

μVRC Robotic Control System



Part No. V4063-0010

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Original Instructions: English

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Important Safety Information

Important information on the safe installation and operation of this product. Read this information before operating the product. For your personal safety, read these instructions. Do not operate the product if you do not understand how to use it safely. Save these instructions for future reference.

Warning Symbols Used in these Instructions

Safety cautions are included in these instructions. These safety instructions must be followed to avoid possible personal injury and avoid possible damage to the product.



WARNING!

Where there is a risk of personal injury or injury to others, comments appear supported by the warning triangle symbol.

Where there is a risk of damage to the product, associated equipment, process or surroundings, comments appear supported by the word '**CAUTION**'.



ELECTRIC SHOCK

Where there is a risk of electric shock, comments appear supported by the hazardous voltage warning triangle.

Intended Use

The μ VRC robotic control system is designed to control compatible robotic camera equipment and accessories. Camera operators can remotely control movements of axes and other functions.

The μ VRC is designed for use in TV studios and other applications including houses of worship, conference facilities and auditoriums.

Electrical Connection



WARNING! Risk of electric shock. Always disconnect and isolate the product from the power supply before attempting any servicing or removing the covers. Always check cables for signs of damage. Damaged cables can cause personal injury and/or damage the equipment. It is the responsibility of the local organisation to ensure that the product is periodically checked for electrical safety in accordance with local regulations.



CAUTION! This product must be connected to a power supply of the same voltage (V) and current (A) as indicated on the product. Refer to the technical specifications for the product. Using alternative power sources will invalidate the system EMC liability. All connections to other devices must be made using shielded cables.

Operating Environment



WARNING! Slots and openings are intended for ventilation purposes to ensure reliable operation of the product and protect it from overheating. Do not block or cover any slots and openings. Protect the product from water, moisture and dust. The presence of electricity near water can be dangerous.

Mounting and Installation



WARNING! Always ensure that all power and auxiliary communications cables are routed so that they do not present any danger to personnel. Take care when routing cables in areas where robotic equipment is in use.

Cleaning



WARNING! Risk of electric shock. Always disconnect and isolate the product from the power supply before cleaning. Do not use solvent or oil-based cleaners, abrasives or wire brushes. Clean with a dry lint free cloth.

Maintenance



WARNING! The fitting of non-approved parts or accessories, or the carrying out of non-approved alterations or servicing can be dangerous and could affect the safety of the product. It may also invalidate the terms and conditions of the product warranty.

Safety when Working with Robotic Equipment

In normal operation remote-controlled equipment can move suddenly and without warning. Since audible warnings are not suitable for use within the studio environment, it is recommended that only trained personnel be allowed to work in the active areas where remote controlled robotic equipment is located.

The safe operating zone is a minimum of 1 m (3 ft).

Safety Notes for Operators

Operators must familiarise themselves with the working footprint of the robotic equipment, including all installed payload items (lens, zoom and focus controls, viewfinder, prompter, etc.) to prevent inadvertent collisions or injury to personnel.

If personnel are too close to robotic equipment that is about to move, the operator should prevent the motion from starting or stop the motion if it has started.

