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一、产品概述

- 一体化球形摄像机是采用当今最新的科技成果、最精尖的制造工艺,综合多年的 宝贵经验研制成功的,配置了自带变焦镜头的高性能数字信号处理(DSP)摄像机, 集内置云台和数字解码器于一体,代表新一代高技术监控8产品的发展潮流。它采用 全数码控制,编程灵活;传动系统设计精巧简单,可作任意迅速定位及连续追踪扫描,实现了真正意义上的全方位、无盲点监视;可以自动适应环境明暗和目标远近的变化;可靠性高,可长期稳定运行,无须维护。
- 一体化球形摄像机的种种特性使之适用于各行各业大面积、活动目标的监视。如 智能大厦监控、银行保安、城市道路监控、电力部门、机场、车站监控等。
- 一体化球形摄像机通过RS-485控制总线。支持P型和D型协议,可通过DIP拨码开 关选择。连接RS-485控制设备,如快球键盘、硬盘录像机等。
- 一体化球形摄像机提供开放的通讯协议,目前可支持多种流行的系统平台。在与 其他系统匹配时,各系统连接和使用方法不尽相同,这里不加以说明,请与相关的 系统制造商联系以获取必要的信息。

二、性能特点

- 采用功能完善的高性能数字DSP设计,性能稳定
- 内部设置数据断电后不丢失
- 采用RS-485控制
- 128个预置位随意储存,定位准确
- 6条巡航线路, 第1条为前8个预置点之间扫描, 其余5条可在16个预置点之间扫描
- 可设置上电动作
- 水平360°连续旋转,无监视盲区
- 垂直方向实现180°自动翻转连续监视
- 自动光圈、自动聚焦、自动白平衡
- 夜视功能,根据环境光线的变化自动开启红外灯并转换CCD照度
- 转旋速度根据镜头变倍倍数自动调整
- 背光补偿功能,在有强光源的环境中可以看到所有的物体
- 精密电机驱动,运行平稳、控制灵敏
- 一体化设计,结构紧凑,可靠性高
- 通过红外灯主动补光,实现白天黑夜24小时实时监控。

三、功能说明

以下简单介绍了控制键盘配套一体化球形摄像机使用的主要功能,并介绍了功能实现的通用原则,未涉及具体的操作方法。

1. 目标跟踪

用户可以使用控制键盘上的摇杆控制摄像机的上下左右转动,可以用来追踪移动目标或转移视界,另外可通过调整焦距来改变视角的大小或目标图像的大小。在缺省的自动聚焦、自动光圈的状态下,随着摄像机的转动,镜头会自动根据景物变化做出迅速调节,即刻得到清晰图像。

2. 自动翻转

操作者将镜头转至底部(垂直)后若仍按住摇杆,此时镜头自动水平旋转 180° 后随即向上翻转90°, 可直接观看到背面的景物,从而实现纵向180°的全程连续监视。

3. 焦距/转速自动匹配技术

手动调节时,对焦距较长的情况,球机高速的反应使得轻微触动摇杆能使画面迅速移动,从而造成画面丢失。基于人性化设计,智能球根据焦距的远近自动调整摄像机水平和垂直转速,使手动跟踪目标操作更为简便易行。

4. 设置及调用预置位

预置功能是球机能将当前状态下云台的水平角度、倾斜角度和摄像机镜头焦距等位置参数储存到存储器中,操作者可方便快捷地通过控制键盘等设备储存及调出预置位,将云台和摄像头调整至该位置,本智能球可支持128个预置位。

5. 夜视功能(红外灯开启)

带感应红外功能的摄像机,在自动彩色/黑白转换模式下,会根据环境光线的变化自动转换CCD照度,并且开打红外灯,红外灯开启后画面转为黑白模式。

用户可以通过键盘设置为手动红外灯开启/关闭,此时摄像机将不能依据环境光 线做相应的转换,只能通过用户手动的选择彩色画面显示或黑白画面显示,彩色时 红外灯关闭,黑白时红外灯开启。

6. 自动背光补偿

当背光补偿功能打开时,摄像机镜头在强光背景下可自动对较黑暗的目标进行亮度补偿,对光亮的背景进行采光调整,避免因背景亮度过高而造成整个画面一团光亮,目标却因黑暗而不可辨别,从而获得清晰的图像。

