

## Beninca BULL 424 FC

# BENINCA Bull 424FC Slide Gate Opener Instruction Manual

Model: BULL 424 FC

## 1. INTRODUCTION

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This manual provides essential information for the safe and efficient installation, operation, and maintenance of your BENINCA Bull 424FC Slide Gate Opener. Please read all instructions carefully before proceeding with installation or use.

The BENINCA Bull 424FC is a chain-driven slide gate operator designed for intensive use on gates up to 20 feet in length or weighing up to 600 pounds. It features a 24 VDC motor, an internal control panel with an integrated LCD display for easy programming, and a built-in radio receiver.



Image 1.1: The BENINCA Bull 424FC Slide Gate Opener unit.

## Kit Contents

Your BENINCA Bull 424FC kit includes the following components:

- 1 x BENINCA Bull 424FC Slide Gate Opener Unit
- 2 x Long-Range Remote Controls
- 2 x Chain-Box #40 (10 feet each)



Image 1.2: Overview of the BENINCA Bull 424FC kit components.

## 2. SETUP AND INSTALLATION

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Proper installation is crucial for the safe and reliable operation of the gate opener. It is recommended that installation be performed by qualified personnel.

### 2.1 Site Preparation

- Ensure the gate operates smoothly manually and is properly aligned.
- Verify the gate weight and length are within the opener's specifications (up to 600 lbs / 20 ft).
- Confirm a stable, level surface for mounting the opener unit. The unit features a 10-inch high galvanized base for protection.
- Ensure access to a 115 Vac power supply for the control board.

### 2.2 Mounting the Opener Unit

1. Position the opener unit next to the gate, ensuring the chain sprocket aligns with the gate's chain path.
2. Securely fasten the opener unit to the prepared mounting surface using appropriate hardware.



Image 2.1: Example of the BENINCA Bull 424FC unit installed next to a sliding gate.

### 2.3 Chain Installation

1. Attach the provided #40 chain to the gate, ensuring it is taut but not overly tight.
2. Route the chain through the opener's sprocket mechanism.
3. Connect the ends of the chain securely.



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## SLIDE GATE OPENER KIT (CHAIN DRIVEN SYSTEM) BULL 424FC

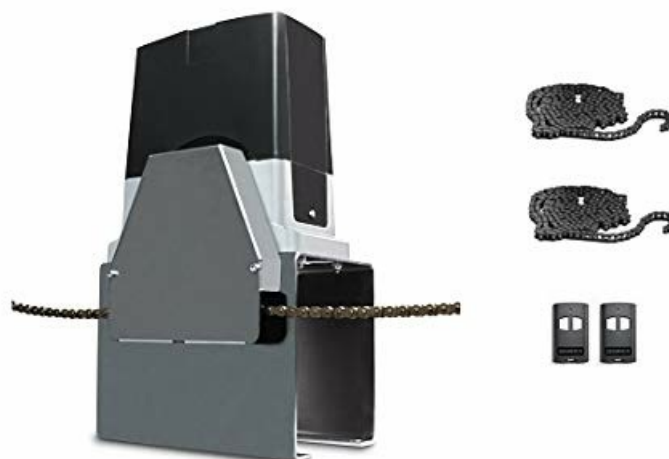


Image 2.2: The BENINCA Bull 424FC unit with the drive chain properly installed.



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AUTOMATIONS FOR  
**SLIDE GATE**  
CHAIN-DRIVEN

**BULL 424 FC**  
**BULL 624 FC**  
**BULL 824 FC**

- Silent, powerful and reliable
- 24Vdc operator for intensive use
- Extremely low-power absorption
- Internal electronic board
- Adjustable limit-switches
- Long-range radio-receiver
- Smooth and sharp movement
- Amperometric anticrushing control
- Encoder-based operation
- LCD display for easy programming
- Multiple feature electronic setting
- Digital adjusting for torque & timing
- Soft-start , soft-stop , cycle counter
- Easy access to the board
- Aluminum gear-box grease-lub.
- Metal cover for sprocket protection
- 10" high-rise galvanized base
- Strong chain brackets
- Manual release with key lock
- Battery back-up system (optional)



Technical specifications :		BULL 424 FC	BULL 624 FC	BULL 824 FC
Input	Volt	115 Vac (230Vac upon request)		1 Amp
Torque	Nm	12 Nm	23 Nm	23 Nm
Thrust	N	336 N	558 N	655 N
Speed (Adjustable)	inch/sec	1 ft/sec (Z17)	1 ft/sec (Z20)	10 in/sec (Z17)
Max cycles	cycle/day	200/day	300/day	300/day
Max tested gate weight	lb	800 lb	1200 lb	1600 lb
Max gate length	ft	20 ft	30 ft	30 ft
Suggested gate ratings	lb/ft	400lb/16ft	600lb/24ft	800lb/24ft
Box Size & Weight	in & lb	14" W x 12" D x 24" H		46 - 48 lb
Information is not binding				
Accessories:				
				

Image 2.3: A close-up view of the #40 drive chain used with the gate opener.

## 2.4 Electrical Connections

- Connect the 115 Vac power supply to the internal control panel.
- Wire any optional accessories such as safety photocells, keypads, or loop detectors according to their respective manuals and the Bull 424FC control board diagram.
- Ensure all connections are secure and properly insulated.

## 2.5 Initial Programming and Adjustments

The integrated LCD display facilitates easy programming of various operational parameters.

1. **Limit Switches:** Adjust the internal limit switches to define the gate's fully open and fully closed positions.
2. **Electronic Settings:** Use the LCD display to configure settings such as torque, stroke, anti-crushing reverse sensor sensitivity, soft-start/soft-stop parameters, working time, and number of cycles.
3. **Remote Control Pairing:** Follow the instructions on the LCD display to pair the long-range remote controls with the built-in radio receiver.