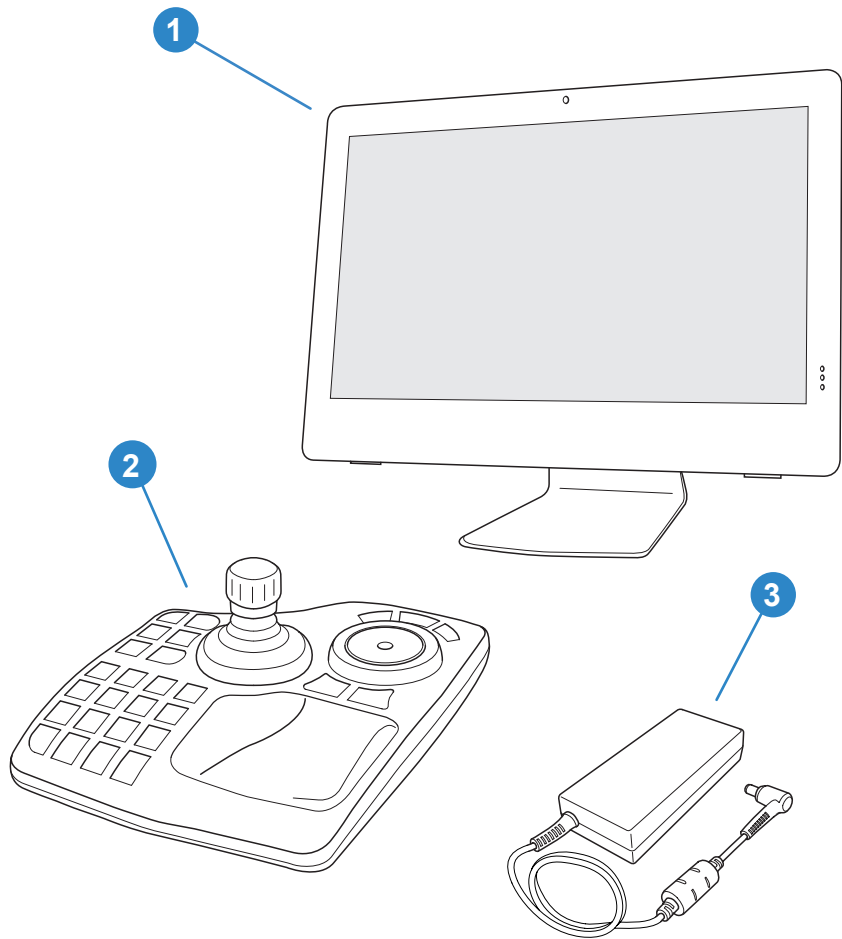
We strongly recommend that the operator verifies visually that the active area is clear of hazards and personnel, both before and during remote operation.

About this User Guide

This user guide covers the installation and basic operation of the hardware components of the μ VRC robotic control system.

For information on the configuration and operation of the VRC software, refer to the **VRC System User Guide, part no. V4063-4980**.

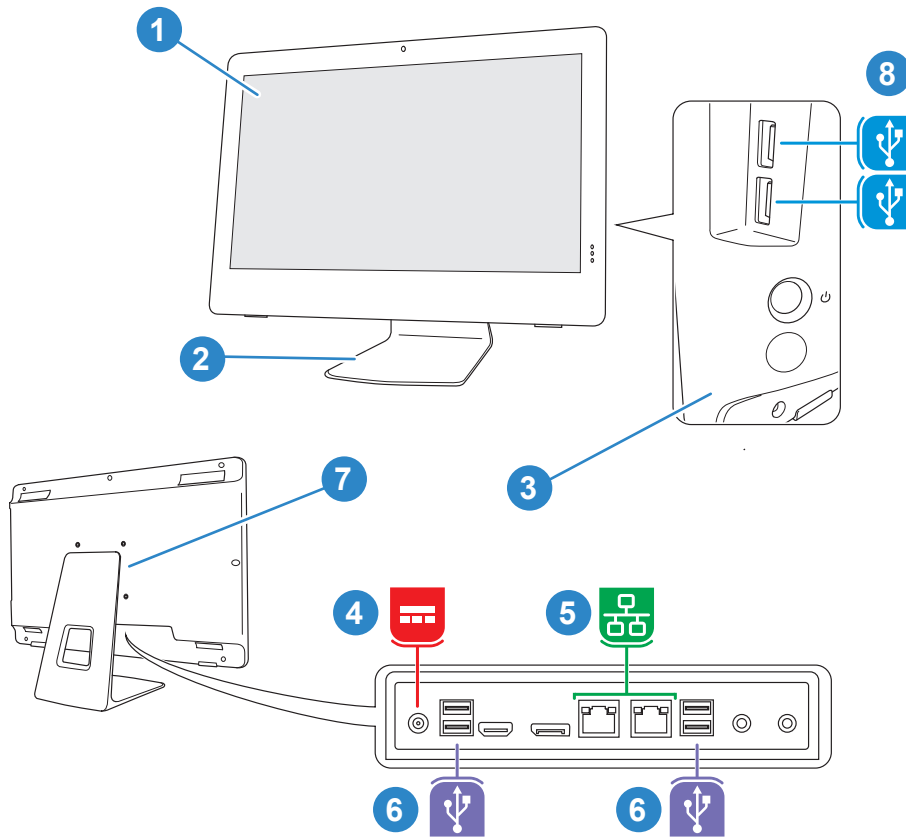
Box Contents



- 1 μVRC computer
- 2 Joystick panel
- 3 μVRC power supply
- NI USB connecting cable
- NI Power cable (x3)
- NI User guide