注意:在自动光圈模式下,才可以实现背光补偿的功能。出厂默认设置为关闭。

7. 镜头控制

焦距控制

用户可以通过键盘或矩阵主机调整焦距的远近,得到所需的全景画面,或者是 特写画面。

聚焦控制

系统默认自动聚焦、变焦时,摄像机镜头会以物景画面的中心自动对焦,保持 清晰图像:用户也可以手动聚焦,达到希望的图像效果。

当处在手动聚焦状态时,操作镜头变倍或移动位置即会自动聚焦。

摄像机镜头在下列情况下将不能对所摄目标自动聚焦:

- ①目标不在画面的中心:
- ②目标同时在远和近的地方:
- ③目标为强光物体。如氖灯、聚光灯等发光物体:
- ④目标在附有水珠或灰尘的玻璃后面:
- ⑤目标移动太快:
- ⑥大面积的目标,如墙壁:
- ⑦目标太黑暗或本来就模糊。

注意:在自动光圈模式下,键盘的光圈调节按键无作用。在手动光圈模式时,操作者才可以改变光圈的大小。要恢复自动光圈模式,需发出控制命令。

8. 自动扫描功能

自动扫描是智能球形摄像机内置的功能,可预先设置左右两个位置,只需一个外部命令就可让球机自动地在左右两个位置内以一恒定速度往复不停地运动,实现无人操作自动巡视。

9. 看守位功能

操作者在一段时间内没有操作时,智能球自动回到使用者预先设置的某一重要位置。

10. 180°水平旋转功能

智能球在任意角度时键入控制命令后实现180°水平旋转。

11. 画面捕获(限带画面捕获功能的摄像机)

操作者可以随意捕获(冻结)画面,及时获取重要信息。

- 12. 画面180°翻转(限带画面翻转功能的摄像机)
- 13. 巡航扫描功能:

6条巡航线路, 第1条固定为前8个预置点, 其余5条线路第条可设置16个预置点。

14. 上电动作:

可设置球机的上电初始动作, 共4种状态:

- A. 无动作
- B. 开机自动走到看守位
- C. 水平360度连续旋转
- D. 在左右限位间连续扫描

四、一般操作

由于不同系统平台的具体操作方法不尽相同,一般应依系统制造商的操作手册为准,某些情况下会有某些特殊要求和操作方法,请与经销商联系获取必要的信息。

通电自检

智能球通电后,摄像机先进行水平和垂直方向运动,镜头拉伸动作,同时红外 灯全亮,自检结束运动停止,红外灯熄灭。通过自检确保球机正常运行。

控制摄像机转动

在选择了一个摄像机后,可以通过键盘上的摇杆手动控制智能球的上下左右的运动。摇杆的运动控制着摄像机的动作,当摇杆向右运动时,摄像机也向右运动。同样地,当摇杆向左运动时摄像机也向左运动。摇杆上下方向运动时,摄像机也跟着做垂直方向的相应动作。按对角线方向运动摇杆,可以让摄像机同时做水平和垂直方向运动,并且运动方向与摇杆一致。

本系列智能球还可以根据摇杆的偏离角度对转速进行调整,偏离中心角度越大,转速越快,使手动跟踪目标更为简便。

预置点的设置

按下列步骤设定预置点:

- 1. 操作摇杆、变倍按钮、聚焦按钮和光圈控制键调节摄像机画面。
- 2. 输入指定的预置点号,按 PRESET 键,保存预置场景参数。

调用预置点

按 CALL 键,输入调看的预置点号按ENTER键

特写镜头和广角镜头

变倍调节摄像机镜头拉近或推远,将景物放大或缩小以获得特写和广角效果。 按住特写TELE键后摄像机景物被拉近,画面中的物体被放大。按住广角WIDE键后摄 像机景物被推远,画面中的物体被缩小。

如果你按下并快速的放开变倍按键,监视器上的摄像机画面只作微小的改变。 摄像机变倍的变化量取决于按住变倍按键的时间的长短。

镜头聚焦控制

聚焦是调节摄像机画面中一个物体或场景的清晰程度的过程。按住聚焦远FAR键后,距离远的物体或场景变清晰起来,近处的物体变得模糊。按住聚焦近NEAR键后,距离近的物体或场景变清晰起来,远处的场景变得模糊。反复调节聚焦按键直到监视器画面中的物体由模糊变为清晰。像变倍按键一样,摄像机聚焦的变化量取决于按住聚焦按键的时间的长短。

打开/关闭背光补偿功能

打开摄像机的背光补偿功能,在键盘上输入数字66,按CALL键; 关闭摄像机的背光补偿功能,在键盘上输入数字65,按CALL键;

夜视功能

自动转换模式,在键盘上输入数字69,然后按 CALL 键。自动转换模式下球机根据环境亮度控制红外灯:

