

BLACK MAMBA DIGITAL RECEIVER

Installation & User Guide

Version 1.0

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Introduction

The "Black Mamba" receiver is the first worldwide, which can be managed entirely through Web Interface, to be able to manage the alarm signals receiving from most and widespread alarm system companies.

It is built so that it can be installed in a Microsoft Cluster environment and of course it is updates online, thus supporting its constant upgrade.

The "Black Mamba" receiver is constantly enriched with new communication protocols and new device vendors, to evolve in parallel with the requirements of the global security systems market.

Pre-installation Requirements

The Black Mamba digital receiver can be installed on systems meeting the following minimum requirements

- Windows Operating System: Windows 10, 11, and Windows Server 2016, 2019, 2022 or later. Windows Cluster Supported.
- **Processor**: Intel Compatible processor with a speed of 1.4 GHz or faster.
- **RAM:** Minimum 512 MB. Recommended: 1 GB or more.
- Hard Disk Space: 5 GB of Disk Space

During the installation process, you will be prompted to install – if not already exist – the following Microsoft products

- Microsoft Visual Studio C++ 2013
- Microsoft SQL Server 2019 LocalDB
- Microsoft ODBC Native Driver 2012 for SQL Server

Installation Steps

- 1. Download the Black Mamba receiver installation file directly from our website https://www.blackmamba.cloud
- 2. Execute the **blackmamba_setup.exe**



3. Complete your Registration **Email Address** when prompted, select if this is a new email address or already registered and click **Next**. Note: Please provide a valid

ြား Setup - BlackMamba version 1.0	_	□ ×
User information Registration email		(III)
Please specify the following information, then click Next.		
Email:		
New Email Registration		
○ Already Registered Email		
Ε	Next	Cancel

email address in order to be able to receive the Registration Key.

4. You will receive a **Registration Key** in your email address provided. Copy it and paste in the next setup dialog box. If you did not receive an email with the

Setup - BlackMamba version 1.0	- 🗆	\times
User information		EN
Registration key		(10m)
Please specify the following information, then click Next.		
Registration Key:		
	Resend Registration Key	
	<u>B</u> ack <u>N</u> ext Ca	ncel

Registration Key, you may click on "Resend Registration Key" button. Click **Next** when you apply the Registration Key in the field.



5. If the Registration Key is valid, you will be prompted to select the Destination Folder for the installation. By default, Black Mamba will be installed in

Setup - BlackMamba version 1.0	-	- 🗆 X
Select Destination Location Where should BlackMamba be installed?		(10)
Setup will install BlackMamba into the following folder.		
To continue, click Next. If you would like to select a different folder, click Browse	e.	
C:\Program Files (x86)\BlackMamba		Browse
At least 196,2 MB of free disk space is required.		

"C:\Program Files (x86)\BlackMamba". You may choose another folder by clicking "Browse". Click Next to continue.

6. In the next dialog box, choose if you want to **create a desktop shortcut** and click **Next** to proceed.

Setup - BlackMamba version 1.0	-		×
Select Additional Tasks Which additional tasks should be performed?			(II)
Select the additional tasks you would like Setup to perform while installing BlackMamb	a, then click	Next.	
Additional shortcuts:			
Create a desktop shortcut			
Back	Next	Ca	ncel



7. Review the setup options previously selected and click Install to begin the

Setup - BlackMamba version 1.0 —		×
Ready to Install Setup is now ready to begin installing BlackMamba on your computer.	((III)
Click Install to continue with the installation, or click Back if you want to review or change any setting	5.	
Destination location: C:\Program Files (x86)\BlackMamba Additional tasks: Additional shortcuts: Create a desktop shortcut	4	k F
4	Þ	
Back Install	Car	ncel

installation process. Please wait until the file copy is complete.

8. Complete the setup and proceed to the installation of Microsoft products required. Please **check all 3 packages** (Visual Studio C++ 2013, LocalDB and ODBC



Driver) and click Finish.



9. Microsoft Visual C++ 2013 Redistributable installation starts shortly after. Check the "I agree to the license terms and conditions" and click **Install**. Wait until the



setup completes with a success message and click **Close** to terminate the process.

10.Microsoft SQL Server 2019 LocalDB installation follows. Click Next to start the setup. Check the "I accept the terms in the license agreement" and click **Next**. In



the next dialog box just click on **Install** to proceed. Wait until the setup completes



and click on Finish to terminate the process.