NI - Not Illustrated

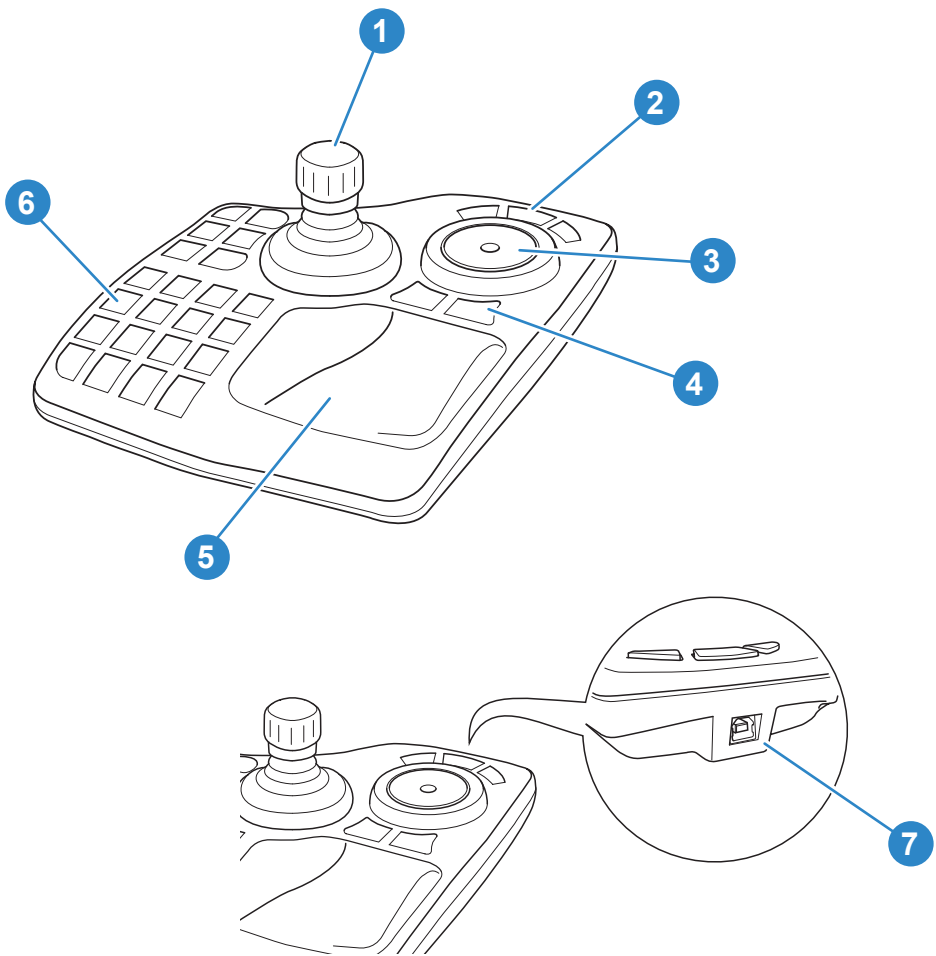
μVRC Computer Components and Connections



1	Touch-screen interface
2	Adjustable stand
3	Power button
4	Power socket
5	Network port
6	USB3 ports
7	VESA mounting holes (X4)*
8	USB 2 ports

* For more information on the VESA mount, see **Technical Specifications** on page 12.

Joystick Panel Controls and Connections



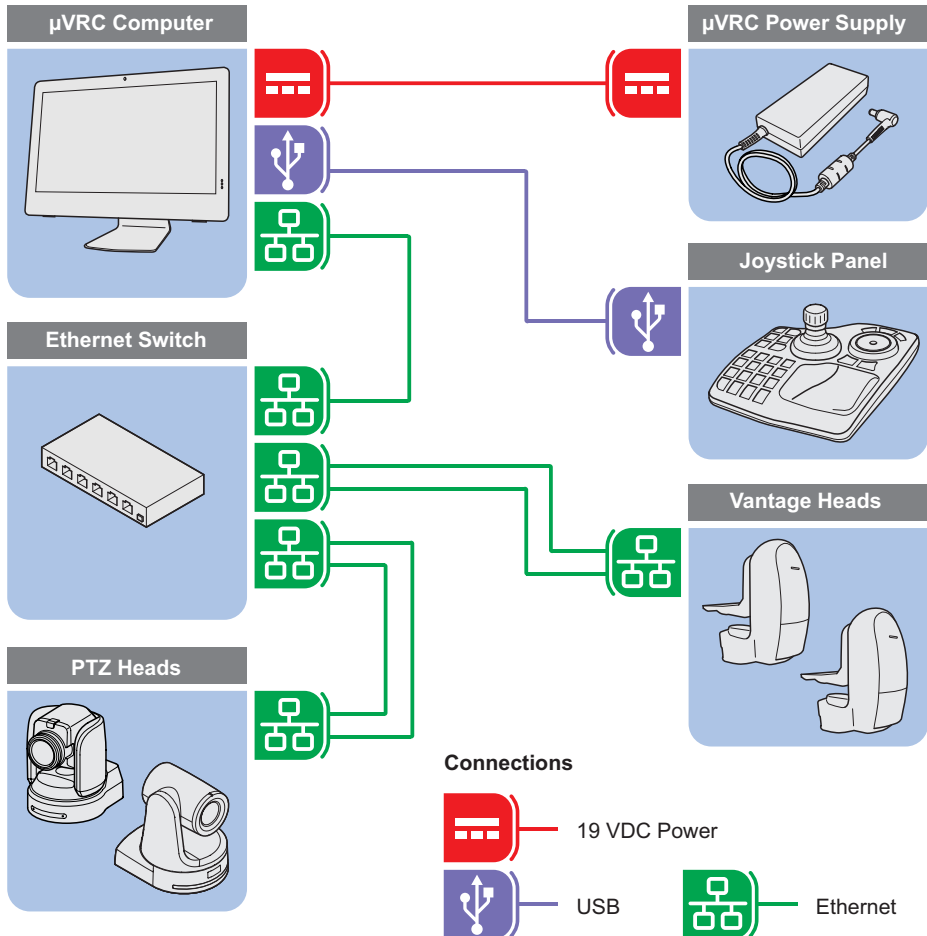
- 1 Main joystick control
- 2 Shot control keys
- 3 Focus controls
- 4 Shift function keys
- 5 Hand rest pad
- 6 Camera selection keys
- 7 USB port

System and Power Connections

The μ VRC system is easily connected together. Robotic cameras are connected using standard Ethernet connections. Use a powered Ethernet switch to expand the number of connections available to suit your system requirements. The control panel is connected and powered with the supplied USB lead.

The μ VRC computer connections are located on the rear of the product. See the section **μ VRC Computer Components and Connections** on page 5

For more information on connecting up robotic cameras and components, refer to the documentation supplied with the products.



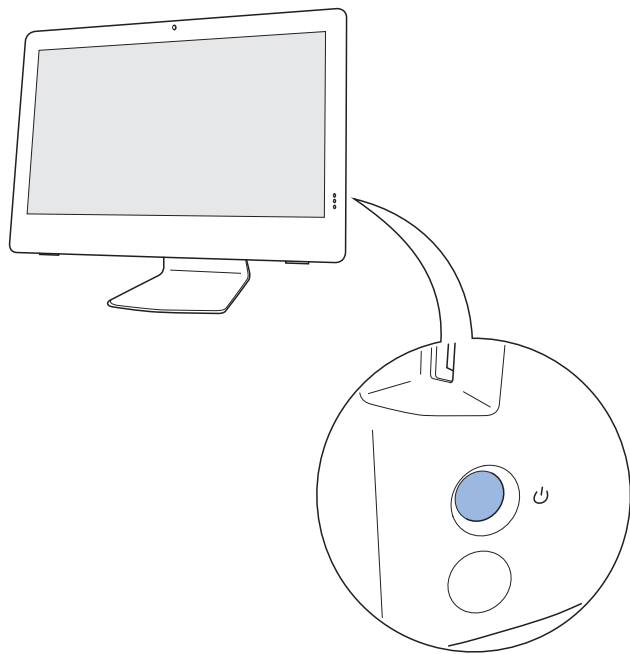
* To connect PTZ heads, an additional license is required. For more information refer to the **VRC System User Guide**, part no. **V4063-4980**.

