



**Connecting radios all over the world**

## **Mimer Option 3115**

**Marine Calls**

**DSC & ATIS-signalling  
for Marine VHF use**

**Setup instructions**

Release date Aug 28, 2017

This guide will help with the use and setup of your Mimer option 3115 “Marine Calls” giving DSC transmission and DSC and ATIS reception. Please also refer to the help texts in the software and to the web page [www.lse.se](http://www.lse.se).

This option is suited for fixed use, i.e. harbors, coast guard, oil rig etc. It is not suited for use onboard ships since there is no way to initiate a distress message.

## 1 Table of Contents

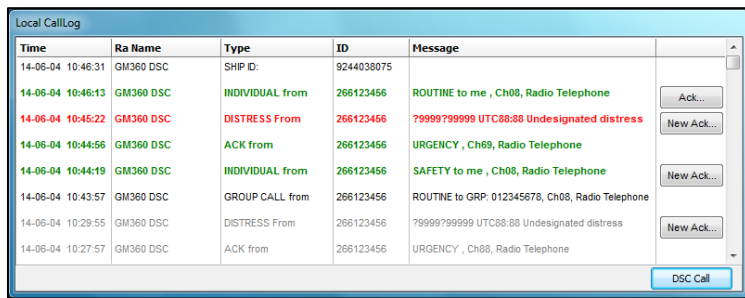
<b>1</b>	<b>TABLE OF CONTENTS</b> .....	<b>2</b>
<b>2</b>	<b>GENERAL</b> .....	<b>3</b>
2.1	SOFTWARE NEEDS.....	3
2.2	HARDWARE NEEDS.....	3
<b>3</b>	<b>WHAT ARE DSC AND ATIS?</b> .....	<b>4</b>
3.1	DSC.....	4
3.2	ATIS.....	4
<b>4</b>	<b>STARTING THE SOFTWARE</b> .....	<b>5</b>
4.1	OPENING THE MARINE CALLS WINDOW.....	5
4.2	OPENING THE DSC CALL WINDOW.....	5
<b>5</b>	<b>RECEIVING CALLS</b> .....	<b>6</b>
5.1	DSC MESSAGES.....	6
5.2	ATIS MESSAGES.....	6
<b>6</b>	<b>SENDING DSC CALLS</b> .....	<b>7</b>
6.1	MAKING A CALL.....	7
6.2	SENDING THE CALL.....	7
<b>7</b>	<b>ACKNOWLEDGING DSC CALLS</b> .....	<b>8</b>
7.1	RESPONSE WINDOW.....	8
<b>8</b>	<b>SETTINGS BEFORE USE</b> .....	<b>9</b>
8.1	BASIC DSC SETTINGS.....	9
8.2	TOUCH SCREEN SUPPORT.....	10
<b>9</b>	<b>LOG FILES OF INCOMING CALLS</b> .....	<b>11</b>
<b>10</b>	<b>EXPORTING ATIS INFORMATION</b> .....	<b>11</b>

## 2 General

Mimer Marine Calls has two basic functions.

- To send and receive DSC calls
- To receive ATIS calls

Included is also the DSC & ATIS CallLog that will display the calls in a list and save them to a file on the PC hard drive.



Time	Ra Name	Type	ID	Message	
14-06-04 10:46:31	GM360 DSC	SHIP ID:	9244038075		
14-06-04 10:46:13	GM360 DSC	INDIVIDUAL from	266123456	ROUTINE to me , Ch08, Radio Telephone	Ack...
14-06-04 10:45:22	GM360 DSC	DISTRESS From	266123456	?9999?99999 UTC88:88 Undesignated distress	New Ack...
14-06-04 10:44:56	GM360 DSC	ACK from	266123456	URGENCY , Ch69, Radio Telephone	
14-06-04 10:44:19	GM360 DSC	INDIVIDUAL from	266123456	SAFETY to me , Ch08, Radio Telephone	New Ack...
14-06-04 10:43:57	GM360 DSC	GROUP CALL from	266123456	ROUTINE to GRP: 012345678, Ch08, Radio Telephone	
14-06-04 10:29:55	GM360 DSC	DISTRESS From	266123456	?9999?99999 UTC88:88 Undesignated distress	New Ack...
14-06-04 10:27:57	GM360 DSC	ACK from	266123456	URGENCY , Ch88, Radio Telephone	

*Example of logged calls from DSC units*

### 2.1 Software needs

The operator PC shall have Mimer SoftRadio installed.

Then install the Marine Calls option.

