

HANSA SPEEDO 24 VOLTS

GATE OPERATOR FEATURES:

ALL-IN-ONE COMPACT UNITS CONTAINS:

TWO VERSIONS OF DC MOTORS AVAILABLE (3300 OR 4000 RPM).

GATE SPEEDS (17.5 TO 26.5 METRES PER MINUTE).

MAXIMUM DRIVING FORCE (40KG – 400 NM).

A 24VOLTS DC, 1 AMP BATTERY CHARGER (DOMESTIC USE, MAXIMUM 300 OPERATIONS/DAY).

OR A 220V AC POWER PACK FOR CONTINUOUS OPERATION (100% DUTY CYCLE AT 25KG DRIVING FORCE).

IQ 24 VOLTS CONTROLLER FEATURES:

LEFT OR RIGHT HAND MOTOR SETTING VIA DIPSWITCH (NO WIRES TO CHANGE OVER).

PROGRAMMABLE AUTOMATIC GATE CLOSING TIMER (2 SEC – 255 SECONDS).

PROGRAMMABLE PEDESTRIAN OPENING DISTANCE AND STAY OPEN TIME.

A.S.A.P. FAST CLOSE FACILITIES.

DIPSWITCH TIMER ON – OFF FACILITY.

DIPSWITCH TIMER OVERRIDE FACILITY (HOLD PUSH-BUTTON FIVE SECONDS).

FOUR MINUTES POTENTIAL FREE CONTACT RELAY TIME FACILITIES (DAY-NIGHT SWITCH LIGHT).

AUXILIARY RELAY (PREVENTS BATTERY DISCHARGED BELOW 10.5 VOLTS).

CONTINUOUS BATTERY VOLTAGE MONETARY.

CONTINUOUS CURRENT MONITORING AND ADJUSTMENT FOR MAXIMUM TORQUE DELIVERY.

CONTINUOUS SPEED CONTROL AND ADJUSTMENT TO OBTAIN MAXIMUM MOVING SPEEDS.

MOTOR SPEED CONTROLLER (FROM CRAWL TO FULL SPEED).

OPTICAL INFRA-RED COUNTER (DETERMINES GATE DISTANCE TRAVELLED).

LED INPUT TRIGGERS LIGHT INDICATORS (TRIGGER ACTIVE).

INFRA-RED BEAM JUMPER OVERRIDE (CONNECTION NOW NORMALLY CLOSED ONLY).

LED OR LIGHT EMITTING DIODE RELAY OUTPUT (GATE STATUS ERROR MESSAGES).

THREE FUSES (MAIN 25 AMPS, MOTOR 20 AMPS, 24 VOLTS OUTPUT 1 AMP).

LIGHTNING PROTECTION (EARTH'S TERMINAL – IMPORTANT ALWAYS EARTH).

IQ 24 VOLT CONTROLLER FEATURES:

AT THE BOTTOM OF THE P.C. BOARD ON THE LEFT HAND SIDE THERE IS AN 8 WAY DIPSWITCH WHICH GIVES YOU THE FOLLOWING FEATURES:

DIPSWITCH 1 = LEFT OR RIGHT HAND MOTOR SETTING.

DIPSWITCH 2 = SET UP GATE PARAMETERS.

DIPSWITCH 3 = PROGRAMME AUTO CLOSE TIMER.

DIPSWITCH 4 = PROGRAMME PEDESTRIAN OPENING DISTANCE AND TIME.

DIPSWITCH 5 = A.S.A.P. – FAST CLOSE FACILITY.

DIPSWITCH 6 = AUTO CLOSE TIMER ON.

DIPSWITCH 7 = AUTO CLOSE TIMER OVERRIDE.

DIPSWITCH 8 = CRAWL SPEED DISTANCE (8 OFF = 800MM – 8 ON = 1300MM).

DIPSWITCH 1: DIPSWITCH 1 IS USED TO SET UP THE CLOSING DIRECTION OF THE MOTOR. IF THIS IS NOT DONE PROPERLY, THEN THE GATE WILL NOT AUTO CLOSE IN THE CORRECT DIRECTION, NOR WILL THE GATE REVERSE ON HITTING AN OBSTRUCTION.