Starting and Using the μ VRC

Powering Up

When all connections in the μ VRC system have been made, the μ VRC computer can be powered up.

To power up, depress the power button recessed on the rear edge of the case.



Launching the VRC System Application

When the μ VRC computer has booted up, the VRC system application must be installed, configured and launched before robotic cameras can be controlled.



For more information on the VRC system application, refer to the **VRC System User Guide, part no. V4063-4980.**

Using the μ VRC

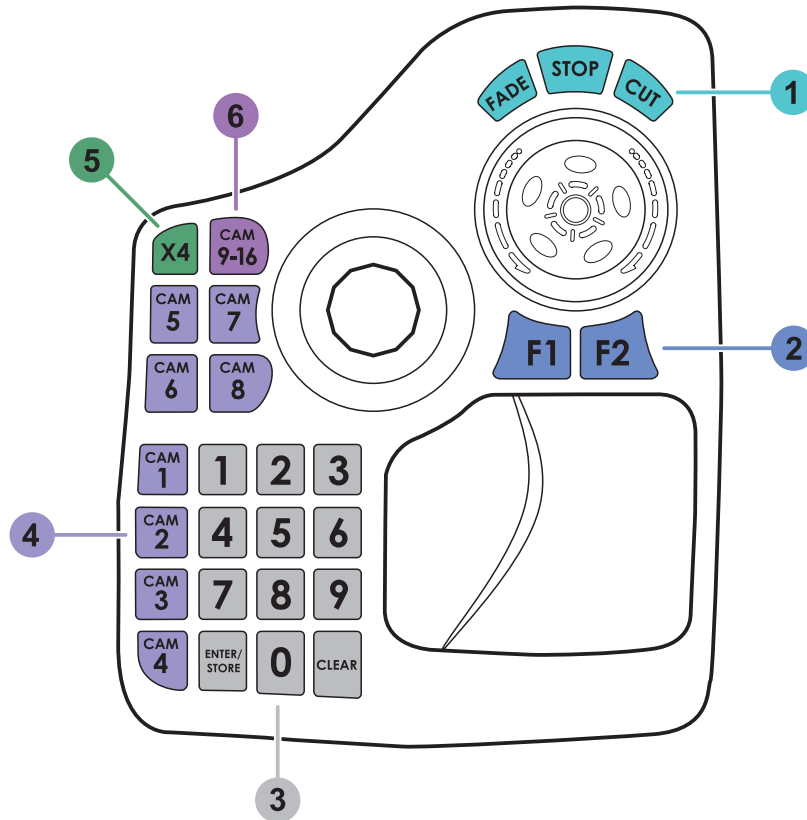
The μ VRC user interface consists of a joystick panel and a PC workstation with integral touch-screen display, through which all functions and operations can be utilised.

Using the Joystick Panel

The joystick panel enables you to select and control connected robotic cameras. Additional keys are available to select cameras and other useful functions.

Joystick Panel Keys

The joystick panel has a selection of useful short cut keys which duplicate features and functions available on the touch-screen display. The keys provide quick access to functions when the operator is using the joystick to control cameras.



1	Camera shot control keys (fade/stop/cut)
2	Function keys
3	Numeric keypad (not currently used)
4	Camera selection keys*
5	X4 key (zoom proportional)
6	Camera selection shift key* (provides access to cameras 9 to 16)






*The number of cameras available for selection is dependent on the system license. For more information refer to the **VRC System User Guide**, part no. **V4063-4980**.

