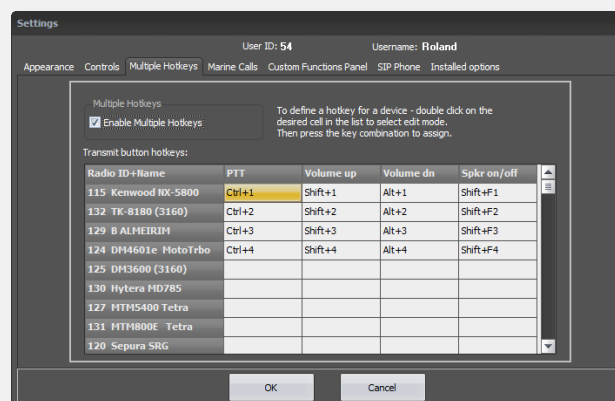
You can assign one, two, three or all eight speakers to each device.



## Multiple Hotkeys

With an extra option to XL you can dedicate separate hotkeys as PTT:s for each radio in your system and also for speaker and volume setting. The hot keys can be on the standard keyboard, on a separate keyboard or on a special made keypad.

The hotkeys can be a single keypress or a combination of keys. For example use “CTRL+1” as PTT on your first radio and “CTRL+2” as PTT on your second radio etc.





# SoftRadio XL – Options

## Advanced Audio Messages

As default you have the yellow “ReSend” button for each device in SoftRadio. Pushing the ReSend button will send the last voice transmission again on the same device or on another device.

This can be changed to the “hour glass” key that instead sends a “Wait tone” message.

With the **Advanced Audio Messages** option you can pre record a number of audio messages and send them on any device at any time.

The messages can be voice recordings, tone messages or other audio files.

A small and simple to use dialogue helps the operator to make and save his own recordings.

More information on the use can be found on the [Audio settings page](#).



## Profiles & Zone Extensions

For the very large systems, there are some extra functions.

### Profiles:

In some cases the operators needs to change the configuration of connected devices depending on what work they have at hand.

For many, the standard function “Tabs” described above is enough. But for others it is better to change the whole configuration. This can be done through the option **Profiles**.

In Connections Setup several configurations can be saved and the operator can select between them when logging on.

The configurations can be setup and distributed from a supervisor terminal.

### Zones:

This option expands the total number of nodes in the SoftRadio system above the standard 240. Making it possible to build systems with thousands of radios and operators.



# InterCom

**When your operators have a need to talk between each other.**

With Mimer InterCom your Mimer dispatcher can make intercom calls between operators without transmitting on the radio system. This is very useful when the operators are at different sites.

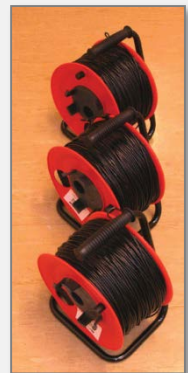
With the addition of Mimer InterCom one or more of the standard device panels can be used as an intercom panel. Functionality is very similar to the standard radio device panel except that when using the InterCom panel the transmit button will only transmit audio to other dispatchers that are monitoring the InterCom channel.

Pushing the yellow button will transmit a tone to the other operators as a call signal.

Intercom is set up with a special network interface or with an option to the Network Repeater.



*Mimer SoftRadio with one of the device panels set up for InterCom.*



You can also connect to PA systems.

Or to external wire line devices, for example to use in tunnels without radio coverage.

Read more: [www.lse.se/intercom](http://www.lse.se/intercom)

**Also see brochures for:**  
**Mimer VoiceLog**  
**Mimer MapView**  
**Accessories**

Developed in Sweden by LS Elektronik AB

More information is available via

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**+46-836 42 25**

**www.lse.se**

Dealer: