

Freja Video Recorders

Digital Video Recorders

COBHAM

The most important thing we build is trust



Freja Standard



Freja Mini

Images not to scale

The Freja Digital Video Recorders' state of the art design, combined with numerous unique features, make them ideal for covert video and audio surveillance operations. The very small and lightweight digital video recorders are extremely suitable for close proximity operations and discreet installations. The video recorders are easily operated using only a single button for basic operation; but additional advanced functionality is provided, using the Multi-Cable or the Advanced Multi-Cable.

Cobham Tactical Communications and Surveillances' low power digital mini cameras provide secure high resolution video (1280 x 1024 pixels) and audio recordings of the highest quality. The recorders are capable of recording video feeds from either one or two digital cameras simultaneously, one or two analogue cameras simultaneously or a combination of one digital and one analogue camera.

The video and/or audio is stored on an internal 32 GB solid state flash drive. When connected to a Windows® XP / Vista / 7 compatible computer via a standard USB 2.0 cable, the recorders function as a normal removable drive, providing read-only access to the recorded tracks.

Both audio and video files are compatible with Microsoft® Media Player and no specialized software is required for video or audio playback.

The Freja Digital Video Recorders gives full freedom to copy, verify and burn the recorded tracks.

Features

- HD resolution video recordings
- High quality audio recordings
- User friendly
- Long recording time - 32 GB memory
- Pre-trigger recording function
- Various start / stop options to save power and memory
- Remote controllable from the INCA GM Keyfob and X-IDER 4096
- Operational security
- Flexible
- Capable of recording two video feeds simultaneously
- Multiple cameras available:
 - Pinhole
(HD Colour, Low Light Colour / Black & White)
 - Buttonhole
(HD Colour, Low Light Colour / Black & White)
 - Fisheye
(Low Light Colour and Low Light Black & White)
 - Tele
(Low Light Colour and Low Light Black & White)
- Ultra Low Light Camera Kit
(Consists of 1 Ultra Low Light Camera with 8 interchangeable lenses in both Colour and Black & White)

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Digital Video Recorder
Cobham Tactical Communications and Surveillance

Features

General Features

- Recorder memory: 32 GB
- Built-in or external microphones
- Fast download: approx. 6 minutes to transfer 2.5 GB of data
- Analogue video output for handheld colour LCD monitor for pre-mission check of camera position, image quality and focus
- Selectable video and audio quality from the software setting program

High Resolution Recordings

- Typical up to 17 hours of high resolution video and audio recordings, 1280 x 1024 pixels @ 10 fps

Long Recording Time

- Video and audio recordings:
Typical up to 42 hours in stereo at 640 x 480 pixels @ 10 fps
- Audio recordings only: typical up to 288 hours in stereo

Flexible

- Multiple camera lenses
- Various trigger options
- Separate plugs for audio, video, and multi-connector
- Analogue camera adapter
- Possible to a combination of use analogue and digital cameras simultaneously

Remote Control Options

- Combined with the RCM remote control module, the Freja can be switched on / off via the X-IDER 4096 or the INCA GM Keyfob

Various Trigger Options to Save Power and Memory

- Scheduled recording (Multi-timer function)
- Built-in Motion detection - 10 to 30 seconds pre-recording
- Voice activation recording (VOX)
- External supply activation
- Trigger input activation (various sensors, etc.)
- 1A switch output for activating e.g. an infrared lamp

Operational Security

- Evidence proof recordings – Watermark: AES encrypted SHA-1 checksum
- Settings can be password protected

User Friendly

- Intuitive setup software
- Very simple to operate and deploy
- Open standard version requires no special software – download, archive to DVD / CD, and playback in Windows Media Player