Using the μ VRC

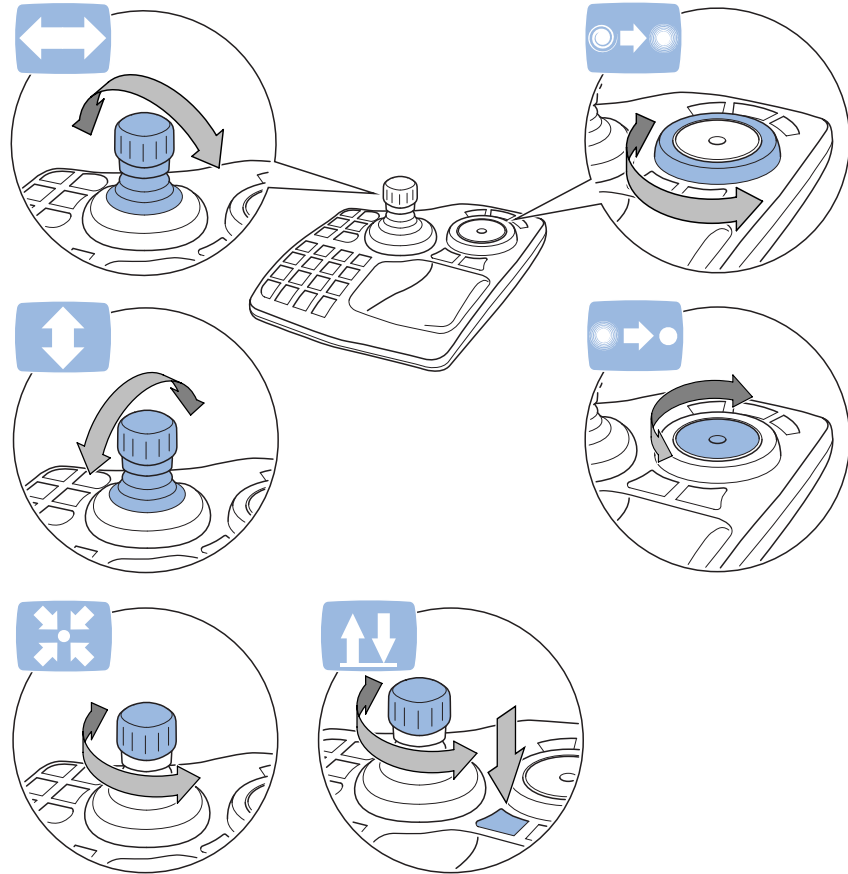
Joystick Camera Controls

The joystick panel provides the best way to smoothly control camera movement and adjustments.

Control functions can be reversed in the VRC application configuration to suit a users preferences.

-  Pan axis control
-  Tilt axis control
-  Zoom control
-  Course focus control
-  Fine focus control
-  Height control (optional)*

*An optional height drive is controlled by pressing and holding down the F1 key and twisting the joystick knob (normally zoom control).



The μ VRC computer and panel require minimal routine maintenance, apart from regular cleaning and routine checks.

Routine checks

During use, check the following daily:

- Check cables for signs of wear or damage. Replace as necessary.
- Check that all cables are connected properly.

Cleaning



WARNING! Risk of electric shock. Disconnect and isolate the product from the power supply before cleaning.

During normal use the only cleaning required should be a regular wipe over with a dry, lint-free cloth. Dirt accumulated during storage or periods of disuse may be removed with a vacuum cleaner. Particular attention should be paid to all connection ports on the μ VRC computer.

Technical Specifications

μVRC PC Controller

Physical Data



Height

369 mm (14.5 in.)



Length

539 mm (21.2 in.)



Width

83 mm (3.3 in.)

Touch-screen Display Panel



Specification

21.5inch TFT-LCD, LED Backlight, 16:9, 1920 x 1080 (FHD)



Illumination

250nits, Viewing Angle: 170° (Horizontal), 160° (Vertical)

Electrical Data



Power Supply

19V 135W AC Power Adapter

VESA Mount



Mounting Hole Spacings

100 x 100 mm (3.9 x 3.9 in.)

Joystick Panel

Physical Data



Height

111 mm (4.4 in.)



Length

279 mm (11 in.)



Width

228 mm (9 in.)

