

Artemis Mk5 HMI software

Quick guide for Fix station

Introduction

This document describes the most important settings to operate an Artemis Mk5 Fix station with the Artemis HMI software.

Description

The Artemis HMI software consists of two programs: -The Artemis network program -The Artemis control panel.

Therefore there are two shortcut icons on the desktop:

Shortcut icon control panel:



Shortcut icon network program:



Artemis Mk5 network program

The Artemis Mk5 network program takes care for the communication between the Artemis computer in the control room and the antenna unit.

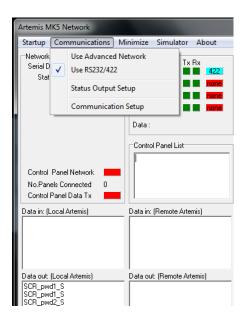
Two types of communications can be used:

-Ethernet. When cabling between the computer and the antenna unit does not exceed 100m -RS422. When cabling between computer and anternna unit exceed 100m (1000m max)

Note: RS422 is an option and a RS422 dongle must be fitted in the unit. For more details contact Reson BV.

Selection of communication type can be made in the network program by selecting the <*communication> tab*:

-Advanced->Ethernet -RS232/422->RS422



In the Artemis network program correct communication with the antenna unit is indicated by:

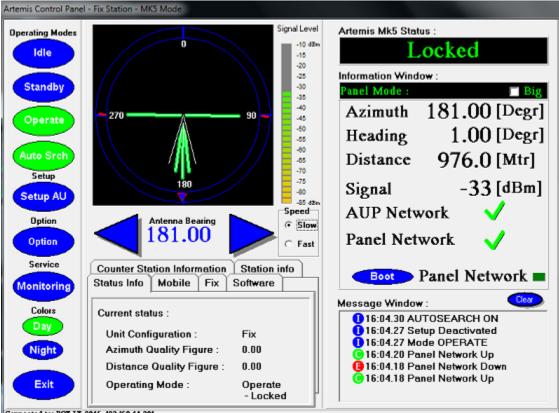
-Flashing TX/RX LED (RS422 communication) or flashing heartbeat LED (Ethernet communication) -Scrolling data in the "data in" and "data out" box -SSB update rate 10/sec

	Artemis MK5 Simulator			
	Startup Communications Minimize Simulator About			
	Network Status			
	Serial Data Tx Hx Com Port 1 7 422			
	Status Com Port 2 🔀 🔳 🖬 none			
	Flashing TX/RX LED Com Port 3 🔀 🔳 🖬 🖬 🖬			
	Com Port 4 🔀 🔳 🖬 nonel			
	Data :			
	Data.			
	Control Panel List			
	Control Panel Network			
	No Panels Connected			
	Control Panel Data Tx			
	Data in: (Local Artemis) Data in: (Remote Artemis)			
	PCR pwd2 S1			
	CCR_pwd2_S 0scrolling data			
1	CCR_prfm_S 1 CCR_rxga S 1			
1	CCR_sI_S1			
A	Data out: (Local Artemis) Data out: (Remote Artemis)			
- \	SCR_pwd2_S SCR_pwd2_S			
	SCR_prfm_S			
	SCR_rxga_S SSR_sll_S			
	Open CP Connections: 0 SSB Update rate 10 a sec.			

The network program have to run always, but you do not have to see it all the time. Therefore when everything is ok press the "minimize" tab to minimize the program:

Artemis MK5 Simulator	1 M		
Startup Communicat	ions M	inimiza Sim	ulator A
	Jons In		idiator A
Network Status Serial Data	Tx Bx	Serial Ports	Tx Rx
Condi D'did		Com Port 1	

Control panel



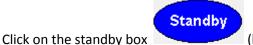
The control panel software is the software to control the Artemis.

Operate modes

On the left side of the control panel the operate modes could be selected

STANDBY:

Select Standby when the Artemis is not in use. (We recommend not to switch off the unit but use standby mode)



(box will get green) to switch to standby mode.

OPERATE:

When clicking with the mouse on the "operate" box

Operate

(box will get green) you switch the

Artemis in manual search mode. In manual search mode you should use the Arrow keys (by pressing mouse on it) to rotate the scanner.:



Keep the mouse pressed at the arrow key to move the antenna.

AUTO SEARCH

By selecting both the "operate" and "auto Srch" box (both get green) the Artemis will be in auto search mode. (Antenna scans automatic)



When you like to switch back to operate mode (manual search) just press again at the "auto srch" box (box will get blue again) to switch the auto search mode off.