IF YOU ARE STANDING BEHIND THE GATE MOTOR ON THE INSIDE ON THE PROPERTY LOOKING OUT TOWARDS THE STREET:

**LEFT HAND MOTOR WHICH CLOSES TO THE RIGHT, SWITCH DIPSWITCH 1 ON.
RIGHT HAND MOTOR WHICH CLOSES TO THE LEFT, SWITCH DIPSWITCH 1 OFF.**

ALSO OF GREAT IMPORTANCE IS THAT TWO WIRES COMING FROM THE MOTOR MARKED M1 AND M2 ARE CONNECTED INTO THE CONNECTION BLOCK AT THE TOP OF THE P.C. BOARD TO THE SAME CONNECTIONS MARKED M1 AND M2.

THE BLACK LIMIT SWITCH CABTYRE CABLE WHICH IS CONNECTED TO THE BLUE CONNECTOR BLOCK MARKED "LIMIT SWITCH" CONNECTOR ON THE P.C. BOARD. MAKE SURE THAT THE:

BROWN WIRE IS CONNECTED TO L/SW OPEN AND THE
BLUE WIRE IS CONNECTED TO L/SW CLOSE AND THE
GREEN AND YELLOW WIRE IS CONNECTED TO 0 VOLTS.

IF YOU OBSERVED THESE CONNECTIONS AS DESCRIBED HERE, THERE SHOULD BE NO PROBLEMS IN SWITCHING BETWEEN A LEFT HAND AND A RIGHT HAND MOTOR.

DIPSWITCH 2: DIPSWITCH 2 IS USED FOR SETTING UP GATE PARAMETERS. **IT IS OF THE GREATEST IMPORTANCE THAT THIS PROCEDURE IS DONE EVERY TIME THE IQ 24 VOLT CONTROLLER IS CONNECTED TO A GATE FOR THE FIRST TIME.**

THE REASONS FOR THIS PROCEDURE IS BECAUSE THE PARAMETERS TO DRIVE EACH GATE IS UNIQUELY DIFFERENT NAMELY:

- A. THE DISTANCE FROM THE OPEN TO THE CLOSED GATE LIMITS.
- B. THE POWER REQUIRED TO MOVE THE GATE AT SLOW SPEEDS AND HIGH SPEEDS.
- C. THE OPTIMUM OBSTRUCTION LEVELS SETTING (OVERLOAD).

THE PROCEDURE IS AS FOLLOWS: SWITCH DIPSWITCH 2 ON AND LEAVE DIPSWITCH 1 AS PER DIRECTION SETTING ABOVE. SWITCH ALL OTHER DEPSWITCHES OFF. MAKE SURE THE GATE IS IN A FULLY CLOSED POSITION AND ON THE CLOSED LIMIT SWITCH. PRESS THE PROGRAMME BUTTON UNTIL THE RED LED LIGHTS UP. IF THE STATUS LED FLASHES TWICE, THIS INDICATES AN ERROR WITH THE DIPSWITCHES. CHECK THAT ALL DIPSWITCHES ARE SWITCHED OFF AND THAT DIPSWITCH 1 AND 2 ARE SWITCHED CORRECTLY. THE RED STATUS LED SHOULD BE LIT NOW. ACTIVATE TRIGGER 1 VIA PUSH-BUTTON OR OPERATE YOUR RADIO REMOTE CONTROL ONCE TO START SET UP MODE.

YOU WILL HEAR A NOISE INCREASING IN SOUND FROM THE MOTOR AS THE POWER TO THE MOTOR INCREASES. THE HEAVIER THE GATE, THE LOUDER THE SOUND FROM THE MOTOR, AS SOON AS THERE IS SUFFICIENT POWER GIVEN TO THE MOTOR BY THE IQ24 CONTROLLER TO OVERCOME THE LOAD THE GATE WILL BEGIN AT A VERY SLOW SPEED. THE GATE WILL OPEN TO AN OPEN LIMIT SWITCH, AND AGAIN YOU WILL HAVE THE SOUND OF THE MOTOR INCREASING AS THE CONTROLLER DETERMINES THE POWER REQUIRED TO CLOSE THE GATE. THE GATE WILL MOVE SLOWLY AGAIN TO A CLOSED LIMIT SWITCH POSITION AND STOP. THEREAFTER THE GATE WILL NOW OPEN AT HIGH SPEED TO AN OPEN LIMIT SWITCH AND STOP, CLOSE AT FULL SPEED TO A CLOSE LIMIT SWITCH AND STOP.

AT THIS POINT THAT RED STATUS LED WOULD HAVE GONE OUT. PROGRAMMING THE SET UP IS NOW COMPLETE.

A POINT TO REMEMBER DURING SET UP PROCEDURE.

DON'T: PRESS ANY TRIGGERS.

BLOCK OR CAUSE ANY OBSTRUCTION TO THE GATE.

THE INFRA-RED BEAM IF CONNECTED – HAS AUTOMATICALLY BEEN DISABLED BY THE IQ24 CONTROLLER.

AND LAST BUT NOT LEAST OF GREATEST IMPORTANCE:

THE PROCEDURE WILL WORK BEST WITH FULLY CHARGED BATTERIES, ALSO IF A 220V AC POWER PACK HAS BEEN INSTALLED THE PROCEDURE SHOULD BE DONE WITH THE POWER PACK ON.

DIPSWITCH 3 PROGRAMME AUTO CLOSE TIMER: THE FACTORY DEFAULT SETTING FOR THE AUTO CLOSE TIMER IS SET AT 8 SECONDS. IF YOU WISH TO HAVE A DIFFERENT TIME YOU CAN PROGRAMME THE AUTO CLOSE TIMER FROM AS LITTLE AS 2 SECONDS TO A MAXIMUM OF 255 SECONDS OR 4 MINUTES 15 SECONDS.

TO DO THIS ALL YOU HAVE TO DO IS THE FOLLOWING:

MAKE SURE THE GATE IS IN A CLOSED POSITION, ONLY THEN CAN YOU SWITCH DIPSWITCH 3 ON. PRESS THE PROGRAMMING BUTTON ONCE THE GATE WILL BEGIN TO OPEN A LITTLE WAY AND STOP. AS SOON AS THE GATE STOPS, USING EITHER YOUR WATCH OR COUNTING THE NUMBER OF 1 SECOND FLASHES FROM THE RED STATUS LED, WAIT TILL THE TIME YOU REQUIRE THE GATE TO STAY OPEN HAS EXPIRED, PRESS THE PROGRAMME BUTTON ONCE AGAIN, THE GATE WILL NOW CLOSE. PROGRAMMING OF THE AUTO CLOSE TIMER IS NOW COMPLETE, SWITCH DIPSWITCH 3 OFF, WHEN THE GATE IS FULLY CLOSED AND ON THE LIMIT SWITCH. TEST BY PRESSING TRIGGER 1 OR TRIGGER 2. REPEAT PROCEDURE OF NECESSARY.

DIPSWITCH 4 PROGRAMME PEDESTRIAN OPENING THE DEFAULT FACTORY SETTING FOR THE PEDESTRIAN OPENING IS SET, THE GATE OPENS FOR A METRE AND STAYS OPEN FOR 8 SECONDS THEREAFTER CLOSES AGAIN. IF YOU WISH TO CHANGE THESE PARAMETERS, AS WAS THE ABOVE GET THE GATE INTO A FULLY CLOSED POSITION, SWITCH DIPSWITCH 4. NOW PRESS THE PROGRAMMING BUTTON ONCE, THE GATE WILL BEGIN TO OPEN, PRESS THE PROGRAMMING BUTTON AGAIN WHEN THE GATE HAS OPENED TO THE POSITION YOU REQUIRE FOR THE LENGTH THE GATE HAS TO OPEN FOR THE PEDESTRIAN FACILITY. AS SOON AS THE GATE STOPS, USING EITHER YOUR WATCH OR COUNTING THE NUMBER OF 1 SECOND FLASHES FROM THE RED LED, THIS WILL DETERMINE THE TIME YOU REQUIRE THE GATE TO STAY OPEN IN PEDESTRIAN MODE. PRESS THE PROGRAMME BUTTON ONCE AGAIN, THE GATE WILL NOW CLOSE. PROGRAMMING OF THE PEDESTRIAN OPENING IS NOW COMPLETE, SWITCH DIPSWITCH 4 OFF, WHEN THE GATE IS IN A FULLY CLOSED POSITION. TEST BY PRESSING PEDESTRIAN TRIGGER. REPEAT PROCEDURE IF NECESSARY.

