Installation Manual MySpot[™] 200

Remote Controlled Parking Barrier

Congratulations!

MySpot 200 rugged construction, careful design and attention to detail will provide you with years of service and enjoyment. However, like all things mechanical and elec-

tronic, proper and careful installation is essential in order for the product to perform as designed.

We suggest that you keep the enclosed User Manual in the car's glove compartment, along with the Emergency Key/ Security Wrench. The Key allows you to manually lower the barrier. The wrench allows access to the Key. The User Manual will refresh your memory how to do it, as well as show you how to recognize when the radio batteries need replacing and how to go about it.

A summary installation procedure is available at the back of this manual.

Unpacking

<u>Warning</u>: The packing carton contains a cardboard mounting **template**. Follow the directions on the carton to safely open it and preserve the template.

If external <u>damage</u> to the packing is evident, notify the carrier immediately. Shipping damage is not covered by the manufacturer's warranty.

<u>Note:</u> Adhesive for mounting the pods is available as a separate option and is not included in the kit.

Kit Contents

Insert here picture showing 3D assembly

of the MS200 with names of key parts

Verify that all the parts listed were delivered in the kit.

1	PowerPod assembly

1	IdlePod assembly

- 1 barrier assembly
- 1 or 2 HT transmitter (s)
- 7 12 mm masonry anchors
- 7 6 mm Allen bolts for anchors
- 1 6 mm Allen wrench
- 6 8 mm Security Barrier bolts
- 1 Security wrench
- 1 Tube of sealant
- 1 Manual
- 1 Template printed on cardboard

Terminology The barrier can be Locked Up in one of 3 positions as shown in Fig. 2 Unlocked With reference to D Figure 1: Locked Down 1 > PowerPod 2 > IdlePod P 3 > Barrier Figure 2 4 > Stub

2:Site Preparation

Gravel, Sand

Mounting the pods directly to gravel or sand is not recommended, as neither the bolts nor the adhesive will provide adequate grip. A suitable concrete footing needs to be poured for each of the pods.

Asphalt

The installer needs to check the integrity of the asphalt or macadam surface to make sure that the depth and strength are adequate to support mounting bolts. In some cases, the use of the optional adhesive kit may be the better way to mount the pods. It is not recommended to use the bolts if the depth of the roadway is less than 50 mm (2").

Special asphalt anchors are available. These use epoxy to create a rigid surface around the anchors. Contact the factory for details.

TOOLS: Unless you use the adhesive kit, you will need a power drill and a 12 mm (15/32") masonry drill bit for setting the anchors into the roadway to mount the two pods.

Where to position MySpot?

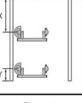
Front or Middle?

MySpot 200 can be positioned in two distinct loca-

Middle mounting means that the barrier will stay under the car while the car is parked in the

space. The advan-

tages of middlemounting are:



1111

Figure 3

- Barrier is further removed from dirt and debris pushed from the main access lane
- Cars making J turns are less likely to bump into the raised barrier accidentally
- The barrier is protected from inclement weather while the car is parked over it
- Cars entering adjacent lanes are less likely to accidentally hit the barrier

When placing the barrier in the middle of the stall, the center line of the device should be about 1.5 meters (5 feet) from the rear of the stall (dimension "X" in figure 1).

WARNING: Locate the PowerPod so that persons getting in or out of the car will not trip on the pod.

Front mounting means that the car drives in and parks *behind* the barrier. A benefit of front mounting is that the barrier can to be used as a **theft deterrent**, raising it with the car parked behind it. The barrier should be installed as close to the front limit of the space as possible, to allow the barrier to rise behind even a large vehicle. (Dimension "Y" in Figure 1 should be less than 1 foot or 30 cm.)

Left Align

The PowerPod should be installed at the left side of the space (facing the parking spot from the outside). The round end of the PowerPod should touch the stripe marking the left limit of the parking stall. This will

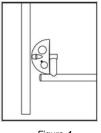


Figure 4

guarantee that, regardless where the car is positioned as the car drives in, the front wheel will ride over the barrier on the side close to the PowerPod. Installing the device further to the right of the space will cause the right wheel of the car to engage the barrier. This increases the stress on the barrier and on the mounting bolts (or adhesive) that attach the pods to the driveway.

Standing Water

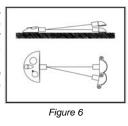
MySpot 200 is sealed to prevent water from entering the unit. The PowerPod

Eigure 5

should not be exposed for extended period of time to standing water or ice. To prevent such occurrence, select a spot for the pod that is slightly raised above the surface, or add a plate to raise it.

Pods Line up

The barrier rotates around the bearing surfaces on the two pods. The force that brings the barrier down to allow access to the space comes from gravity pulling the barrier. Excessive friction along the travel of the barrier will prevent proper operation of the device. The two pods need to be reasonably aligned with each other, so that the barrier is free to rotate. Alignment means that



the two pods face each other so that an imaginary line extending from the shaft of the PowerPod will line up abeam with the opening in the IdlePod. This alignment also applies to the height -a significant (more than 1 inch) height difference between the two pods will hamper the free motion of the barrier.

If the PowerPod mounting area is not level, the use of a shim under the PowerPod may be required to level it with the IdlePod.

Barrier Clearance

The front edge of the barrier must be able to travel 3" (from its "unlocked", Unlocked position) before it hits the ground. A rise in the roadway anywhere between the two pods may interfere with this full range of motion.

To check the surface, place the barrier upside-down on the ground.



Observe any height irregulari-

Figure 7

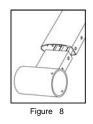
ties. If the roadway is lower in between the two ends of the barrier, there is no problem. If the roadway at even one point is 7 mm (14") higher, move the barrier towards the front or the rear of the space until a better location is found.

If the rise in the middle is unavoidable, you may have to raise one or both pods using a suitable plastic or metal plate. The use of wood or plywood is not recommended as it will rot.

3:Assemble Barrier

Prior to the mounting of MySpot 200, the barrier needs to be assembled to complete the assembly of the device. This will self-align the two pods.

- Make sure that the stub on the PowerPod is in the Locked Up position. (See inset for instructions how to manually bring the shaft to the Locked Up position if necessary.)
- 2. Rotate the stub on the IdlePod until it too is in the Locked up position.
- Slide the barrier over stub of the Power-Pod. The grooved surface of the barrier should be facing back, away from the entrance to the parking space.



- 4. Make sure the holes on the side of the barrier align with the threaded holes in the stub.
- 5. Secure the barrier to the stub using 2 security bolts.
- Repeat the process for the IdlePod side and secure the barrier to the stub using 2 security bolts.

MySpot 200 is now ready for attachment to the roadway. The mounting procedure is quite different when using adhesive than when using mounting bolts.

4: Mount Using Adhesive

Designated Parking offers a number of adhesives that have been tested for mounting the pods to concrete and compacted asphalt.

In general, a fast-curing epoxy such as Devcon DA012 ("10 minute epoxy") will provide good adhesion. Cure time for the DA012 is 1.5 hours at 25°C. A less expensive alternative is to use silicones such as GE SCS2003 It cures partially in about 3 hours.

- Thoroughly clean the roadway where the pods are to be installed. The surface must be free of sand, gravel and loose particles.
- Place the cardboard template to position the assembled MySpot 200 and verify that the surface meets the criteria specified in section 2.
- 3. Turn the 2 pods upside down.
- Apply about 2 mm (0.080") of adhesive uniformly over the surface of the bottoms of the two pods.
- 5. Turn the pods over and place them carefully in position as guided by the template.
- Press lightly on the pods. Do not wipe adhesive from around the base unless it is in abundance.
- 7. Do not remove the template as yet.

Proceed to section 6

5: Mount Using Bolts

Remove PowerPod Cover

Remove the cover of the PowerPod. Use the security socket to remove the 4 security bolts around the circumference of the PowerPod. Lift the cover gently about 2" and



disconnect the an-

tenna cable by pulling its RCA plug from the socket.