### 2.2 Hardware needs

Any analogue radio type in the Marine VHF band, set to Marine CH70, can be used. It does not have to be a dedicated Marine radio.

The network interface by the radio needs to be fitted with an FSK-encoder/decoder, part number 3095.

### 3 What are DSC and ATIS?

*Most of the text below is borrowed from Wikipedia. More details can be found there.*

#### 3.1 DSC

Digital Selective Calling or DSC is a standard for sending pre-defined digital messages via the medium frequency (MF), high frequency (HF) and very high frequency (VHF) maritime radio systems. It is a core part of the Global Maritime Distress Safety System (GMDSS).

*All DSC messages are sent on marine CH70 and the radio therefor needs to use CH70 for receive and transmit in order for the DSC function to work. If the radio is set to another channel the DSC will not work.*

#### 3.2 ATIS

The Automatic Transmitter Identification System (ATIS) is a marine VHF radio system used and mandated on navigable inland waterways in Europe for identifying the ship or vessel that made a radio transmission. The identity of the vessel is sent digitally immediately after the ship's radio operator has finished talking and releases their transceiver's push-to-talk button.

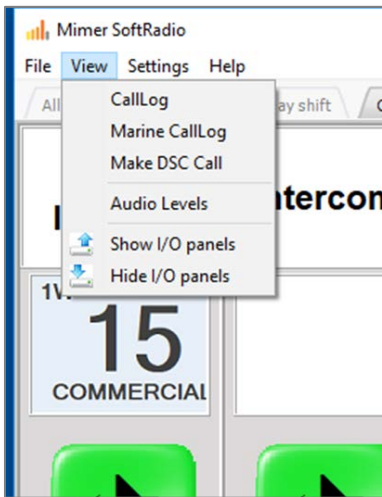
*ATIS messages are sent on the currently used voice channel as a data message when PTT is released.*

## 4 Starting the software

### 4.1 Opening the Marine Calls window

The Marine CallLog is opened by ticking the selection “Marine CallLog” on the “View” menu in SoftRadio.

When selected it will be opened automatic every time SoftRadio is started.

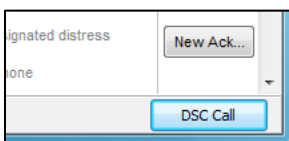


*Opening the CallLog window of Marine Calls*

### 4.2 Opening the DSC Call window

You can open the DSC Call window in two ways.

- Click “Make DSC Call” in the View menu as above.
- Click the button in the right hand corner of the Marine CallLog window.

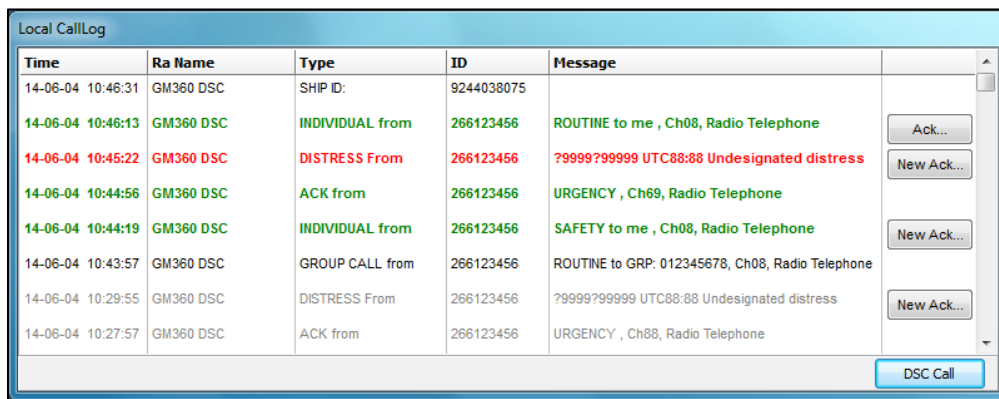


*Opening the DSC Call window from the CallLog*

## 5 Receiving calls

The Marine CallLog window will show all incoming DSC & ATIS calls that have been received by the Network Interface at the radio(s).

The log will handle many radios and shows the radio that received the call in the column "Ra Name".