DIPSWITCH 5 A. S. A. P. - FAST CLOSE: THIS FEATURE CAN BE USED IN DOMESTIC AND INDUSTRIAL APPLICATIONS WHEN A CLIENT REQUIRES THE GATE TO OPEN JUST ENOUGH FOR A VEHICLE TO GET THROUGH AND CLOSE THEREAFTER AS QUICKLY AS POSSIBLE. A. S. A. P. OR FAST CLOSE CAN ONLY BE USED IN CONJUNCTION WITH **YOUR SAFETY INFRA-RED BEAM**. THIS FACILITY WILL NOT WORK WITHOUT YOUR INFRA-RED BEAM. TO ENGAGE THIS FACILITY THE GATE MUST BE STOPPED IN A FULLY CLOSED POSITION ON THE CLOSED LIMIT SWITCH. NOW SWITCH DIPSWITCH 5 ON.

WHEN OPERATING THE GATE USING EITHER TRIGGER 1 OR TRIGGER 2 FROM A CLOSED POSITION, WHILST THE GATE IS OPENING, IF THE INFRA-RED BEAM BECOMES ACTIVE (TRIGGERED) VIA A PEDESTRIAN OR A VEHICLE THE GATE WILL IMMEDIATELY STOP. THE GATE WILL STAY IN THAT POSITION AS LONG AS THE INFRA-RED BEAM IS ACTIVE. WHEN THE INFRA-RED BEAM IS CLEARED THE GATE WILL BEGIN TO CLOSE 1 SECOND LATER. THIS IS A FIXED TIME AND CANNOT BE CHANGED.

IF THE GATE IS CLOSING AND THE INFRA-RED BEAM BECOMES ACTIVE AGAIN, THE GATE WILL REVERSE FOR A SPECIFIED TIME, NOT DISTANCE, AND WILL BEGIN TO CLOSE 1 SECOND LATER AFTER THE INFRA-RED BEAM IS CLEARED.

IF THE GATE IS CLOSING AND TRIGGER 1 OR TRIGGER 2 IS ACTIVATED, THE GATE WILL STOP AND REVERSE TO AN OPEN POSITION, IF THE INFRA-RED BEAM IS NOT ACTIVATED THE GATE WILL OPEN ALL THE WAY TO AN OPEN LIMIT AND STOP. IN THE OPEN POSITION THE GATE WILL WITHER WAIT FOR AN INFRA-RED BEAM SIGNAL BEFORE CLOSING OR IF THE AUTOMATIC CLOSING TIMER IS ON THE GATE WILL CLOSE AFTER THAT TIME HAS ELAPSED.

YOU CAN SET UP YOUR AUTO CLOSING TIMER FOR 60 SECONDS AND ACTIVATE FAST CLOSE. WHEN OPENING, THE GATE WILL OPEN AND STOP IN THE OPEN POSITION, IF NO ONE HAS GONE THROUGH THE GATE AND ACTIVATED THE INFRA-RED BEAMS IN THE 60 SECONDS AUTO CLOSE TIMER PERIOD, THE GATE WILL CLOSE ITSELF. IF DURING THE 60 SECONDS AUTO CLOSE TIME PERIOD, THE INFRA-RED BEAM IS ACTIVATED AND CLEARED, THE GATE WILL CLOSE 1 SECOND LATER. THIS GIVES YOU THE ABILITY TO COVER SITUATIONS WHERE THERE'S LONG DRIVEWAY, AND THE HOUSE OWNER DOESN'T HAVE TO WORRY ABOUT THE GATE CLOSING BEFORE HIS VISITOR HAS MANAGED TO GET OUT. CERTAINLY YOU WILL BE ABLE TO GIVE YOUR CUSTOMERS, WHATEVER THEY REQUEST.

DIPSWITCH 6 AUTO CLOSE TIMER ON ONLY WITH THE GATE IN A FULLY CLOSED POSITION ON A CLOSED LIMIT SWITCH CAN YOU SWITCH DIPSWITCH 6 ON. THE FACTORY SETTING FOR THE AUTO CLOSE TIMER IS 8 SECONDS, SHOULD YOU WISH TO CHANGE THIS, REFER TO DIPSWITCH 3 PROGRAMMING AUTO CLOSE TIMER. IF THE GATE IS ACTIVATED VIA TRIGGER 1 OR TRIGGER 2 AND STOPS IN ANY POSITION (HALF OPEN OR FULLY OPEN), AFTER THE PRE-SET OR PROGRAMMED AUTO CLOSE TIME THE GATE WILL CLOSE. THE GATE WILL REMAIN IN AN OPEN POSITION IF TRIGGER 2 OR INFRA-RED BEAM IS ACTIVE.