Status

In the "Status" box you see current status of the Artemis.

When the Artemis has found and locked in to the counter station (mobile) this is indicated with status "Locked":



Status "off" or status "updating status" is communication failure between the computer or Artemis unit and the Artemis software

Big screen

To increase the font of the control panel you can select "big screen" by ticking the big box.

Panel Mode :

🗖 Big

Making nomal size again by un-ticking the "big box"

Image Big

Configuring/ setting up the Artemis.

By pressing with the mouse at the "setup AU" box configure the Artemis.

Setup AU

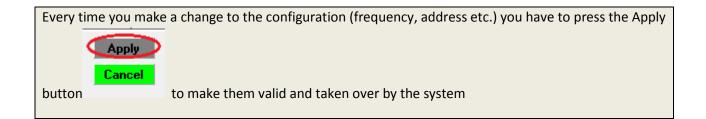
you have access to several menus to

NOTE: For some menus a password is requested to make the changes valid.

The password to enter is "setup".

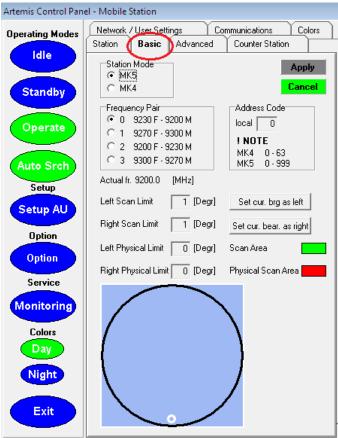
If you like to go back to the normal operate screen you have to press the setup box





Basic menu

When pressing at the basic tab at the setup menu you can change basic settings as frequency, address etc.



Connected to: BOT-LT-0037.reson.root 192.168.44.201

-Station mode: Mk4 or Mk5; not important you can ignore. This does not affect any performance. -Frequency pair. Select frequency pair by ticking the box and press the "Apply" button.

Frequency Pair			-Address	s Code-
🔎 d) s	3230 F - 9200 M		local [0
0.1 9	3270 F - 9300 M			-
0.2.9	3200 F - 9230 M		! NOT	-
03	3300 F - 9270 M		MK4 MK5	
	k box to selec quency and pr			
	oply" button		: cu	r. brg a:
Right Scan Limit 1 [Degr]			Set cur.	bear. a

-Address code. Type in address code in the box and press the "apply" button.

	Apply
	Cancel
Addres	s Code
local 🛛	0
! NOT	E
MK4	0 - 63
MK5	0 - 999

-Scan limit. Scan limits are used when you use Auto search mode. Fill in the left and right scan sector and press the "apply" button. This will be the sector the scanner will turn/search when the "Auto search" mode is selected. (In this example between 90 and 270 degrees)

Left Scan Limit	90 [Degr]	Set cur. brg as left	
Right Scan Limit	270 [Degr]	Set cur. bear. as right	

-Physical scan limit

Never use physical scan limit. Keep these values zero!!!:



Advanced menu

In the advanced menu advanced settings could be set

Artemis Control Pane	I - Fix Station - MK5 Mode
Operating Modes	Network / User Settings Communications Colors
Idle	Station Basic Advanced Counter Station
Standby	Station Type Fix C Mobile C Beacon C Automatic C Station Type C Normal C Apply C Normal C Ancel C Automatic
Operate	Enable Gyro Compensation
	Enable Remote Configuration (On = MK4/ Off = MK5)
Auto Srch	Enable Auto Recovery
	Azimuth added by Mobile
Setup	Enter Azimuth 0.000 Set
Setup AU	Reference Azimuth/Bearing
Option	Enter Azimuth 0.000 Set
Option	Azimuth/Bearing Setpoint
Service	Setpoint 000 Turn
Monitoring	De-Icing
Colors	Servo Mode / Simulation
Day	Normal Mode
Night	Open Loop
Eulé	Close Loop
Exit	Simulation
onnected to: BOT-LT-	-0046 192 168 44 201

Do not forget to press the "apply" button every time you make changes!

-Station type: Fix

- -Tx power mode: Automatic
- -Enable auto recovery: Box should be ticked.
- -"Azimuth added by mobile": always 0

-"Reference Azimuth/Bearing": This value should be 0 when the scanner is pointed to FPSO bow or to true north.

- -"Azimuth/bearing Setpoint": always 0
- -"De-icing": Click at box to switch on antenna heating. (when on, status will be green)
- -"Normal Mode": always status green.

All other settings are not important for a fix station and can be ignored.

-----end of document-----

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