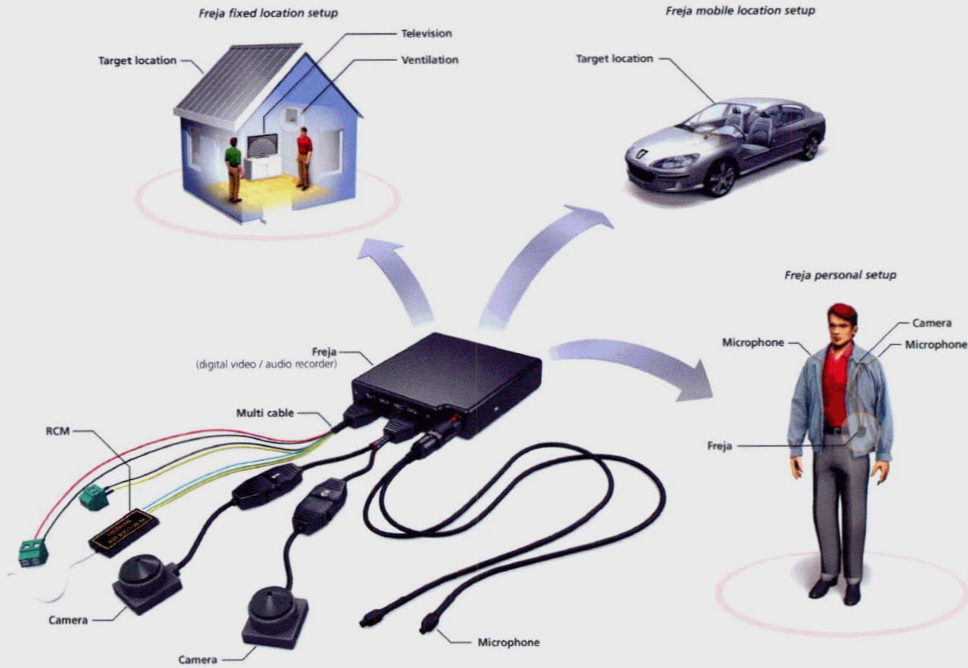
Power Supply Options, Freja

- 2 x AAA batteries
- External power source from 7 to 32 V DC, e.g. car battery or Micro Mains Module

Power Supply Options, Freja Mini

- External power source from 7 to 32 V DC, e.g. car battery or Micro Mains Module
- Freja Battery Packs

Freja Operational Set-up



Freja Mini Operational Set-up



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Freja Cameras



Camera, Buttonhole
(colour HD, colour low-light, or B/W low-light)



Camera, Pinhole
(colour HD, colour low-light, or B/W low-light)



Camera, Fisheye
(colour low-light, or B/W low-light)



Camera, Tele Lens
(colour low-light, or B/W low-light)

Freja Ultra Low Light Camera Kit

Consists of 1 Ultra Low Light Camera with the following interchangeable lenses in both Colour and Black & White:



Freja Ultra Low Light with Buttonhole Camera



Freja Ultra Low Light with Pinhole Camera



Freja Ultra Low Light with Fisheye Camera

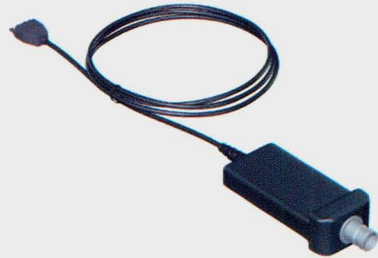


Freja Ultra Low Light with Tele Camera

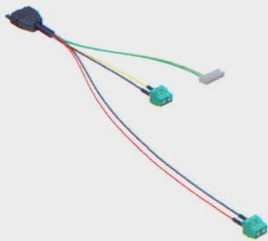
Freja Accessories



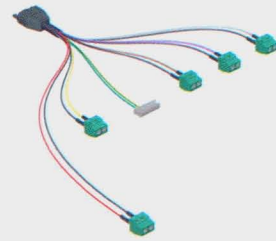
External Microphone Lemo
0.5m, 1.5m, and 3.6m



Analogue Camera Adapter



Standard Multi Cable



Advanced Multi Cable



Camera Extension Cable, 1m



Camera Extension Cable, 2m



Camera Splitter Cable



Active Matrix 5.6" Colour LCD Monitor

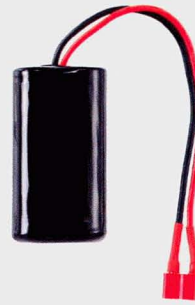
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Freja Accessories



1300 mAh Battery



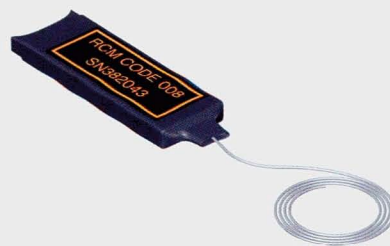
2200 mAh Battery



4400 mAh Battery



GM Keyfob



Remote Control Module



IR Lamp



PIR Sensor

Technical Specifications

System & Recorder Specifications

Power requirements

Freja	External supply 7 to 32 V DC Internal 2 x AAA batteries
Freja Mini	External supply 7 to 32 V DC
Current consumption, video & audio, colour/black&white, one camera, audio sample rate 16 KHz	Typical 230mA@3VDC, 640 x 480 pixels at 30 fps, HD camera
Current consumption, video & audio, colour/black&white, one camera, audio sample rate 16 KHz	Typical 270mA@3VDC, 640 x 480 pixels at 30 fps, Low Light / Ultra Low Light camera
Current consumption, video & audio, colour, one camera, audio sample rate 16 KHz	Typical 240mA@3VDC, 1280 x 1024 pixels at 10 fps, HD camera
Current consumption, video & audio, colour/black&white, two cameras, audio sample rate 16 KHz	Typical 290mA@3VDC, 640 x 480 pixels at 15 fps, Low Light / Ultra Low Light camera
Current consumption, audio only, audio sample rate 16 KHz	Typical 61mA@3VDC / 25mA@12VDC / 13mA@24VDC
Current consumption in sleep mode (pre-triggered), audio sample rate 16 KHz	Typical 0.02mA@3VDC / 1.7mA@12VDC / 1mA@24VDC
Current consumption in VOX mode (pre-triggered), audio sample rate 16 KHz	Typical 0.62mA@3VDC / 1.79mA@12VDC / 1.08mA@24VDC
Recorder memory	32 GB (flash)
Communication interface	USB 2.0
Transfer rate	Up to 7.5 MB per second
Transfer time for 32 GB	90 minutes
Operation system (supported operative system for PC software)	Microsoft Windows XP, Vista and 7
File system on recorder	Power failure resistant (no missing data, no corrupt files)
Video & audio format	Standard AVI files (Motion JPEG)
Audio format	Microsoft PCM Wave
Audio sample rates	8, 11.025, 12, 16, 22.05, 24 KHz
Audio compression	None (16 bit linear)
Video Compression	Motion JPEG
Microphones	Internal or external
Audio lines	Line in (stereo)
Audio gain	Fixed or automatic
Fixed audio gain settings	0, +9, +18, +27, +36 dB
Encryption	Check-sum encrypted SHA-1 watermark
Evidence verification	WaveChecker II
Input frequency response	20 Hz to 10 kHz
Signal to noise ration (SNR)	89 dB
Line in voltage range	1.5 Vpp
Operation temperature & humidity	0 °C to 50 °C / 32 °F to 140 °F, max 90% RH
Storage temperature & humidity	-20 °C to 70 °C / -4 °F to 158 °F, max 90% RH
Housing	Anodized Aluminium, black
Dimensions, HxWxD	
Freja	54 mm x 53.3 mm x 12.6 mm / 2.1 in x 2.1 in x 0.6 in
Freja Mini	54 mm x 32 mm x 15 mm / 2.13 in x 1.26 in x 0.59 in
Weight	
Freja (including batteries)	62 grams / 2.19 oz
Freja Mini	36 grams / 1.27 oz

Video Recording Specifications

Video input lines available	One or two cameras (digital or analogue) or any combination of digital and analogue cameras
Recording time, video & audio, colour/black&white, one camera, audio sample rate 16 KHz	Typical 14 hours @ 640 x 480 pixels at 30 fps, HD camera, External DC supply
Recording time, video & audio, colour/black&white, one camera, audio sample rate 16 KHz	Typical 3 hours 55 min @ 640 x 480 pixels at 30 fps, HD camera Internal 2 x AAA, Lithium
Recording time, video & audio, colour/black&white, one camera, audio sample rate 16 KHz	Typical 3 hours 15 min @ 640 x 480 pixels at 30 fps, Low Light / Ultra Low Light camera Internal 2 x AAA, Lithium
Recording time, video only, colour, one camera, audio sample rate 8 KHz	Typical 17 hours @ 1280 x 1024 pixels at 10 fps, HD camera external DC supply
Recording time, video only, colour, one camera, audio sample rate 16 KHz	Typical 3 hours 45 min @ 1280 x 1024 pixels at 10 fps, HD camera internal 2 x AAA, Lithium
Recording time, video only, colour/black&white, two camera, audio sample rate 8 KHz	Typical 14 hours @ 640 x 480 pixels at 15 fps, HD camera External DC supply
Recording time, video only, colour/black&white, two camera, audio sample rate 16 KHz	Typical 3 hours 25 min @ 640 x 480 pixels at 15 fps, HD camera Internal 2 x AAA, Lithium
Recording time, video only, colour/black&white, two cameras, audio sample rate 16 KHz	Typical 3 hours @ 640 x 480 pixels at 15 fps, Low Light / Ultra Low Light Camera Internal 2 x AAA, Lithium

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Recording time, audio only, audio sample rate 16 KHz	144 hours, External DC supply
Recording time, audio only, audio sample rate 16 KHz	Typical 15 hours, Internal 2 x AAA, Lithium
Pre-trigger recording (RAM) - worst case	Minimum 10 seconds pre-recording depending on configuration. (High resolution, high framerate, high complexity scene)
Pre-trigger recording (RAM) - better case	Minimum 1 minute pre-recording depending on configuration. (Low resolution, low framerate, low complexity scene)
Video output	PAL / NTSC (for use with monitor for pre-view purpose) (50/60 Hz - Note: 1 fps update rate)

Camera Specifications, HD and Low Light

Video resolutions, selectable	
One Camera (1280 x 1024 pixels)	Up to 10 frames per second
One Camera (640 x 480 pixels)	Up to 30 frames per second
Two Cameras (640 x 480 pixels)	Up to 15 frames per second
Camera, Buttonhole dimensions, HxWxD	16 mm x 14 mm x 14.4 mm / 0.63 in x 0.55 in x 0.57 in
Camera, Pinhole dimensions, HxWxD	16 mm x 14 mm x 14 mm / 0.63 in x 0.55 in x 0.55 in
Camera, Fisheye dimensions, HxWxD	25 mm x 25 mm x 32 mm / 0.98 in x 0.98 in x 1.26 in
Camera, Tele dimensions, HxWxD	16 mm x 14 mm x 25.5 mm / 0.63 in x 0.55 in x 1.0 in
Camera housing	Anodized Aluminium, black
Camera cable length	1 m / 39.37 in
Camera extension cable length	1 m or 2 m / 39.37 in or 78.74 in
Camera splitter cable length, (for use with to cameras)	0.2 m / 7.87 in
Max. camera cable length	3.2 m (0.2m splitter + 2m extension cable + 1m camera cable) 126 in (7.87 in splitter + 78.74 in extension cable + 39.37 in camera cable)

Pinhole, HD, Colour	
Focal length	3.7 mm / 31 mm (Full format (35mm) equivalent)
Angle of view	83.2 degrees
Object distance, minimum	20 cm / 7.87 in
Aperture (F)	1.8
Lux	0.1

Pinhole, Low Light, Colour	
Focal length	3.7 mm / 47 mm (Full format (35mm) equivalent)
Angle of view	62.4 degrees
Object distance, minimum	20 cm / 7.87 in
Aperture (F)	1.8
Lux	0.02