11. Microsoft SQL Server 2012 Native Client setup is the last package required. Click

🖟 Microsoft SQL Server	r 2012 Native Client Setup 🛛 🗙	d Microsoft SQL Server 2012 Native Client Setup X
	Welcome to the SQL Server 2012 Native Client Setup	Feature Selection Select the program features you would like to install.
	Setup helps you install, modify or remove SQL Server 2012 Native Client . To continue, click Next. WARNING: This program is protected by copyright law and international treaties.	Click an icon in the following list to change how a feature is installed. Image: Client Components SQL Server Native Client SDK Image: Client SDK Image: Client Components SQL Server Native Client SDK Image: Client SDK <td< th=""></td<>
	< Back Next > Cancel	< Back Next > Cancel

Next to start the installation. In the next step just click **Next**, as it is not necessary to install the SQL Server Native Client SDK. Then click **Install** to begin the process.



Wait until the setup completes and click on **Finish** to terminate the process.

12.Upon successful installation and if you had selected "Launch BlackMamba", you should be redirected on your default web browser and see the login page of Black Mamba Administration Tool. Please refer to the next section for instructions.



Black Mamba User Guide

1. Login

The "Black Mamba" receiver is fully controlled through web interface. User the application shortcut to access it or simply open your web browser and open the following url: http://127.0.0.1:8181 or http://localhost:8181

255550 00 00 7440 0 322775134700 19366A497C 294A33 6F 52 F 52 F 52 F 52 F 52 F 52 F 52 F 53 F 54 F 55 F 56 F 57	
ALC DESOS	
	Your Username Password Your Password
200 TOP2PA	
¹¹⁸¹⁰⁷ 0 ⁴ 92 ^{5C42CC} 0 0	

You will see the Administration Tool Login page, prompting you to enter the username and password. The default credentials are username: **admin** and password: **admin**

2. Status

		Status Receiver Se	attings Signal History Subscribers	Change Password A	bout Log Out
Status					
Black Mamba (Primary)	Black Mamba (Secondary)	Sirion	CSVIP		
Service ? Running	Service O Running	Service ? Running	Service O Runnin	g	
On / Off	On / Off	On / Off	On / Off		
ArrowHead					
Service O Running					
On / Off					
Registration					
Registration Email: 2021-09- Status: Active 2023-02- Valid Until: 2023-02-	17 17:47:06 17 12:36:01				



After the successful login, you will be redirected to the Status Panel of Black Mamba. There are **5 different Receiver Services** running simultaneously. The Primary and Secondary Black Mamba Receivers, the Sirion Receiver, the CSV-IP Receiver and the Arrowhead Receiver.

Each Service is running independently and may be switched on or off at any time, simply using the **Switch** below each Service

The **Registration** details may be found at the bottom left side of the Status Panel, indicating the registration email address, date, status and expiration date.

3. Receiver Settings

The Receiver Setting Panel is the main controller of Black Mamba. It allows the administration of Network Settings, Reporting, Registration and Pending Subscribers.

АМВА							Status	Receiver Settings	Signal History	Subscribers	Change Password	About	Log Out
Network													
Black Mamba	(Primary)	Black Mamba	(Secondary)		Sirion			CS	VIP				
Receiver No: IPv4: TCP port: UDP port:	01 Iocalhost v 9090 9090	IPv4; TCP port: UDP port:	localhost ~ 9393 9393]	IPv4: Sirion TCP port: Sirion Preshared Key:	localhost 9191 00000000000000000	•	IPv4: CSVIF	TCP port:	localhost 9292	v		
ArrowHead													
IPv4: TCP port:	localhost v 9494												
Reporting		Web Interface			Registration			Pend	ling Essence-hu	b Subscribers			
Server Enabled: Server IP: Server Port: Server ACK:	Yes • 0.0.0.0 • 0 • \x6 •	IPv4: TCP port:	localhost ~		Registration Email: Registration Key: Update Registration			Ma	nage Pending Subs	cribers			
Server status:	Check For Updates (curren												

Network

Each Receiver must be assigned a **local machine IP address and port**, either TCP or UDP, or even both, depending on the Receiver Type. Especially for **Sirion Receiver** Service, the **Pre-shared Key** must be defined for signal decoding.

The **Receiver Number** is unique (e.g. 01), since all the Receiver Services are Reported as one single Receiver.



Reporting

The received signals from the Black Mamba digital receiver may be transmitted to **over TCP-IP** your Automation Software. You need to **enable the Reporting Server** and apply the preferred **IP address** and **TCP Port**. Every signal is buffered and retransmitted until an **ACK** is received from your Automation Software. The Reporting Server Status is displayed in this panel.