<u>Warning</u>! Pulling the cover without disconnecting the antenna cable will damage the antenna cable or the electronic module in the base of the PowerPod.

Do Not remove IdlePod Cover

The IdlePod can be mounted without opening the cover using the two external bolts. A third mounting bolt under the cover will be accessed later.

Drill Mounting Holes

Position the template (Figure 8) on the surface carefully. Place the IdlePod and the

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plate so	CenterLine	2
that they	POWER POD	IDUE POO
align		
with the	Figure 10	
respec-		

tive markings and cutouts on the template.

Using the pods as templates, mark the 7 holes on the roadway. <u>Remove the</u>

PowerPod before drilling to prevent dirt from getting into the mechanism.

Drill 7 holes using a 12 mm (15/32") masonry drill. Take extra time to make sure that each hole is aligned with the pod openings.

Clean the area and gently hammer in the anchors until they are flush with the surface. Gently remove the screws from the anchors making sure that none of the anchors rotates in its seat. If an anchor rotates freely, see inset.

What to do if an anchor rotates in its seat: If the hole is only slightly oversize, use a sharp point to hold the anchor against the wall of the hole and gently tighten the bolt. At some point, the expanding anchor will grip the walls of the hole. Turn the bolt another ½ turn to make sure the anchor is set.

If the hole is too large, you may need to fill it with concrete mix or epoxy, and then re-drill once the mixture has hardened. Inserting the anchor into the liquid epoxy may fill the threads and prevent the anchor from accepting the bolts. If the bolt is placed while the filler is not yet hardened, it may not be able to be withdrawn later.

Mount Pods

Remove the 4 protective plastic caps that seal the mounting holes of the PowerPod. Using the bolts that came with the anchors and the sealing washers, secure the base of the PowerPod to the roadway. Make sure that the base is lying reasonably flat on the surface. <u>Do not tighten the bolts until</u> the IdlePod has been installed.

If one of the corners of the base is lifted because of surface irregularities, insert a plastic or metal shim under that area before tightening the mounting bolts. Applying excessive force on the base where the surface is highly irregular may bend the base over time, causing internal misalignment and eventual operational failure.

Likewise, install the IdlePod using the two external bolts. Tighten the mounting bolts.

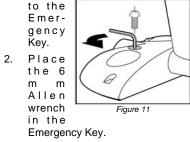
Remove the cover of the IdlePod, and drill a 3rd 12 mm hole into the roadway through the clearance hole in the base. Insert the anchor with the bolt and the washer. Gently hammer in the bolt until the anchor is flush with the roadway, below the base of the IdlePod. Tighten the bolt.

Reinstall the cover using the security bolt.

Rotating the shaft manually

If it is necessary to rotate the shaft manually, with the cover in place, follow this procedure:

1. Remove the security bolt to gain access



- Turn the wrench counter clockwise. This releases the lock or locks that are holding the shaft and the internal mechanism.
- 4. If the barrier was in the Lock up position, it should fall freely.
- 5. If the barrier was in the Lock down position, it should rise.
- 6. Remove the Allen wrench

6: Test

Check for Free Motion

MySpot is shipped in "hibernation" mode, to prevent the radio batteries from discharging.

The radio in MySpot 200 is activated by rotating the shaft from the Locked Up position to the Unlocked position. This requires the use of the Emergency key, as described in the inset to the left

Release the shaft to allow the barrier to fall. Verify that the rotation of the barrier is smooth and that it comes to a stop about 50 mm (2") above the highest spot on the ground. <u>Do not press</u> down on the barrier at this time.

Raise the barrier manually. Verify that the barrier is locked in the Locked Up position. If you notice resistance to the movement of the barrier, slightly rotate the pods until optimum performance is reached.

Tighten the 7 mounting bolts that hold down the two pods. Close the Power-Pod cover if it is open (remember to connect the antenna cable).