Pinhole, Low Light, Black&White	
Focal length	3.7 mm / 47 mm (Full format (35mm) equivalent)
Angle of view	62.4 degrees
Object distance, minimum	20 cm / 7.87 in
Aperture (F)	1.8
Lux	0.01
No IR cut filter	Can be used with an infrared lamp

Buttonhole, HD, Colour	
Focal length	4.3 mm / 36 mm (Full format (35mm) equivalent)
Angle of view	58 degrees
Object distance, minimum	20 cm / 7.87 in
Aperture (F)	2.0
Lux	0.1

Buttonhole, Low Light, Colour	
Focal length	3.3 mm / 42 mm (Full format (35mm) equivalent)
Angle of view	43 degrees
Object distance, minimum	20 cm / 7.87 in
Aperture (F)	2.0
Lux	0.02

Buttonhole, Low Light, Black&White	
Focal length	3.3 mm / 42 mm (Full format (35mm) equivalent)
Angle of view	43 degrees
Object distance, minimum	20 cm / 7.87 in
Aperture (F)	2.0
Lux	0.01
No IR cut filter	Can be used with an infrared lamp

Fisheye, Low Light, Colour

Focal length	1.47 mm / 19 mm (Full format (35mm) equivalent)
Angle of view	123 degrees
Object distance, minimum	10 cm / 3.94 in
Aperture (F)	2.0
Lux	0.02

Fisheye, Low Light, Black&White

Focal length	1.47 mm / 19 mm (Full format (35mm) equivalent)
Angle of view	123 degrees
Object distance, minimum	10 cm / 3.94 in
Aperture (F)	2.0
Lux	0.01
No IR cut filter	Can be used with an infrared lamp

Tele, Low Light, Colour

Focal length	16 mm / 200 mm (Full format (35mm) equivalent)
Angle of view	5 degrees
Object distance, minimum	250 cm / 98.43 in
Aperture (F)	1.8
Lux	0.02

Tele, Low Light, Black&White

Focal length	16 mm / 200 mm (Full format (35mm) equivalent)
Angle of view	5 degrees
Object distance, minimum	250 cm / 98.43 in
Aperture (F)	1.8
Lux	0.01
No IR cut filter	Can be used with an infrared lamp

Camera Specifications, Ultra Low Light

Video resolutions, selectable

One camera (1280 x 1024 pixels)	up to 10 frames per second
One camera (640 x 480 pixels)	up to 30 frames per second
Two Cameras (640 x 480 pixels)	up to 15 frames per second
Camera dimensions, HxW	18 mm x 18 mm / 0.71 in x 0.71 in
Camera housing	Anodized Aluminium, black
DC power source	
Connector	Freja Camera Connector
Voltage	3.2 to 4.2 V
Camera cable length	1 m / 39.37 in
Camera extension cable length	1 m or 2 m / 39.37 in or 78.74 in
Camera splitter cable length, (for use with two cameras)	0.2 m / 7.87 in
Max. camera cable length	3.2 m (0.2m splitter + 2m extension cable + 1m camera cable) 126 in (7.87 in splitter + 78.74 in extension cable + 39.37 in camera cable)

Pinhole, Ultra Low Light Colour

Focal length	3.7 mm (27 mm equivalent on 50 mm camera)
Angle of view	60 degrees
Object distance, minimum	20 cm / 7.87 in
Aperture (F)	1.8
Lux	0.004

Pinhole, Ultra Low Light Black & White

Focal length	3.7 mm (27 mm equivalent on 50 mm camera)
Angle of view	60 degrees
Object distance, minimum	20 cm / 7.87 in
Aperture (F)	1.8
Lux	0.002

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Buttonhole, Ultra Low Light, Colour

Focal length	3.3 mm (24 mm equivalent on 50 mm camera)
Angle of view	67 degrees
Object distance, minimum	20 cm / 7.87 in
Aperture (F)	2.0
Lux	0.004

Buttonhole, Ultra Low Light, Black & White

Focal length	3.3 mm (24 mm equivalent on 50 mm camera)
Angle of view	67 degrees
Object distance, minimum	20 cm / 7.87 in
Aperture (F)	2.0
Lux	0.002