Web Interface

You may change the **local IP address and TCP Port** of the Black Mamba Administration Tool.

Registration

Provide the Email Address of your Black Mamba Registration, along with the valid Registration Key. In order to apply changes, you must click "**Update Registration**".

Pending Essence-hub Subscribers

Black Mamba is compatible to receive Essence-hub signals. The Subscribers are **not activated automatically** (like any other receiver) but must be manually activated. This is because Essence-hub protocol uses **8-digit subscriber codes** instead of 4 or 6 that are used by common protocols like SIA or Contact ID.

Click "Manage Pending Subscribers" to view the list of new Essence-hub subscribers.

87										
	Network									
	Black Mamb		Black Mamba							
			IPv4 TCP port: UDP port: Manage Pending B	hosathost v 9191 9191 Essence-hub Subscribers						
	ArrowHead Incoming Subscriber Code				Signal Date	a Last Signal D)ate 💠			
			00001234	2023-0	2-08 10:00:00	2023-02-08 10:	Cancel			
						ation		Menage Pending S	ubscribers	



Select one of the pending subscribers by clicking on it in the list. The **new subscriber code field appears,** and you may enter the desired subscriber code according to your

R							
	Network						
	Black Mamba (Primary)	Black Mamba (Secondary)					
		IPv4 Institution	iPsd:	localhost	*		
		Incoming Subscriber Code Fi	rst Signal Date	2023.02.08.10	Date		
		New Code for 00001234: 1234					
		L		Apply	Cancel		
						Subscribers	

standards. Click **Apply** to save the new subscriber code and activate it.

Save Settings & Update

At the bottom left corner of the Settings Panel, the **Save Configuration** button applies all the preferred settings of Black Mamba. Please remember to click on it before exiting the panel, otherwise all changes will be discarded.

The "**Check For Updates**" button allows online checking for new release of the Black Mamba receiver and informs you accordingly. You may check for updates frequently so you keep your receiver up to date.

4. Signal History

The Signal History Panel offers a search tool for the received alarm signals of Black Mamba.

The results grid loads automatically with the most recent signals according to the date and time. The available filters for more specific search are the signal **Date and Time** period (From, To), the **Subscriber Code** and the **Polling flag** which allows to include or exclude polling signals from the request.



The more filters completed the more specific result will be returned. Click **Refresh** to apply the filters and load the results into the grid.

	AMBA		Status Re	ceiver Settin	gs	Signal History	Subsc	ribers	Change Pass	word Ab	out Log Ou	rt
Signal	History											
From:	2023-02-08 11:15 To: 2023-02-08 13:15	Subscriber:	Polling:	~	Refre	sh			Search:			
Date		Signal		Rec	eiver 🕴	Subscriber 0	Protocol	IP	Polling 0	Status 🕴		
2023-0	02-08 13:13:38	5011 187890E35000000		00		7890	TCP	0.0.00	No	Active		
2023-0	02-08 13:08:09	5011 181234E35000000		00		1234	TCP	0.0.0.0	No	Active		
Show 1 entries	10 ~											
Showing	g 1 to 2 of 2 entries											
										1		

The Results Grid may be searched for more detailed findings. You may search each **Grid Column** by typing into the relevant text field at the bottom of the grid column, or type in the **General Grid Search** field at the right top of the results grid. In both cases, the results rows are instantly changed to meet the requested criteria.

At the bottom of the results grid, the pagination options allow the result rows splitting into pages for more convenient lookup.

5. Subscribers

The Subscribers Panel is used for monitoring and controlling all the registered subscribers of Black Mamba. The Subscribers are automatically loaded into the results grid when accessing this panel.



List Details

			Stat	us Receiver Settings	Signal History	Subscribers	Change Password	About	Log Out
Manage Subscribers									
							Search:		
Code	Essence-hub Code	Registration Date	Status	Last Update	Polling Check Minutes	in 🕴 Las	st Received Polling		
7890	00001234	2023-02-08 13:08:35	Active	2023-02-08 13:10:29	10	2023	3-02-08 13:08:35		
1234		2022-12-09 18:37:25	Active	2023-02-08 12:41:22	5	2023	2-12-09 21:22:56		
Show 10 v entries									
Showing 1 to 2 of 2 entries								1	
						Remov	ve Selected Subscribers		

For each Subscriber in the results grid you may see the Code, the Essence-hub Code when applicable, the Registration Date and time, the current Status, the Last Update date and time, the Polling Check interval in minutes and the last Polling signal date and time. The results grid functionality is similar with the one described previously in section 4 (Signal History).