## 3. OPERATION

### 3.1 Normal Operation

- Press the designated button on your remote control to open or close the gate.
- The opener features soft-start and soft-stop functions for smooth gate movement and reduced wear.
- The anti-crushing reverse sensor will detect obstacles and reverse the gate's direction to prevent injury or damage.

### 3.2 Manual Release

In case of power failure or malfunction, the gate can be operated manually using the key-lock release mechanism located on the unit. Insert the key and follow the instructions to disengage the motor and move the gate by hand.

## 4. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your BENINCA Bull 424FC gate opener.

- **Monthly:** Inspect the gate's movement for any obstructions or signs of wear on the chain. Clean any debris from the chain and the opener unit.
- **Quarterly:** Lubricate the drive chain and the aluminum gearbox with appropriate grease. Check all electrical connections for tightness and corrosion.
- **Annually:** Have a qualified technician inspect the entire system, including safety features, limit switches, and electronic settings, to ensure proper function.
- **Battery Backup (Optional):** If a battery backup system is installed, ensure its functionality is checked regularly according to the battery manufacturer's guidelines.

## 5. TROUBLESHOOTING

This section addresses common issues you might encounter. For complex problems, contact customer support.

- **Gate Not Responding to Remote:** Check remote battery, ensure the opener has power, and verify remote pairing.
- **Gate Stops Mid-Cycle:** Check for obstructions in the gate's path. The anti-crushing sensor may have activated. Inspect limit switch settings.
- **Unusual Noises:** Inspect the chain for proper tension and lubrication. Check for any loose components or debris in the opener mechanism.
- **LCD Display Errors:** Refer to the specific error codes displayed on the LCD for detailed diagnostics. Consult the full technical manual for a complete list of error codes and their solutions.

## 6. SPECIFICATIONS

Technical specifications for the BENINCA Bull 424FC Slide Gate Opener:



Image 6.1: Technical specifications overview for BENINCA Bull 424FC.

Feature	Specification (BULL 424 FC)
Input Voltage	115 Vac
Motor Voltage	24 Vdc


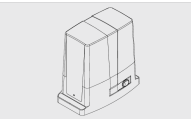
Feature	Specification (BULL 424 FC)
Torque	12 Nm
Thrust	336 N
Speed (Adjustable)	1.1 sec (Z17)
Max Cycles	200/day
Max Tested Gate Weight	600 lb
Max Gate Length	20 ft
Suggested Gate Ratings	400 lb / 16 ft
Unit Weight	46 - 48 lb
Package Dimensions	24 x 14 x 12 inches
Manufacturer	Beninca
Date First Available	June 9, 2017

## 7. SUPPORT




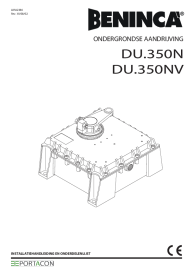
For technical assistance, warranty inquiries, or to purchase replacement parts, please contact your authorized BENINCA dealer or customer support provider. Refer to your purchase documentation for specific contact information.

While specific warranty details are not provided in this manual, BENINCA products typically come with a manufacturer's warranty. Please retain your proof of purchase for warranty claims.

### Related Documents - BULL 424 FC

<p>BULL 10M - 10M.S BULL 15M - 15M.S BULL 20M - 20M.S</p>  <p><b>BENINCA</b> TECHNOLOGY TO OPEN</p> <p>CE</p>	<p><a href="#">Beninca BULL Sliding Gate Operator Installation and User Manual</a></p> <p>Comprehensive manual for the Beninca BULL series of sliding gate operators, including installation instructions, technical specifications, safety guidelines, and maintenance information for BULL 10M, BULL 15M, and BULL 20M models.</p>
<p>BULL 5M - BULL 5M.S BULL 8M - BULL 8M.S BULL 5 OM - BULL 5 OM.S BULL 8 OM - BULL 8 OM.S</p>  <p><b>BENINCA</b> TECHNOLOGY TO OPEN</p> <p>CE</p>	<p><a href="#">Beninca BULL 5M/8M Sliding Gate Operator Installation and User Manual</a></p> <p>This document provides comprehensive installation, operation, and maintenance instructions for the Beninca BULL 5M and 8M series sliding gate operators. It covers safety precautions, installation steps, manual operation, technical specifications, and troubleshooting.</p>



	<p><a href="#">Beninca BULL 1524 &amp; BULL 1524.S Automatic Gate Opener Installation and Programming Manual</a></p> <p>Comprehensive guide for the installation, programming, and maintenance of Beninca BULL 1524 and BULL 1524.S automatic gate openers. Includes technical data, safety instructions, wiring diagrams, and troubleshooting.</p>
	<p><a href="#">Beninca BULL 424 &amp; BULL 624 Sliding Gate Operator Manual</a></p> <p>Comprehensive installation, operation, and maintenance manual for the Beninca BULL 424 and BULL 624 sliding gate operators. Includes technical specifications, safety warnings, and parts diagrams.</p>
	<p><a href="#">Beninca BOB50M and BOB5024E Gate Automation Installation and Parts Manual</a></p> <p>This manual provides detailed installation instructions, technical specifications, wiring diagrams, and a parts list for the Beninca BOB50M and BOB5024E automatic gate operators. It covers safety guidelines, manual release procedures, and maintenance information.</p>
	<p><a href="#">Beninca DU.350N/NV Swing Gate Operator Installation and Maintenance Manual</a></p> <p>This document provides installation, technical specifications, and safety guidelines for the Beninca DU.350N and DU.350NV swing gate operators. It details the components, mounting procedures, and maintenance requirements for these automated gate systems.</p>