Fisheye, Ultra Low Light, Colour

Focal length	1.79 mm (13 mm equivalent on 50 mm camera)
Angle of view	140 degrees
Object distance, minimum	20 cm / 7.87 in
Aperture (F)	2.0
Lux	0.004

Fisheye, Ultra Low Light, Black & White

Focal length	1.79 mm (13 mm equivalent on 50 mm camera)
Angle of view	140 degrees
Object distance, minimum	20 cm / 7.87 in
Aperture (F)	2.0
Lux	0.002

Tele, Ultra Low Light, Colour

Focal length	25 mm (184 mm equivalent on 50 mm camera)
Angle of view	8 degrees
Object distance, minimum	250 cm / 98.43 in
Aperture (F)	2.0
Lux	0.004

Tele, Ultra Low Light, Black & White

Focal length	25 mm (184 mm equivalent on 50 mm camera)
Angle of view	8 degrees
Object distance, minimum	250 cm / 98.43 in
Aperture (F)	2.0
Lux	0.002

Lux Definition

Illuminance	Example
<1 lux	Moonlight
0.25 lux	Full Moon on a clear night
0.01 lux	Quarter Moon
0.002 lux	Starlight clear moonless night sky including airglow
0.0002 lux	Starlight clear moonless night sky excluding airglow
0.00014 lux	Venus at brightest
0.0001 lux	Starlight overcast moonless night sky

Audio Recording Specifications

Recording modes, audio	Stereo
Samples rates	8, 11.025, 12, 16, 22.05, 24 KHz
Compression	None (16 bit linear)
A/D converter resolution	16 bit
Recording time, audio only, external DC supply	144 hours, stereo, 16kHz sample rate
FREJA ONLY: Recording time, audio only, internal 2 x AAA Lithium batteries	15 hours, stereo, 16 kHz sample rate

Analogue camera adapter

Video input	PAL / NTSC
Video output	640 x 480 pixels, 1 to 30 fps
Connector	BNC
Dimensions, HxWxD, (excl. BNC connector)	17 mm x 27 mm x 60 mm / 0.67 in x 1.06 in x 2.36 in

Active Matrix 5.6", 960 x 234 dots, Colour LCD, PAL/NTC Monitor

Power Requirements	11 VDC to 14 VDC, 500 mA
Power Consumption	4.0 W (340 mA @ 12V DC)
Connections, video	Female BNC video IN/OUT
Connections, DC supply	4 mm DC connector
Dimensions, HxWxD w/ Battery Pack	130 mm x 158 mm x 55 mm / 5.1 in x 6.2 in x 2.2 in

INCA GM Keyfob

Output Frequency	433.92 MHz
TX Antenna	Internal Antenna
Internal Battery	3.6 V Lithium Coin Cell
Activations with Fully Charged Battery	Typical up to 500 Transmissions
Pairing	Factory Set to Supplied RCM
Dimensions, HxWxD	54 mm x 42 mm x 13.5 mm / 2.13 in x 1.65 in x 0.33 in

Remote Control Module (RCM)

Remote Control Frequency	433.92 MHz
Sensitivity	< -90 dBm
Modulation	OOK
Coding Addresses	2
DC Supply	3.3 - 15 VDC
Auxiliary Connector	8 pole
Dimensions, HxWxD	38 mm x 14 mm x 8 mm / 1.49 in x 0.55 in x 0.31 in

Micro Mains Module (MMM) 115/230 VAC /12 VDC /250 mA

Mains Input - 115 V	85 VAC to 267 VAC, 50 / 60 Hz
Mains Input - 230 V	195 VAC to 267 VAC, 50 / 60 Hz
Output Current	Max. 250 mA
Temperature Range	-5° C to 55° C / 23° F to 131° F
Length of Main Wires	50 cm / 19.68 in
Dimensions, HxWxD	20 mm x 42 mm x 29 mm / 0.8 in x 1.6 in x 1.1 in

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Freja recording times – typical values in hours