DIPSWITCH 7 TIMER OVERRIDE SHOULD YOUR CUSTOMER REQUIRE A FACILITY WHEREBY IF THEY SHOULD HAVE DELIVERIES AT ANY TIME AND REQUIRE A WAY OF OVERRIDING THE AUTOMATIC CLOSE TIMER DIPSWITCH 7 CAN BE ENGAGED. BY SWITCHING DIPSWITCH 7 WHEN THE GATE IS IN A FULLY CLOSED POSITION ON THE CLOSED LIMIT SWITCH, THE OVERRIDING OF THE TIMER CAN TAKE PLACE IF:

TRIGGER ONE IS HELD FOR FIVE SECONDS WHEN OPENING A GATE FROM A CLOSED LIMIT SWITCH POSITION. WHEN THE GATE REACHES THE FULLY OPEN POSITION THE TIMER WILL HAVE BEEN OVERRIDDEN AND THE GATE WILL NOT CLOSE AUTOMATICALLY UNTIL SUCH TIME, THAT TRIGGER ONE IS PRESSED ONCE AGAIN. THEREAFTER YOUR AUTO CLOSETIMER IS FULLY ENGAGED.

IT IS IMPERATIVE THAT YOU TEACH YOUR CUSTOMER, AND THAT YOUR CUSTOMER TEACHES EVERYONE WHO OPERATES THE GATE THAT, TRIGGER 1 CAN ONLY BE HELD FOR A MAXIMUM OF 1 SECOND WHILST TRIGGERING AND NOT LONGER, OTHERWISE PAST EXPERIENCE HAS SHOWN THAT THIS FACILITY CAN BECOME A NIGHTMARE TO THE INSTALLER.

DIPSWITCH 8 CRAWL DISTANCE BEFORE LIMIT SWITCH AFTER SET UP PROCEDURE HAS BEEN COMPLETED, THE GATE WILL SLOW DOWN TO A CRAWL DEPENDING ON DIPSWITCH 8 SETTING BETWEEN:

DIPSWITCH 8 OFF - 800 mm

DIPSWITCH 8 ON - 1300mm

THE IQ 23 VOLT CONTROLLER WILL THEN AFTER APPROXIMATELY 20 CYCLES ADJUST THE CRAWL SPEED SLOWDOWN TO WITHIN 100 TO 200mm BEFORE THE LIMIT SWITCH. THIS IS ALL DONE AUTOMATICALLY BY THE CONTROLLER ITSELF, AN INSTALLER DOES NOT HAVE TO WORRY ABOUT IT. THE CONTROLLER IS PROGRAMMED TO ADJUST ITSELF IN THE CASE WHERE THE BATTERY VOLTAGE DROPS LOW AND THEN RISES AGAIN, AND ALSO WHERE THERE IS GREATER FRICTION TO MOVE THE GATE (THE GATE DOESN'T ROLL EASILY ON THE TRACK).

IN THE CASE WHERE THE INSTALLATION OF THE GATE IS ON A TRACK WHICH DOES NOT RUN LEVEL (THE GATE IS EITHER OPENING OR CLOSING ON A GRADIENT), WE RECOMMEND SWITCHING DIPSWITCH 8 ON, ONLY WHEN THE GATE IS IN A FULLY CLOSED POSITION AND ON THE CLOSED LIMIT SWITCH. BY DOING THIS THE IQ24 CONTROLLER HAS THE ABILITY TO LEARN, OVERCOME THE GRADIENT AND PREVENT THE GATE OVERRIDING THE LIMIT SWITCH.

IMPORTANT: WHEN A SPEEDO WITH A POWERPACK IS INSTALLED, ENSURE THAT DIPSWITCH 8 IS ON WHEN PROGRAMMING, COMMENCE – AFTER PROGRAMMING, LEAVE DIPSWITCH 8 ON – IF NOT THE GEARBOX WILL GET DAMAGED WHEN THE GATE RIDES INTO THE END POLE. THE LARGER SLOW DOWN IS NEEDED TO STOP THE GATE IN TIME. **A POWERPACK INCREASES THE FORCE AND SPEED AND THE SPEEDO NEEDS TO SLOWDOWN SOONER**

ERROR STATUS LED LIGHT DISPLAY

THE RED STATUS LED SITUATED AT THE BOTTOM OF THE IQ24 VOLT CONTROLLER NEXT TO THE 1 AMP FUSE IS CONNECTED TO THE LED RELAY OUTPUT. AN ERROR CONDITION ON THE IQ24 V PCB, IS DISPLAYED BY THE RED STATUS LED.