Time	Ra Name	Type	ID	Message	
14-06-04 10:46:31	GM360 DSC	SHIP ID:	9244038075		
14-06-04 10:46:13	GM360 DSC	INDIVIDUAL from	266123456	ROUTINE to me , Ch08, Radio Telephone	Ack...
14-06-04 10:45:22	GM360 DSC	DISTRESS From	266123456	?9999?99999 UTC88:88 Undesignated distress	New Ack...
14-06-04 10:44:56	GM360 DSC	ACK from	266123456	URGENCY , Ch69, Radio Telephone	
14-06-04 10:44:19	GM360 DSC	INDIVIDUAL from	266123456	SAFETY to me , Ch08, Radio Telephone	New Ack...
14-06-04 10:43:57	GM360 DSC	GROUP CALL from	266123456	ROUTINE to GRP: 012345678, Ch08, Radio Telephone	
14-06-04 10:29:55	GM360 DSC	DISTRESS From	266123456	?9999?99999 UTC88:88 Undesignated distress	New Ack...
14-06-04 10:27:57	GM360 DSC	ACK from	266123456	URGENCY , Ch88, Radio Telephone	

*Exampel of calls received in the Marine CallLog*

The ID column shows the number of the calling party.

The Message column shows in plain text the DSC message received.

### 5.1 DSC messages

DSC messages can be sent in different formats depending on the urgency and who or whom it is sent to. The CallLog reflects this in different colours.

The CallLog will show:

- Messages sent to the operators own MMSI number in green.
- Distress messages in red
- All other types in black

Calls shown in grey are historic calls that have been stored when SoftRadio is closed, and then read back into the log when SoftRadio is started again.

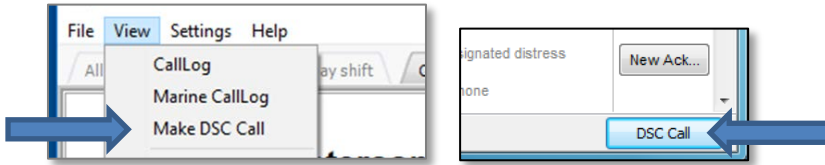
### 5.2 ATIS messages

In Marine VHF radio systems at inland water ways, for example rivers in Europe, a message format called ATIS is used. This is an ID code that is sent every time the PTT on the ship radio is released so that the coast radio station shall see whom is transmitting.

The Marine CallLog will display all ATIS calls with the ships number.

## 6 Sending DSC calls

To make a DSC call you need to open the DSC Call window. You can leave it open after the call or close it again when you are ready.



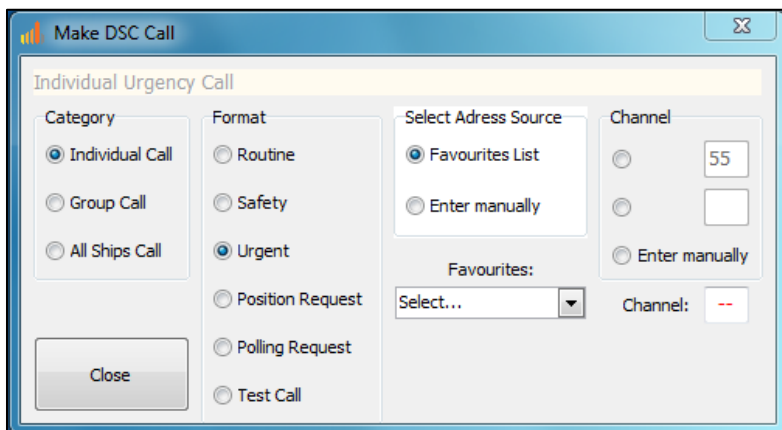
*Two ways of opening the DSC Call window*

### 6.1 Making a call

Go through the steps in the call window to select category and format of the call.

Then select or manually enter the number you would like to call.

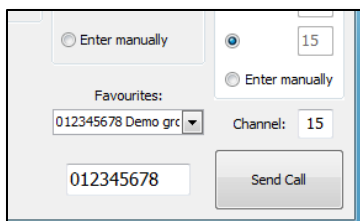
Finally select the channel that you would like the called party to answer back on. (All calls, that require that a voice communication is set up, needs to transmit information on which channel the voice call shall take place.)



*DSC Call window*

### 6.2 Sending the call

When all parameters are set, press the "Send Call" button.



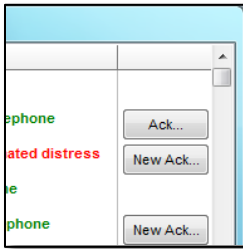
*Send Call button*

## 7 Acknowledging DSC Calls

Incoming DSC calls often needs an acknowledgement.

The CallList shows a button “Ack...”, next to such calls, that leads to the Response window.

A call that already has been acknowledged will display the button “New Ack...” which lets you repeat or send a different acknowledgement on the same call.