手动转换模式,在键盘上输入数字70,然后按 CALL 键。手动转换模式下,调用72号预置点开启红外灯,调用71号关闭红外灯;

注意: 在此项设置完成后, 应将智能球重新上电才能使设置起作用。

打开/关闭摄像机数字变倍功能

打开摄像机的数字变倍功能,在键盘上输入数字68,按CALL键; 关闭摄像机的数字变倍功能,在键盘上输入数字67,按CALL键;

打开/关闭看守位功能

设置好62号预置点后,执行调用76号预置点命令即可激活看守位功能,不对智能球进行任何操作,约5分钟后智能球自动回到预先设置的62号预置点。

关闭摄像机看守位功能,执行调用75号预置点命令。

打开/关闭自动扫描功能

设置63号预置点作为左限位,再设置64号预置点作为球机运行的右限位。然后执行调用99号预置点命令,即打开自动扫描功能,球机即可在设定的左右限位内往复不停地运动。在运行限位处会停留3秒,再向反方向运行。

关闭摄像机自动扫描功能,执行调用96号预置点命令。

180°水平旋转功能 调用93号预置

巡航扫描功能:

第1路巡航扫描设置过程:

- 1:设置好需要的预置点(仅限1-8号)
- 2: 调用(CALL)55号预置点命令, 球机会在1-8号预置点之间巡航
- 注: 仅在已经设置的预置点间扫描, 若某个预置点没有设置,则跳过。

第2-5条巡航线路,每条线路可设置16个预置点。第55至60号预置位命令依次用于设置和调用第1到6号巡航线路。按如下步骤设置第一条巡航线路:

- 1. 执行设置55号预置点命令,表示进入设置状态
- 2. 调用你想设置到线路中的预置点,如1号、3号等

- 3. 等待你所想要停留的时间(到下一个点之间的停留时间),不要做任何操作
- 4. 调用下一个你想设置到线路中的预置点;如还有预置点要加入到线路中,则循环执行3、4两个步骤,否则执行第5步,结束设置。
- 5. 执行除调用预置点命令以外的任何命令,如上下左右运动命令,或执行设置55号预置点命令,表示结束设置状态.

上电动作:

设置球机的上电初始动作, 共4种状态:

- A. 无动作
- B. 开机自动走到看守位(62号预置点)
- C. 水平360度连续旋转
- D. 在左右限位(63.64号预置点)间连续扫描

通过执行调用91号预置点命令可在4种状态中循环切换,您可以执行调用94号预置位对设备进行重启动,观察重启动后设备上电动作,用于验证当前的设置状态。

注: 在执行巡航扫描之前必须先设置好相应的预置点号。

五、调用\设置预置点对照表

调用预置点	功能
51	关闭雨刷功能 (仅限B型雨刷红外球)
55	启动1号巡航线
56	启动2号巡航线
57	启动3号巡航线
58	启动4号巡航线
59	启动5号巡航线
60	启动6号巡航线
62	看守位
63	左限位
64	右限位
65	关闭背光补偿
66	打开背光补偿
67	关闭数字变倍
68	打开数字变倍

调用预置点	功能
6 9	自动彩转黑模式
7 0	手动彩转黑模式
7 1	手动彩转黑模式下转为彩色
7 2	手动彩转黑模式下转为黑白
7 5	关闭看守位
7 6	打开看守位
7 7	切换红外灯状态
9 0	删除所有预置点
9 1	设置上电动作功能
9 2	水平360度连续扫描
9 3	水平旋转180度
9 4	设备重启
9 6	停止自动扫描
9 9	自动扫描

设置预置点	功	能
51		雨刷功能 型雨刷红外球)
56	设置25	号巡航线
57	设置3号	号巡航线

设置预置点	功能
58	设置4号巡航线
59	设置5号巡航线
60	设置6号巡航线

备注:调用77号预置点可切换红外灯状态(D型红外球除外),初厂默认为根据摄像机的 当前变倍控制红外灯.若调用77号预置点,则远近光灯全亮,再次调用时又恢复出厂默 认状态.