Electrical Data



Power

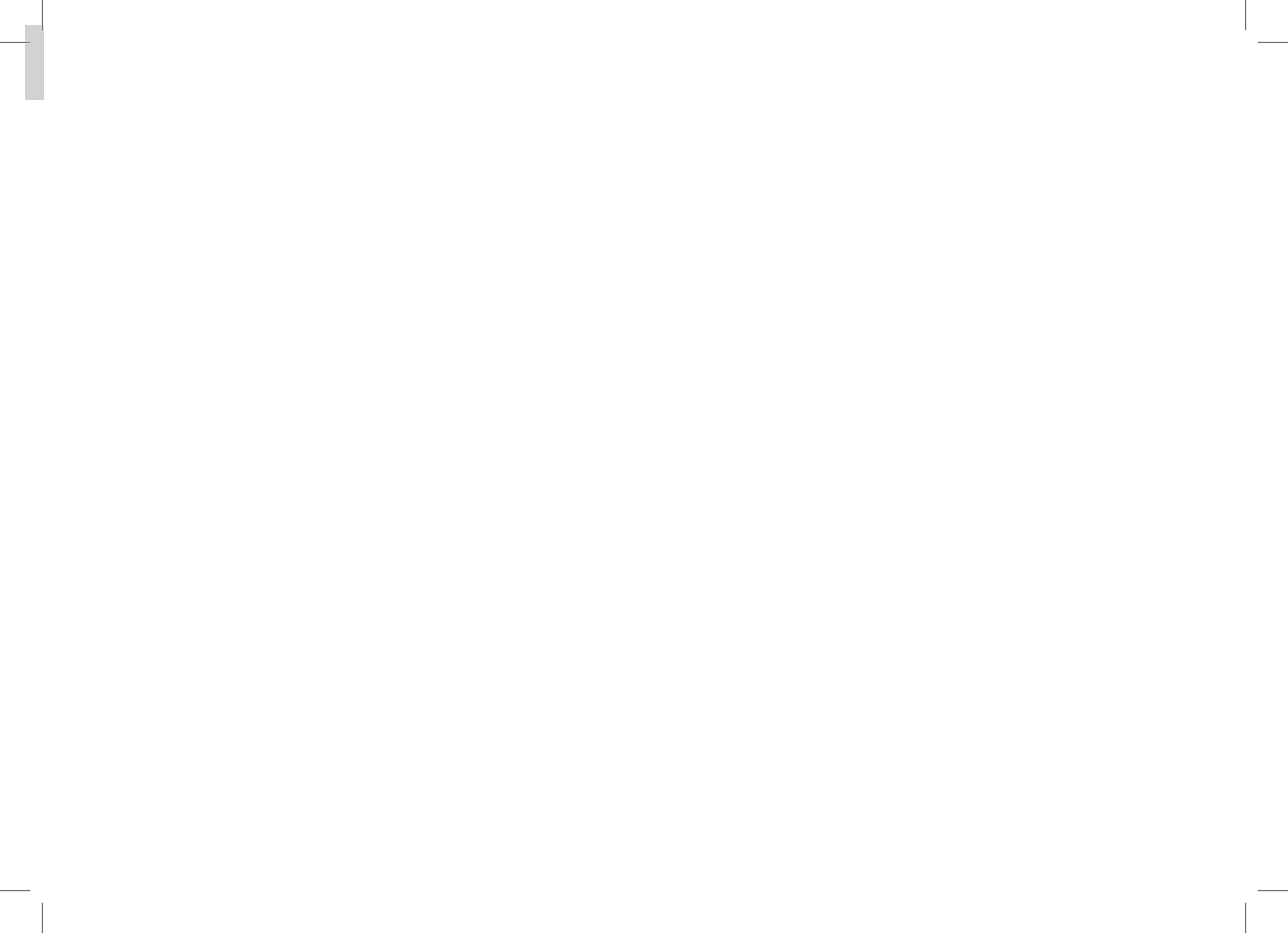
Via USB interface (5V DC) consumption 1A



USB Interface

Type A male cable length: 2m (6ft. 6.8in)

Technical specifications are subject to change without notice.



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