AUDIO & VIDEO / Resolution 640 x 480 px Colour / Black & White		EXTERNAL POWER (7 – 32 V)						INTERNAL POWER (2 x AAA Lithium batteries)
Audio sampling rate, Stereo		8 KHz	11.025 KHz	12 KHz	16 KHz	22.05 KHz	24 KHz	16 KHz
1 x Camera	30 frames per second	14	14	14	14	13	13	3h 55m
1 x Camera	10 frames per second	42	41	41	40	40	39	5h 45m
2 x Camera	15 frames per second	14	14	14	14	13	13	3h 25m
2 x Camera	10 frames per second	21	21	21	20	20	20	3h 00m
AUDIO & VIDEO / Resolution 1280 x 1024 px Colour								
1 x Camera	10 frames per second	17	16	16	16	15	15	3h 45m
AUDIO ONLY								
Recording time in hours		288	209	192	144	104	96	15h 00m
VIDEO ONLY / Resolution 640 x 480 px Colour / Black & White								
1 x Camera	30 frames per second				14			4h 00m
1 x Camera	10 frames per second				42			5h 50m
2 x Camera	15 frames per second				14			3h 30m
2 x Camera	10 frames per second				21			3h 05m
VIDEO ONLY / Resolution 1280 x 1024 px Colour								
1 x Camera	10 frames per second				17			3h 50m

The values in the **cyan box** are applicable for FREJA with AAA batteries ONLY

Battery Pack Options

Audio sampling rate, 16 kHz		1300 mAh	2200 mAh	4400 mAh
AUDIO & VIDEO / Resolution 1280 x 1024 px Colour				
1 x Camera	1 frame per second	11	18	37
1 x Camera	5 frames per second	10	18	36
1 x Camera	10 frames per second	10	18	36
AUDIO & VIDEO / Resolution 640 x 480 px Colour / Black & White				
1 x Camera	1 frame per second	17	28	57
1 x Camera	5 frames per second	16	28	56
1 x Camera	10 frames per second	16	27	54
1 x Camera	15 frames per second	16	27	55
1 x Camera	20 frames per second	14	23	47
1 x Camera	25 frames per second	13	21	43
1 x Camera	30 frames per second	11	20	38
2 x Camera	1 frame per second	11	18	37
2 x Camera	5 frames per second	11	18	37
2 x Camera	10 frames per second	10	17	34
2 x Camera	15 frames per second	11	18	37
AUDIO ONLY				
Recording time in hours		32	55	110
Sleep Mode		520	880	1760
Sleep Mode @ VOX		500	846	1692
Approximately charging time @ 25° C		3	5	10

Recording time is given as a maximum based on available power and NOT based on available memory. Please note that the battery can last longer than the available recorder memory, e.g. i.e. using a 4400 mAh battery with 2 x cameras @ 15 fps typically will get a maximum of 14 hours recording within a time period of 36 hours running motion detection.

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Freja Current Consumption

Audio and Video / Resolution 1280 x 1024 px Colour

	HD	HD	HD
	mA @3VDC	mA @12VDC	mA @24VDC
1 x Camera - 1 fps	235	78	43
1 x Camera - 5 fps	238	80	42
1 x Camera - 10 fps	240	81	42

Video Resolution – 640 x 480 px Colour / Black and White

	HD	LL / Ultra LL	HD & LL	HD & LL
	mA @3VDC	mA @3VDC	mA @12VDC	mA @24VDC
1 x Camera - 1 fps ⁷	155	164	53	29
1 x Camera - 5 fps ⁷	150	167	54	29
1 x Camera - 10 fps ⁷	171	185	58	30
1 x Camera - 15 fps ⁷	148	162	54	28
1 x Camera - 20 fps ⁷	195	210	65	35
1 x Camera - 25 fps ⁷	210	230	70	38
1 x Camera - 30 fps ⁷	230	270	75	40