六、重要的安全和警告信息

在开始安装和使用之前,请先阅读以下的警告信息:

- 1. 应该由经过培训的有资格的服务人员进行安装和维护,并遵守当地的电器安装规定。
- 2. 设计制造为室内使用的球机,不能暴露安装于可以淋到雨或非常潮湿的地方。
- 3. 在重新安装或维修后,需测量电路部分与外壳之间的电阻,检查是否绝缘良好。应保证电路部分与外壳不短路。
 - 4. 在安装中用于支撑重量的材料,应能承受四倍于球机的重量。

产品和手册中有下列标记:



这个符号表示产品的某些部分存在有触电危险的电压。



CAUTION:
RISK OF ELECTRIC SHOCK
DO NOT OPEN

这个符号表示这里需要根据重要的指示进行操作或维护。

出厂状态

光	卷	控	制	自	动	
背	光	补	偿	关	闭	
数	字	变	倍	打	开	
夜	视	功	能	自	动	
看	守(立 功	能	关	闭	
自	动 扫	描功	能	关	闭	
180	0°水平	旋转耳	力能	关	闭	
字	符显力	示(英	文)	关	闭	
自	动 巡	视功	能	关	闭	

七、球机安装

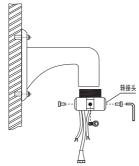
壁挂式球机可用于室内、室外环境的硬质墙壁结构

- (1) 墙壁的厚度应足够安装膨胀螺钉
- (2) 墙壁至少能承受4倍球机的重量

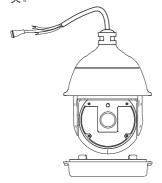
安装外罩壳:

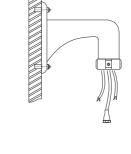
注意:如果是室外球机安装,应确定球机的密封性能,并避免接近高温或潮湿。

(1)将布线从支架引出,再把支架固定在墙壁上。然后将转接头缠好生料带后,拧入支架。转接头上有拧入3个内六角螺丝(注意不要拧到底,以可以让球机的连接头插入为准)。___



② 拧松红外球两侧的两颗一字螺钉, 打开装饰圈, 可见球机底盘有二排拨码开关。

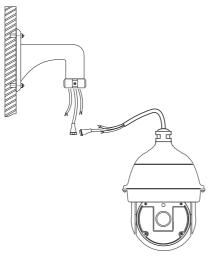




(3)设置球机底部的DIP开关SW1和SW2,用于确定球机的控制协议和球机地址(请参考开关设置表)。然后固定好装饰圈。

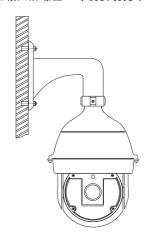


(4)将视频线、电源线和控制信号线, 与球机上对应的视频线、电源线和控制信号线接口连接。

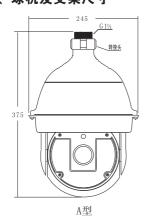


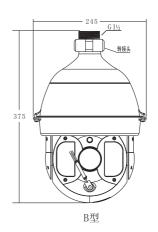
注意:以上各连接工作,必须由有资格的专业技术人员或系统安装人员在符合于当地规定的条件下来完成,电源接线请按设备连接线上标注的电压接线,切不可接错。

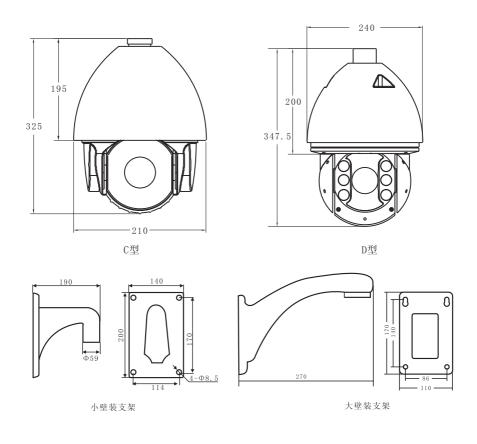
(5)将球机套入支架,先拧紧在接连头圆弧切面处的一颗内六角螺丝,再拧紧其它内三颗六解螺丝。球机安装完毕。

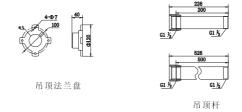


八、球机及支架尺寸









注:图中所示尺寸单位为mm,G1½为圆柱管螺纹连接

九、维护

1、小心运输

运输及保管过程中要防止重压、剧烈振动和浸泡等对产品造成的损坏。本产品必须采用一体包装形式运输,无论工程商发货还是返回工厂维修,若因采用装配后整体运输方式而造成的任何产品损坏,不属保修范围。

2、小心安装

球机透明罩壳属于高等级光学产品,避免用手直接触摸,以免球罩划伤,影响图像质量。在未 完成全部安

装工作前,请勿通电。

3、不要拆卸

本产品内部并无用户可自行维修的部件。有关维修工作,必须由我公司授权的维修人员进行。

4、请按工作环境要求使用本产品

室内球机使用温度为 0□C至 +40□C. 湿度小于90%: 交流电源: 24V/1.25A 50Hz:

