



Intelli-Park Series Barrier Arms

Intelli-Park 9

Intelli-Park 14

Intelli-Park 18

Intelli-Park 32

06/2017

Features:

The IntelliPark operators use a high quality PLC style microprocessor

- Features full system capable integration and logic control
- Multiple operation Modes to meet the requirements of different installations and applications
- Built in position outputs
- Capable of providing logic for traffic light controls

The IntelliPark operators utilize a high torque 120 Volt AC motor (220 Volt option available)

- Maintenance free motor
- Automatic 20 watt power reduction at each end of gear travel to provide soft stop and assist in motor life longevity

The IntelliPark operator housings are made of high grade steel

- High quality paint to help prevent fading from ultraviolet radiation
- Zinc plated interior components provide excellent corrosion protection
- Arm booms are made of extruded aluminum and painted/striped to provide superior visual identification
- Telescoping and Articulating arms available

The IntelliPark operators can provide safety features such as:

- Break-a-way hub design to help eliminate damage if the arm is struck by a vehicle
- Red / Green signal light to control traffic
- Terminal input for optional Infrared Photo electric for vehicle and pedestrian obstruction protection
- Remote Control inputs
- Vehicle induction loop inputs
- LED Illuminated Cabinet for visual reference in dark locations

Technical Parameters

Technical Data	IntelliPark 9	IntelliPark 14	IntelliPark 18	IntelliPark 32
Voltage	AC 110 Volt +/- 10%, 50/60 Hz or AC 220 Volt +/- 10%, 50/60 Hz			
Rated Power	80 Watts			
Max Arm Length	8 Feet	10 Feet	13 Feet	19.5 Feet
Open/Close Time	0.9 Seconds	1.4 Seconds	1.8 Seconds	3.2 Seconds
Noise	Approximately 60dB			
Life Cycle	>= 5 Million Cycles			
Ambient Temp.	-40 Celcius to +75 Celcius			
Weight	144 lbs (65 Kg)			
Size	13.75" x 13.75" x 39.75"			

Safety Precautions

General

- The IntelliPark Series barrier arm operators have been well designed, manufactured, and tested for appropriate operation. Failure to use and operate in accordance with the instructions when installing and servicing may result in personal injury and damage to property and/or equipment.
- Please read this manual carefully before installing or servicing the product to ensure operational safety and avoid accidents
- The IntelliPark Series barrier arm operators are for traffic control only and not designed to be used for pedestrian control
- The IntelliPark Series barrier arm operators are not recommended to be used in controlling the traffic of bicycles or motorcycles. Make sure to provide a separate lane of travel for motorcycles, bicycles, ATV's, or any other vehicle of these types
- The PLC Controller is designed only for the IntelliPark Series barrier arm operators and is not recommended to be used in any other device

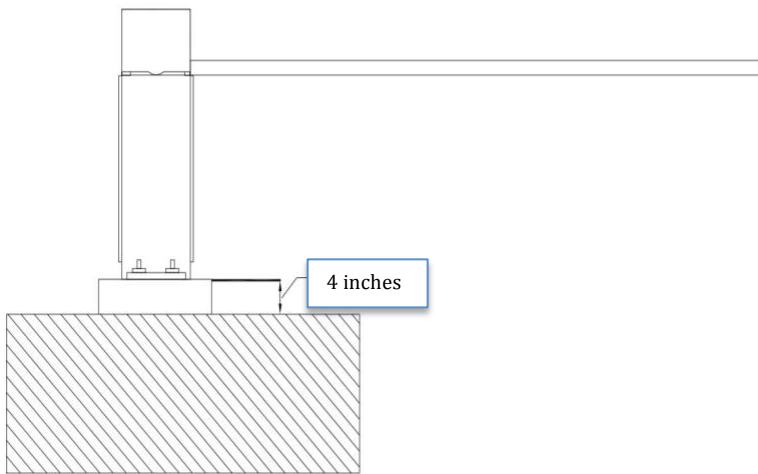
Safety

- No one is allowed to stand under or walk through the path of the barrier arm operator. A separate path is required for pedestrian use
- Keep hands away from springs, hub and motor. Disconnect all power when servicing
- Installation and electrical wiring must be performed in accordance with local codes
- Operator and controls must be properly grounded. Do not try to eliminate the Grounding terminals. Use a grounding rod in accordance with local codes
- Only qualified and licensed (if applicable) personnel may install and/or service the operator