Block a Subscriber

By default, every subscriber is registered with status Active upon the reception of the first signal. The Active Subscribers appear with green font row in the results grid and Blocked Subscribers with red font row. Click on an Active Subscriber and see the row selected.

Ø	ELACK MAMBA				Status	Receiver Settings	Sig	gnal History S	ubscribe	rs Cha	nge Password	About	Log Out
	Manage Subscribers												
											Search:		
	Code 0	Essence-hub Code	Registration Date	Status	φ.	Last Update	¢	Polling Check In Minutes	¢	Last Recei	ved Polling		
	7890	00001234	2023-02-08 13:08:35	Active		2023-02-08 13:10:29	1	10		2023-02-08 1	13:08:35		
	1234		2022-12-09 18:37:25	Active		2023-02-08 12:41:22	5	5		2022-12-09 2	21:22:56		
	Show 10 v entries Showing 1 to 2 of 2 entries												
	Block	Polling Check every: 10	Change Polling						R	emove Select	ed Subscribers	1	



The "**Block**" button appears on the bottom left of the grid, allowing to click it. After approval, the selected subscriber is blocked, the signals are received but no longer reported to the Automation Software.

Activate a Blocked Subscriber

By selecting a blocked subscriber row in the grid, the bottom left button is turned into "**Activate**", allowing the activation of the selected blocked subscriber after your confirmation.

					Status	Receiver Settings	Sig	nal History	Subscribe	rs Cha	nge Password	About	Log Out
Manage Subscribers													
											Search:		
Code \$	Essence-hub Code	÷ R	egistration Date	Status	¢	Last Update	¢	Polling Check In Minutes	¢	Last Recei	ved Polling 🕴		
7890	00001234	203	23-02-08 13:08:35	Blocked		2023-02-08 13:08:45	1	0		2023-02-08	3:08:35		
1234		203	22-12-09 18:37:25	Active		2023-02-08 12:41:22	5	5		2022-12-09 2	1:22:56		
Show 10 ~ entries Showing 1 to 2 of 2 entries	***) [)						
Activate	Polling Check every: 10		✓ Change Polling						R	emove Select	ed Subscribers	1	

Alter Polling Interval

By selecting a subscriber row in the grid, you may change the **Polling Check interval in minutes**. Depending on the subscriber GPRS module setting the interval between two polling signals may differ. Adjust the Polling Check interval respectively and click the "**Change Polling**" button to apply the new value and to be informed accurately in case of communication loss. The polling failure signal is triggered as soon as this interval is reached without receiving at least one polling event.

Remove Subscriber(s)

You may permanently remove one or more subscribers from Black Mamba by using the **check box** at the right side of each row in the subscriber results grid. Check as many rows of subscribers required or all of them (using the check box on the top of the last column) and click the "**Remove Selected Subscribers**" button. Approve the deletion and all the selected subscribers will be permanently deleted from the Black Mamba Receiver.



Note: If a subscriber retransmits a signal after removal, it will be automatically added to the subscribers list again with status "Active". In this case you need to Block the subscriber to prevent the signal transmission.

6. Change Password

The default administrator password (**admin**) may be changed using this panel. Provide the existing one (Old Password) and type the new password twice for

Status Receiver Settings	Signal History	Subscribers	Change Password	About	Log Out
CHANGE PASSWORD					
Old Password your old password					
New Password your new password					
Confirm Password confirm password					
Change Password					
	CHANGE PASSWORD Old Password your old password wer new password Confirm Password confirm password Charge Piessword	Status Receiver Settings Signal History	Status Receiver Settings Signal History Subscribers	Status Receiver Settings Signal History Subscribers Change Password Old Password	Status Receiver Settings Signal History Subscribers About CHANGE PASSWORD

confirmation. Finally click the "Change Password" button to apply and login again with your new credentials.

7. Log Out

Simply click on this menu item to log ff the Black Mamba Administration Tool and return to the login page.



Post-installation Information

The Black Mamba Digital Receiver is installed in the default path "C:\Program Files (x86)\BlackMamba" except you have selected differently during the installation process.

You may find all the application error logging in the installation path and specifically in the "**ERRORS.ilf**" file.

Contact Us

You may contact us by email at info@blackmamba.cloud

Information about the Black Mamba Digital Receiver and our **Subscription Plans** may be found by visiting our website at <u>https://www.blackmamba.cloud</u>