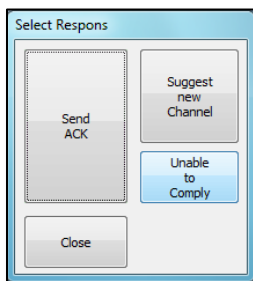


“Ack..” and “New Ack..” buttons

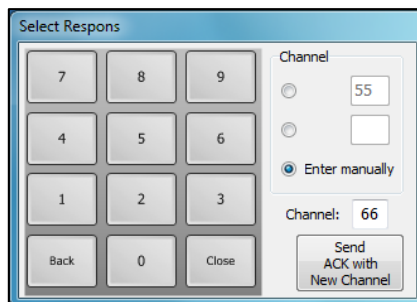
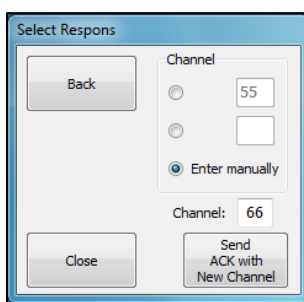
### 7.1 Response window

You have three choices here.

- Send the standard acknowledgement
- Send an acknowledge suggesting another channel for the voice call
- Send “Unable to comply”



Response window



Channel select window when acknowledging with a new channel.

The keypad appears if you have chosen touch screen support in SoftRadio Settings.



## 8 Settings before use

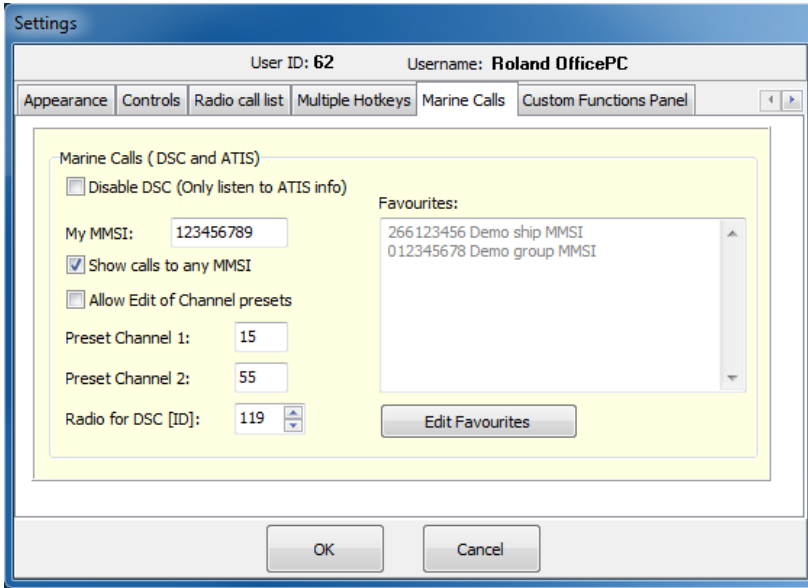
Before use of DSC you need to do some settings in SoftRadio.  
The use of ATIS needs no settings.

Open the Settings menu and select the “Marine Calls”-tab.

### 8.1 Basic DSC settings

You can set the following:

- **Disable DSC**  
Ticking this box will inhibit decoding and transmitting of DSC calls.  
Only decoding of ATIS will be possible.
- **My MMSI**  
This is the number that this operator position shall listen to. If you have more than one operator, they can share the same number or each have their own.  
These calls are presented in green.
- **Show calls to any MMSI**  
Ticking this box will present all calls, that the radio can hear, in the CallList. Calls for other MMSI than the own number, set above, will be shown in black.
- **Allow Edit of Channel presets**  
Ticking this box allows the operator to change the preset channels in the DSC application.  
Un ticking the box locks the presets to the two channels that are set in this window.
- **Preset Channel**  
These are the two channels that the operator normally can select to send as suggested voice channel together with a DSC call.
- **Radio for DSC (ID)**  
This setting selects which radio in the Mimer SoftRadio system that is the DSC transmitter. (Always set to Marine VHF CH70).
- **Favourites**  
Here you can enter a list of marine radios that you often call.