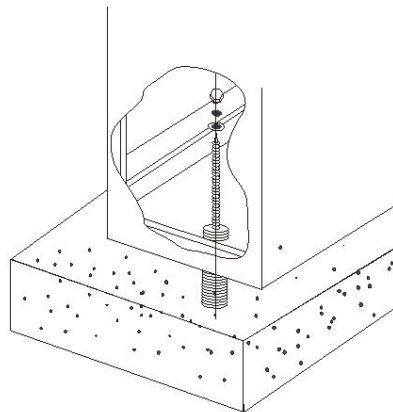
Installation

Foundation Setup

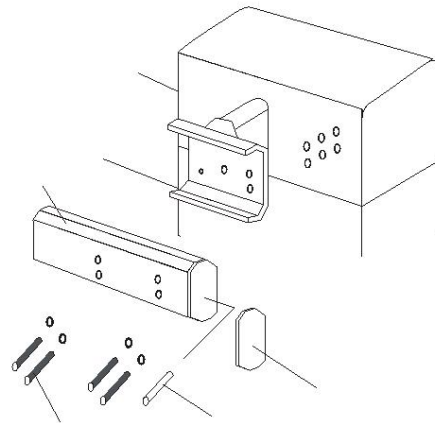
- Select and confirm an appropriate site for the operator installation. Verify that nothing will obstruct the arm from rotating from its closed and open position. A concrete pad is recommended for secure and ideal installation. Lay required electrical conduits before pouring concrete. Be sure to group the conduits in such a way that operator can be anchored down without being impeded by the conduit placement. Check local codes for required depth and size of concrete pad. Recommended concrete pad dimension is 24" x 24" x 24" with 4" being supplied above final grade



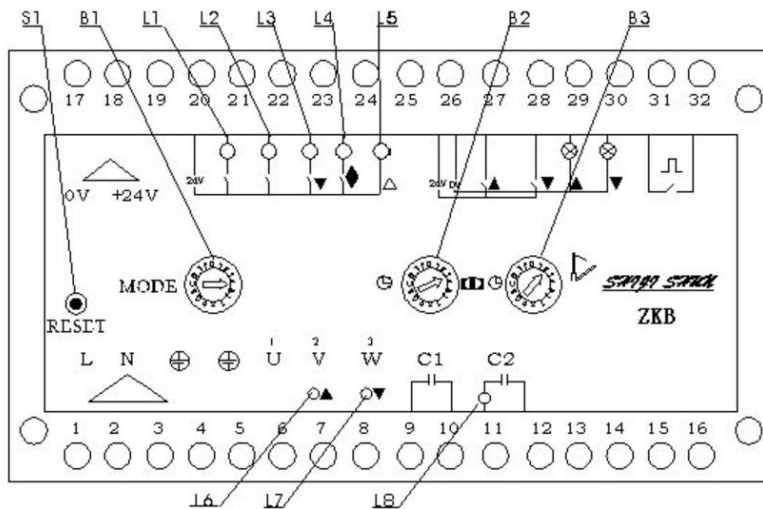
- Level the operator and properly secure the housing using the provided mounting channel feet
- Use ½" x 4" or equivalent concrete anchors to mount the housing to the concrete pad



- Use provide hardware to connect arm to hub bracket



Intelli-Park PLC Definitions



- S1 = Reset Button
- B1 = Operation MODE Selection pot
- B2 = Maximum Run Timer
- B3 = Auto Close Timer (if applicable)
- L1 = Open 1 Input LED
- L2 = Open 2 Input LED
- L3 = Close Input LED
- L4 = Limit Switch LED
- L5 = SAFE/Close Obstruction Input LED
- L6 = “Opening” status LED
- L7 = “Closing” status LED
- L8 = Full Speed/Power status LED