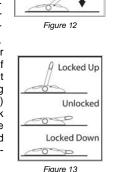
Check Radio Operation

- 1. With the barrier in the Locked Up position, press the center button on the HT transmitter.
- The first activation may not result in a visible response, as the command is used to program the radio receiver to recognize the transmitter.
- Press the center transmitter key again. The barrier should fall to its Unlocked position.
- 4. If you hear a whirl of the motor but the barrier does not drop, verify that the barrier can move freely.

Check Operation

Warning! In the case of adhesive mounting, do not proceed further until the adhesive has cured to at least 50% strength.

- 1. Bring the barrier to the Unlocked position using the HT transmitter.
- 2. Step on the barrier on the side close to the PowerPod. This simulates the car driving over the barrier. The barrier will yield if you exert at least 85 Kg (190 lbs) and will lock the in Locked Down posi-



3. Step again on

tion.

the barrier, and observe the Locked Up motion of its leading edge. It should move at least 18 mm (3/4") while you stand on it, and should return to the Locked Down position once you step off. Failure of the barrier to move this "Overtravel" amount means that there is a rise in the roadway between the pods that interferes with the full travel of the barrier.

- If the test failed on the Overtravel, resolve the problem before proceeding to the next step. Solutions include raising the pods or leveling the bump on the roadway.
- 5. Press the center button on the HT; the barrier should rise back to the Locked Up position.

7: Add Transmitter

Once the first transmitter has been added ("programmed") to the authorized list in the radio receiver in the PowerPod, additional transmitters (up to a total of 15) can be programmed without opening the PowerPod by this procedure:

1. Place the barrier in the Locked Up

position. Prop the barrier with your leg so that the barrier will not fall when activated.



Figure 14

2. Hold the authorized transmitter in

one hand, and the new one in the other.

- Press the center button on the *au-thorized* transmitter. The motor will whirl. Observe the green indicator on the face of the HT transmitter it will stay lit for 2 seconds.
- As soon as the indicator on the Authorized transmitter turns off and the motor stopped whirling, press the center switch on the *new* transmitter. The green indicator on it will turn on for 2 seconds.
- 5. As soon as the green indicator on the new transmitter turns off, press the center button on the "*old*" transmitter.
- To verify that the new transmitter works, move away from the barrier and activate the transmitter. The motor should respond and the barrier should fall.

The same procedure can be used to add another button on a transmitter to the list. Each of the 3 buttons on the HT has its own code, and all 3 can be programmed into the PowerPod if desired. The 3 keys allow the same transmitter to control 3 separate MySpot 200.

Remove Transmitters

The only way to delete transmitters is to erase the programming in the unit. This is also the case when the only authorized transmitter has been lost, and a replacement transmitter needs to be added.

1. Open the cover of the PowerPod. Remember the antenna cable.

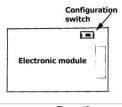


Figure 15

- 2. Press and hold the Configuration switch for more than 5 seconds but less than 10 seconds. Release the switch,
- The unit has been returned to the factory setting. To program the first transmitter, just activate it.
- 4. Connect the antenna and close the cover
- 5. Apply silicone to seal the bolts.

Using HomeLinkTM

MySpot 200 is compatible with Johnson Control HomeLink car-installed transmitters. Follow the manufacturer's instructions how to program the authorized transmitter into the HomeLink unit. (The instructions are usually part of the car's owner manual.)

The programming of the transmitter to the HomeLink unit needs to be done after the HT transmitter was taught to the PowerPod.

HomeLink is a registered trade mark of Johnson Control

Car Sensor

MySpot 200 is equipped with a wheel sensor. The purpose of this sensor is to prevent activation of the barrier if the car is parked over it.

The product is shipped with this sensor enabled. If it is desired to change the setting of this sensor, open the cover of the PowerPod, identify the Configuration switch and use one of the procedures below:

To disable the wheel sensor:

- Hold down the Configuration switch for more than 5 seconds (but less than 10 seconds)
- 2. Release button.

To enable the wheel sensor:

- 1. Open the cover of the PowerPod
- Hold down the Configuration switch for more than 5 seconds (but less than 10 seconds)
- 3. Release button, immediately press it for 1 second and release it again.