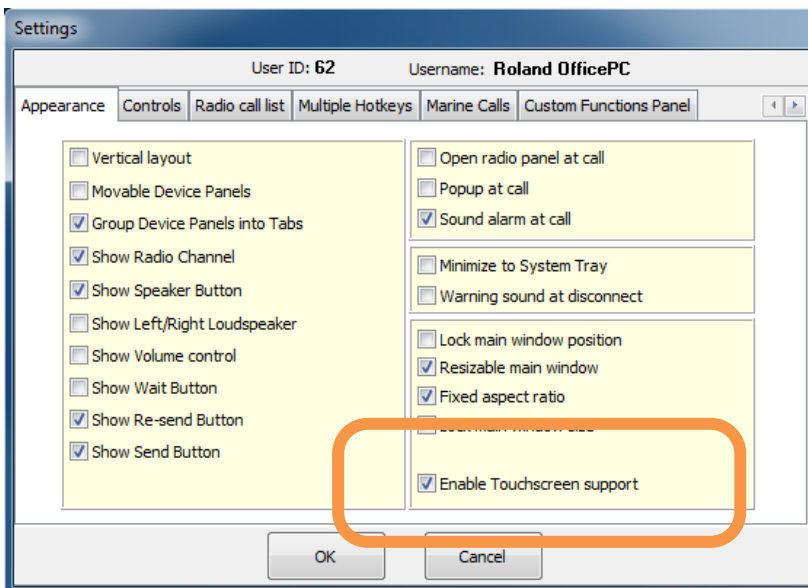


*Marine Calls settings menu in SoftRadio*

After the changes has been done, restart SoftRadio for them to take effect.

## 8.2 Touch screen support

If you are using a touch screen and do not have a standard keyboard, ticking the “Enable Touchscreen Support” box will give you help by displaying a virtual keyboard when for example entering a channel number in the DSC application.

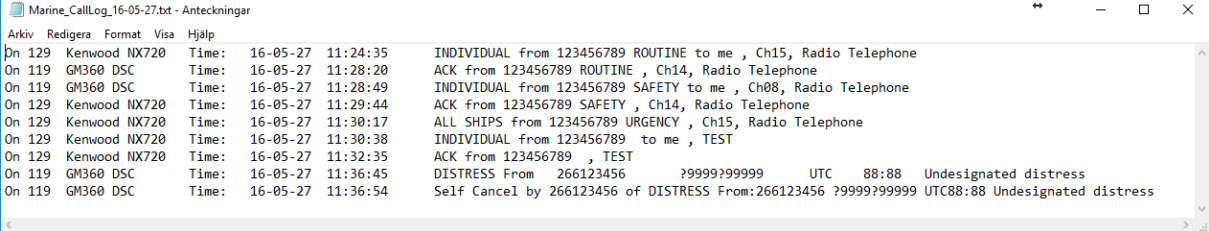


*Settings menu in SoftRadio*

## 9 Log files of incoming calls

All incoming calls are stored in files on the operators PC. The files are standard text files divided with one new file for each new day.

They are found under: C:\Users\Public\Documents\Mimer\Logfiles



```
Marine_CallLog_16-05-27.txt - Anteckningar
Arkiv Redigera Format Visa Hjälp
On 129 Kenwood NX720 Time: 16-05-27 11:24:35 INDIVIDUAL from 123456789 ROUTINE to me , Ch15, Radio Telephone
On 119 GM360 DSC Time: 16-05-27 11:28:20 ACK from 123456789 ROUTINE , Ch14, Radio Telephone
On 119 GM360 DSC Time: 16-05-27 11:28:49 INDIVIDUAL from 123456789 SAFETY to me , Ch08, Radio Telephone
On 129 Kenwood NX720 Time: 16-05-27 11:29:44 ACK from 123456789 SAFETY , Ch14, Radio Telephone
On 129 Kenwood NX720 Time: 16-05-27 11:30:17 ALL SHIPS from 123456789 URGENCY , Ch15, Radio Telephone
On 129 Kenwood NX720 Time: 16-05-27 11:30:38 INDIVIDUAL from 123456789 to me , TEST
On 129 Kenwood NX720 Time: 16-05-27 11:32:35 ACK from 123456789 , TEST
On 119 GM360 DSC Time: 16-05-27 11:36:45 DISTRESS From 266123456 ?9999?99999 UTC 88:88 Undesignated distress
On 119 GM360 DSC Time: 16-05-27 11:36:54 Self Cancel by 266123456 of DISTRESS From:266123456 ?9999?99999 UTC88:88 Undesignated distress
```

*Example of Log file*

## 10 Exporting ATIS information

There is also a separate software available that exports the ATIS messages to other software from third party providers.

This can for example be used if a third party map software is used and you would like to plot on the chart which ship is transmitting at the moment.

Mimer software number 3151.

## Mimer Marine Calls Setup

THIS MANUAL WILL HELP WITH:

- UNDERSTANDING THE MARINE CALLS OPTION TO SOFTRADIO
- EXAMPLES OF USE
- SETUP INSTRUCTIONS



Proudly made in Sweden by

**LS Elektronik AB**

[www.lse.se](http://www.lse.se)

[mimer@softradio.se](mailto:mimer@softradio.se)