Video Resolution – 640 x 480 px Colour / Black and White

	HD	LL / Ultra LL	HD & LL	HD & LL
	mA @3VDC	mA @3VDC	mA @12VDC	mA @24VDC
2 x Camera - 1 fps ⁷	268	280	85	45
2 x Camera - 5 fps ⁷	270	282	86	44
2 x Camera - 10 fps ⁷	303	330	94	51
2 x Camera - 15 fps ⁷	282	290	86	47

Audio Only

	mA @3VDC	mA @12VDC	mA @24VDC
Audio Sampling Rate, 16 kHz Stereo	61	25	13

Sleep Mode

	mA @3VDC	mA @12VDC	mA @24VDC
Without VOX	0.02	1.7	1
With VOX	0.62	1.79	1.08

⁷Typical values - may increase or decrease depending on scene activity.

Ordering Information

Video Recorders

Freja Video Recorder, AAA	Order No. 9915 05 40
Freja Mini Video Recorder	Order No. 9915 05 94

Kits

Freja Standard Kit	Order No. 9915 05 62
Freja Standard+ Kit	Order No. 9915 05 63
Freja Blue Complete Kit	Order No. 9915 05 64
Freja Mini - Blue Complete Kit	Order No. 9915 05 97

Cameras

Freja HD Camera - Buttonhole, Colour	Order no. 9915 05 70
Freja HD Camera - Pinhole, Colour	Order no. 9915 05 71
Freja Low Light Camera - Buttonhole, Colour	Order no. 9915 05 76
Freja Low Light Camera - Pinhole, Colour	Order no. 9915 05 77
Freja Low Light Camera - Fisheye, Colour	Order no. 9915 05 78
Freja Low Light Camera - Tele, Colour	Order no. 9915 05 79
Freja Low Light Camera - Pinhole, Black & White	Order no. 9915 05 80
Freja Low Light Camera - Buttonhole, Black & White	Order no. 9915 05 81
Freja Low Light Camera - Fisheye, Black & White	Order no. 9915 05 82
Freja Low Light Camera - Tele, Black & White	Order no. 9915 05 83

Freja Ultra Low Light Camera Kit	Order no. 9915 05 84
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Accessories

External Microphone Lemo 1.5 meter	Order no. 6591 50 22
Camera Extension Cable, 1 meter	Order no. 9915 05 65
Camera Extension Cable, 2 meter	Order no. 9915 05 66
Camera Splitter Cable	Order no. 9915 05 67
Analogue Camera Adapter	Order no. 9915 05 86
Standard Multi Cable	Order no. 9915 05 85
Advanced Multi Cable	Order no. 9915 05 91
Freja Monitor	Order no. 9915 05 88
MMM 115 VAC /12 VDC / 250 mA	Order no. 9915 02 07
MMM 230 VAC /12 VDC / 250 mA	Order no. 9915 02 04
RCM Module	Order no. 9915 05 87
Freja Mini Battery Pack	Order No. 9915 06 10

Additional Ordering Information

X-IDER 4096 Remote Control	Order no. 9915 02 00
INCA GM Keyfob	Order no. 9915 02 31

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The most important thing we build is trust

Cobham Tactical Communications and Surveillance in Grenaa, Denmark is a world leading provider of high-quality covert audio and video surveillance. Our products are exclusively used by law enforcement, the intelligence community and military special operations forces world wide in their efforts to combat terrorism and crime. Besides the headquarters in Grenaa, Cobham Tactical Communications and Surveillance has branches in Switzerland, Canada, Argentina, and Brazil.

It is our mission to deliver reliable products and solutions to those people who risk their lives in their efforts to make our everyday life more secure.

Cobham Tactical Communications and Surveillance, Grenaa is one in eight companies in the strategic business unit Cobham Tactical Communications and Surveillance. The companies are specialists within audio- and video surveillance, tracking & locating, VIP / force protection, data / video links and surveillance systems.

We are part of the British Cobham Group that manufactures high-tech solutions for land, sea, air and space platforms. The Group has an annual turnover of more than EURO 2.2 billions, employs some 12,500 people on five continents, with customers and partners in over 100 countries. The partnership with Cobham means that we as a company can benefit from world class specialists and resources, whenever needed.



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