DURING OPERATION OF THE GATE SHOULD AN ERROR OCCUR, THE STATUS LED AND RELAY WILL DISPLAY ERROR. SHOULD MORE THAN ONE ERROR OCCUR AT THE SAME TIME, A VISIBLE DELAY BETWEEN ERRORS IS NOTICEABLE. THE ERRORS ARE AS FOLLOWS:

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| 1 FLASH | - | CURRENT OVERLOAD OBSTRUCTION LEVEL REACHED. |
| 2 FLASHES | - | INCORRECT DIPSWITCH SETTINGS. |
| 3 FLASHES | - | MAXIMUM GATE RUN FAILURE. |
| 4 FLASHES | - | MAXIMUM STEP CURRENT REACHED. |
| 5 FLASHES | - | BATTERY VOLTAGE LOW (10.5 VOLTS THRESHOLD). |
| 6 FLASHES | - | OPTICAL INFRA-RED COUNTER ERROR. |
| 7 FLASHES | - | GATE MANUALLY MOVED OFF LIMIT, |

1 FLASH THIS ERROR WILL OCCUR EVERY TIME THE GATE MOTOR TRIPS ITS CURRENT LIMIT LEVEL, THIS WILL OCCUR MAINLY WHEN THE GATE ENCOUNTERS AN OBSTACLE OR IT MAY BE AT ANY TIME WHEN THE FRICTION OF THE SLIDING GATE INCREASES BEYOND THE ORIGINAL SET UP LEVELS.

2 FLASHES THIS ERROR WILL OCCUR WHEN ONE OF THE DIPSWITCHES HAS NOT BEEN SWITCHED ON OR OFF CORRECTLY, PLEASE CHECK DIPSWITCH SETTINGS AND CORRECT.

3 FLASHES THIS ERROR WILL OCCUR IF THE MOTOR BEGINS TO RUN FOR THE FULL DISTANCE OF THE GATE, BUT DOES NOT SEE AN OPEN OR CLOSED LIMIT SWITCH, HENCE MAXIMUM GATE RUN FAILURE CONDITION. THE PROBLEM MAY BE THAT THE MOTOR WAS DISENGAGED BEFORE OPERATING OR EITHER ONE OF THE LIMIT SWITCHES ARE FAULTY OR THE LENGTH OF THE GATE HAS CHANGED, WHICH COULD MEAN YOU JUST INSERTED THIS IQ24 CONTROLLER INTO ANOTHER GATE MOTOR WITHOUT DOING SET UP (IF THIS IS THE CASE, REDO SET UP NOW DIPSWITCH 2)

4 FLASHES THIS ERROR SEQUENCE WORKS IN CONJUNCTION WITH **1 FLASH** ABOVE. IF THE GATE CONTINUOUSLY ENCOUNTERS OBSTRUCTIONS OR IF THE FRICTION OF THE GATE INCREASES (CAUSED BY OBSTACLES PLACED IN THE PATH OF THE GATE OR GATE WHEELS MALFUNCTIONING, OR OTHERS!!), THE CONTROLLER AUTOMATICALLY, ADJUSTS THE FORCE OF THE MOTOR TO OVERCOME THE OBSTRUCTION OR FRICTION. THIS IS DONE IN SEVERAL STEPS, WITH EACH STEP INCREASING THE MOTOR POWER FORCE BY 2 KILOGRAMS AT A TIME. IF THE NEW INCREASED GATE FORCE, MANAGES TO MOVE THROUGH THE OBSTRUCTION THE CONTROLLER WILL NOW ADJUST THE CURRENT LIMIT TO THIS LEVEL!!!. IF HOWEVER THE OBSTRUCTION IS GREATER THAN THE 7th ADJUSTMENT, A 4 FLASH ERROR SEQUENCE WILL BE SHOWN.