Terminal Definitions

- 1 = LINE Power
- 2 = NEUTRAL Power
- 3 = GROUND
- 4 = Motor Ground
- 5 = Motor Terminal C
- 6 = Motor Close Line V
- 7 = Motor Open Line W
- 8,9 = Motor Run Capacitor (4uF / AC450v)
- 10,11 = Motor Speed Control Capacitor RC (R=5ohm/25watt C=4uf/AC450v)
- 12-16 = Not Used
- 17 = 24v Ground (-)
- 18 = +24v Power Terminal 0.2 A current (+)
- 19 = +24v Control Common
- 20 = Open Pulse Input (Standard Level)
- 21 = (Mode Defined) Open Pulse input (High Level)
- 22 = Close Pulse Input (High Level)
- 23 = Limit Switch Input
- 24 = Safe/Close Obstruction Input
- 25 = +24 Power Terminal
- 26 = 24v Ground
- 27 = Open pulse (same as 20)
- 28 = Close pulse (same as 22)
- 29 = OUTPUT –Open
- 30 = OUTPUT –Close
- 31,32 = OUTPUT –Cycle

IntelliPark Operation MODE selection

Mode 1

- Single Button = Terminal connection 19 and 22
- Press button to Close, Release button to Open

Mode 2

- Double Locking = Terminal connection 19 and 20
- Press ON the button to Open the arm
- Press the button OFF until it reaches the limit to Close the arm. If button is not held until limit, the arm will open automatically

Mode 3

- Single Button Bi-Directional = Terminal 19 and 20
- Momentarily press the button to Open, press to Close

Mode 4

- Double Button Pulse = Terminal 19 and 20 to Open, Terminal 19 and 22 to Close
- Momentarily press button between 19 and 20 to Open the arm
- Momentarily press button between 19 and 22 to Close the arm

Mode 5

- Automatic Close with Optional Close Command
- Momentary button between 19 and 20 to Open the arm
- Automatic Close after Close Timer Expires (B3)
- Release and Re-Energize of 19 and 24 to Close the arm (after a vehicle drives thru the loop)
- Momentary button between 19 and 22 will also Close the arm
- If vehicle remains on loop, the arm will NOT close

Mode 6

- Open with terminal 19 and 20
- Close with terminal 19 and 22
- Contact between 19 and 21 will Open the arm, removal of contact between 19 and 21 will Close the arm (if loop detector output is connected between 19 and 21, when the vehicle enters the loop, the arm goes Open, when the vehicle leaves the loop, the arm Closes)

Mode 7

- Same as Mode 5 but without automatic Close Timer

Mode 8

- Same as Mode 7 but without automatic Close

Mode 9-F

- N/A

Status and Adjustments

Outputs and LED

- Arm Opening: Terminal 26/29 produces +24V output (L4, L5, and L6 will be on)
- Arm Closing: Terminal 26/30 produces +24V output (L4, L5, and L7 will be on)
- Count Method Terminal 31/32: in Mode 4, 300ms output active when arm is up; in Mode5-8, 300ms output active when arm is closing

POT Adjustment

- B2 controls the total amount of time that the motor can run after a command has been given
- Total run time available: 2-16 seconds
- B3 controls the Automatic Close Timer is available in Mode 5 and 6
- Timer starts after Open command and any subsequent SAFE/Close Obstruction has been released
- Timer value available: 2-8 seconds

Limit Switch Adjustment

Do not adjust the cam or limit switch position. Please contact manufacturer for proper adjustment clarification if applicable



Program Mode 1

Input between 19 (Common) and 22
Press and Hold to Close Barrier
Release to Open Barrier



Program Mode 2

Press and Hold 19 (common) and 20 to Open Barrier
Release to Close