How the Sensor Works

The concept behind the sensor is that the device counts the number of times that a wheel of the car passes over the barrier.

In a typical sequence of operation for a middleinstalled barrier (see section xx), the barrier drops to allow the car to enter. The car front wheel drives over the barrier, but the rear wheel does not. The sensor has therefore counted only one wheel, and will not respond to remote commands to rise.

Once the car leaves the space, the front wheel passes over the barrier a second time. The sensor has now counted 2 passes, and will respond to the command to raise the barrier.

8: Maintenance

Warning: Never raise the barrier when foreign articles are on the barrier (e.g. tree limbs), as it can catapult these (if they are light enough).

The most important maintenance is to clear the immediate area of the MySpot 200 of debris of any kind.

Never drive over the barrier when obstructions are visible under the barrier.

Replacing PowerPod Batteries

The batteries should provide up to 4

years of life under normal operating

the

conditions.

When



batteries approach their end-of-life, MySpot 200 will become "sluggish" – it will delay the response to the transmitter commands by about 5 seconds. This is an intentional re-

minder that the batteries need replacing. If the batteries are not replaced before they are completely exhausted after 50-100 additional operations, the barrier

will accept one last command and will stay down. To replace the batteries, open the cover

of the PowerPod and pull out the 4 batteries. Replace with fresh (4) D alkaline batteries. **Observe polarity!** Reversing the polarity of some or all the batteries will damage the radio receiver.

Replacing transmitter batteries

When the batteries in the HT transmitter approach their end-of-life, the HT will signal the condition by delaying the transmission of a command. The green indicator on the transmitter will flash for a few seconds, before the normal pattern of turning solid for 2 seconds (while it sends the command) takes place.

To replace the batteries, open the two small Philips screws on the back of the unit. Replace the 2 Lithium button batteries with CR2016 batteries. Observe polarity! Check operation of the indicator before closing. If OK, close with the two screws.

Copyright and Patents

MySpot 200 is covered by design and utility patent applications and issued patents. MySpot is a trademark of Designated Parking Corp.

Help

A troubleshooting chart is provided at the end of this manual

If you need assistance with the installation, repair or other problems, please contact the company that sold the system to you first. They are likely to provide you with immediate support, especially if the product was purchased overseas.

Designated Parking web site is a good source of tips, troubleshooting information and a way to contact the factory engineers to address unusual problems. <u>www.dp-corp.com</u>

FCC THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOW-ING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED.INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERA-TION.

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHOR-IZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

CE Hereby, Designated Parking Corp., declares that MySpot 202 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC . A copy of the Statement of Conformity can be found on the Company's web site.

Rudor M. Teich, President

Limited Warranty

Except as otherwise provided, Seller warrants for a period of twelve (12) months from the date of shipment that the goods supplied to Buyer shall be of good materials and workmanship. Seller makes no warranty with respect to the following: (a) materials not manufactured by Seller, the use of which is suggested by Seller's general recommendations, application or installation procedures, or otherwise; (b) goods sold by Seller to Buyer for other than resale; (c) goods which have been subject to abuse, accident, alteration, misuse, negligence or alterations; and (d) all display items sold by Seller to Buyer.

THE FOREGOING WARRANTIES ARE EXCLUSIVE, AND IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WRITTEN OR ORAL WHETHER IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MER-CHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, USE, OR INFRINGMENT.SELLER DOES NOT ASSUME, NOR AUTHORIZE ANY REPRESENTATIVE OR OTHER PERSON TO ASSUME FOR IT, ANY OBLIGATION OR LIABILITY OTHER THAN AS EXPRESSLY SET FORTH HEREIN.

Limitation of Remedies.

Seller's obligations under the above warranties (contained in Section 10) are conditioned upon Seller actually receiving notice from Buyer of the alleged defect within the warranty period and the existence of an actual defect in the goods as revealed upon examination by Seller. The sole liability of the Seller for breach of such warranties shall be to provide Buyer with replacement for, or repair of, defective parts in the manner provided herein. This exclusive remedy shall not be demed to have failed of its essential purposes so long as Seller is willing to repair or replace the defective part(s) in the manner prescribed herein.