IF THE OBSTRUCTION WAS CAUSED BY AN OBJECT IN THE PATH OF THE GATE, AFTER REMOVING THE OBJECT THE GATE WILL ADJUST ITSELF BACK DOWN TO ITS ORIGINAL SET UP CURRENT LIMIT IF IT HAS 14 CLEAR RUNS. IF HOWEVER THE OBSTRUCTION WAS CAUSED BY FRICTION (WHICH COULD BE MANY OF THINGS) THE GATE WILL NEED TO BE REPAIRED, OR IF THE LEVEL OF FORCE NEEDED TO MOVE THE GATE WAS STILL BELOW 40 KILOGRAM LEVEL, BY REDOING THE SET UP PROCEDURE (DIPSWITCH 2) THE PROBLEM CAN BE TEMPORARY SOLVED.

5 FLASHES THIS ERROR WILL OCCUR IF THE BATTERY VOLTAGE DROPS TO BELOW 10.5 VOLTS WHICH CAN BE ATTRIBUTED TO THE FOLLOWING FACTORS, THE 220 VOLTS AC POWER TO THE BATTERY CHARGER IS SWITCHED OFF OWING TO THE CIRCUIT BREAKER TRIPPING OR IF THE GATE RUNS FAR TOO MANY TIMES IN EXCESS OF THE BATTERIES CAPABILITIES.

IF THE BATTERY VOLTAGE DROPS BELOW 10,7 VOLTS AS THE MOTOR STARTS UP, OR IF THE BATTERY VOLTAGE DROPS BELOW 10.5 VOLTS WITH THE GATE IN A STATIONARY, THE 5 FLASH ERROR WILL BE DISPLAYED.

THE IQ24V CONTROLLER IS PROGRAMMED TO CLOSE THE GATE, ALTHOUGH IT MEASURES THE BATTERIES BEING FLAT. IF THE BATTERY VOLTAGE DOES NOT RISE AGAIN, AFTER REACHING THE CLOSED POSITION TO 11.7 VOLTS THE AUXILIARY RELAY WILL BE SWITCHED OFF, TO SAVE BATTERY POWER. DURING THIS PERIOD NO ERROR MESSAGES WILL BE DISPLAYED, AS THIS CONSUMES LARGE AMOUNTS OF POWER AND WILL DISCHARGE THE BATTERIES EVEN MORE.

IF YOUR CUSTOMER REPORTS THAT THE MOTOR DOES NOT DO ANYTHING, ASK THEM TO CHECK THAT THE 220VOLTS AC POWER TO THE MOTOR IS SWITCHED ON. IF THIS IS DONE, WITHIN MINUTES THE BATTERY VOLTAGE SHOULD BEGIN TO RISE BUT NOT SUFFICIENT ENOUGH TO RUN THE MOTOR, YET SUFFICIENT ENOUGH TO INDICATE THAT THE BATTERY IS CHARGING. AFTER +- 30 MINUTES THE BATTERIES SHOULD HAVE SUFFICIENT POWER TO RUN THE GATES A FEW TIMES.

6 FLASHES THIS ERROR WILL OCCUR IF THE OPTICAL INFRA-RED SENSOR DETECTOR COUNTER LOCATED ON TOP OF THE MOTOR, DETERMINING AT ALL TIMES THE DISTANCE THE GATE HAS TRAVELLED FROM THE CLOSED LIMIT SWITCH TO THE OPEN LIMIT SWITCH, FAILS TO DETECT 20 COUNTS IN ONE SECOND. THE CAUSE COULD BE ONE OF THE FOLLOWING:

1. THE GATE WHEN TRYING TO OPEN ENCOUNTERS AN OBSTRUCTION WITHIN THE FIRST TO 10mm (CAUSED BY THE GATE BEING PADLOCKED).
2. THE GATE MOTOR RUNNING AT CRAWL SPEED ENCOUNTERS AN OBSTRUCTION.
3. THE OPTICAL INFRA-RED SENSOR, IT'S CABLE OR FAILURE TO PLUG THE SENSOR INTO THE IQ24 VOLT CONTROLLER.

7 FLASHES THIS ERROR WILL OCCUR IF THE GATE MOTOR IS PLACED ON MANUAL OVERRIDE AND MOVED OFF STOPPER. WHEN GATE MOVES BACK AND READS LIMIT ERROR, FLASH WILL STOP.