Seller shall not be liable for any labor or other expenses incurred by Buyer in the removal, repair or replacement of the goods or any component part claimed to be defective, nor shall Seller be liable for any expenses incurred by the Buyer in order to remedy any defect. Seller's acceptance of shipped goods shall not be deemed an admission that such goods are noncontorming under the above warranties. If the Seller finds that any goods are not defective, such goods will be reshipped to Buyer at its expense and Buyer will be charged for shipping charges incurred by Seller.

Under no circumstances and in no event will the Seller be liable for any personal injury or property damage, loss of profits or revenue, loss of business, consequential, incentive, punitive, special or contingent damages or expenses of any kind incurred by Buyer or any third party, based upon warranty, contract, strict liability, negligence or any other cause of action arising under this Agreement or in connection with the product or services provided hereunder even if the other party or any other person has been dvised of the possibility of such damages The discharge of Seller's warranty obligation hereunder shall constitute fulfilliment of all liabilities of Seller to Buyer, whether based on contract, negligence or otherwise. The remedies set forth herein shall be the exclusive remedies available to the Buyer and in lieu of all other remedies, and the liability of Seller, whether in contract, in tort, warranty or otherwise, shall not exceed the price of the goods sold, supplied or furnished by Seller which give rise to the claim.

Any suit or action arising out of or relating to this Agreement or the breach thereof, must be commenced within one (1) year after the date of shipment of the goods to the Buyer. The foregoing shall not limit the time within which any suit or action must be brought to collect an amount agreed to be paid by Buyer or to enforce a judgment in favor of Seller or to collect any amount awarded to Seller.

Troubleshooting

No response to Transmitter

Step No.	Test	YES	NO
1	Is the correct button pushed and does indicator on transmitter light up when button is pushed?	go to step 2	Replace battery in transmitter
2	Has this transmitter worked before?	go to step 2a	Add transmitter to memory of MySpot 200
2a	Has the barrier been slow to respond recently	Replace PowerPod batteries	go to step 3
3	Is barrier locked in Locked Up posi- tion?	go to step 4	go to step 5
4	Use Emergency key to release barrier, then raise barrier and retest. Is unit now working properly?	Jam cleared	go to step 6
5	Is barrier locked in Locked Down position?	go to step 8	Force barrier to locked down or locked up position and go to step 1
6	Is there another transmitter that does control the unit?	go to step 7	Replace batteries in the PowerPod . If this does not help, erase memory of MySpot (see manual)
7	Add transmitter to memory of MySpot. Does it work?	Done	Replace transmitter
8	With the barrier down, step on it a couple of times to simulate a car passing over the barrier with both wheels. Is the barrier responding the transmitter?	Done	go to step 4

Motor	Notor responds but no motion of barrier					
Step No.	Test	YES	NO			
1	Is barrier locked in Up position?	go to step 2	Goto step 4			
2	While motor sounds, push barrier down. Did it move?	go to step 3	Open PowerPod cover and check operation			
3	Check alignment of pods and a bent barrier	Done				
4	Is it locked in Down position?					

Express Installation Instructions

- 1. Clear area where unit is to be installed
- 2. Use the inside of the packing carton as a template to position the two pods
- 3. Apply adhesive to the bottoms of the pods and press them into place
- 4. Open cover of IdlePod and remove security screw for access to Emergency key
- 5. Slide barrier over shaft of PowerPod so that screw hole on barrier tube mates with hole in the tube-bearing on the shaft
- 6. Fit other end of barrier over pins in IdlePod. Close Cover.
- 7. Screw barrier tube to bearing on PowerPod side
- 8. Use emergency key to release the lock. The barrier should fall freely.
- 9. Wait for adhesive to cure before driving or stepping over barrier.



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www.dp-corp.com Email Support@dp-corp.com Tel +1.973 669-8214 Fax +1.973 669-5161