室外球机使用温度为 -40□C至 +50□C, 湿度小于90%; 交流电源: 24V/3A 50Hz;

- 5、不可将室内球机安装在室外环境。
- 6、不要将摄像机瞄准强光物体

无论是使用中或非使用中,绝不可以使其瞄准太阳或其它的光亮物体。否则可能造成摄像机 CCD永久受损。

7、电气安全、防雷击、防浪涌

在本产品安装使用中必须严格遵守各项电气安全标准,球机和信号传输线必须与高压设备或高压电缆之间保持至少50米的距离。如果限于环境无法达到上述要求,请采用钢管护套将信号传输线屏蔽,并对钢管采用一点接地;

本产品采用TVS板级防雷击技术,可以有效防止1500W以下功率的雷击、浪涌等各类脉冲信号对设备造成的损坏。

8、透明罩壳清洁

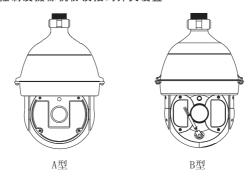
为了保证球机成像清晰,球机透明罩壳应该定期清洁。清洁时务必小心,只能用手拿住透明罩壳外环,避免直接接触透明罩壳,手指膜的酸性汗迹可能会腐蚀透明罩壳的表面镀层,硬物刮伤透明罩壳将可能导致球机成像模糊,影响图像质量。请使用足够柔软的干布或其他替代品擦拭内外表面。如污垢严重,可以使用中性清洁剂,任何高级家私清洁产品都可以用于透明罩壳清洁。

9、提示

保存完整的机箱条形码以便得到快捷的售后服务。

十、开关设置

1. A-B型红外球控制及摄像机协议拨码开关设置



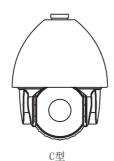
表A.SW1 A-B型红外球控制协议的设置

10 Hul 77			开	关	设	置		
控制码	1	2	3	4	5	6	7	8
D型2400B	ON	0FF	0FF	0FF	×	×	×	×
P型2400B	0FF	ON	0FF	0FF	×	×	×	×
P型4800B	ON	ON	0FF	0FF	×	×	×	×
P型9600B	0FF	0FF	ON	0FF	×	×	×	×
D型4800B	ON	0FF	ON	0FF	×	×	×	×
D型9600B	0FF	ON	ON	0FF	×	×	×	×

表B. SW1 A-B型红外球摄像机协议的设置

177.45.15			开	关	设	重		
摄像机	1	2	3	4	5	6	7	8
索尼、日立、光影	×	×	×	×	0FF	0FF	0FF	×
CNB 22倍	×	×	×	×	ON	0FF	0FF	×
CNB 23倍	×	×	×	×	0FF	ON	0FF	×
CNB 27倍	×	×	×	×	ON	ON	0FF	×
为先 老LG	×	×	×	×	0FF	0FF	ON	×
新LG(LM927/923)	×	×	×	×	0FF	ON	ON	×
联数、国产索尼	×	×	×	×	ON	ON	ON	×

2. C型红外球控制及摄像机协议拨码开关设置



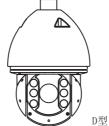
表C. SW1 C型红外球控制协议的设置

14447			开	关	设	置		
控制码	1	2	3	4	5	6	7	8
D型2400B	ON	0FF	0FF	×	×	×	×	×
P型2400B	0FF	ON	0FF	×	×	×	×	×
P型4800B	ON	ON	0FF	×	×	×	×	×
P型9600B	0FF	0FF	ON	×	×	×	×	×
D型4800B	ON	0FF	ON	×	×	×	×	×
D型9600B	0FF	ON	ON	×	×	×	×	×
三星9600B	ON	ON	ON	×	×	×	×	×

表D. SW1 C型红外球摄像机协议的设置

177.6			开	关	设	I		
摄像机	1	2	3	4	5	6	7	8
索尼、日立、光影	×	×	×	0FF	0FF	0FF	×	×
CNB 22倍	×	×	×	ON	0FF	0FF	×	×
CNB 23倍	×	×	×	0FF	ON	0FF	×	×
CNB 27倍	×	×	×	ON	ON	0FF	×	×
为先 老LG	×	×	×	0FF	0FF	ON	×	×
新LG(LM927/923)	×	×	×	0FF	ON	ON	×	×
联数、国产索尼	×	×	×	ON	ON	ON	×	×

3. D型红外球控制及摄像机协议拨码开关设置



- 1、SW1的第1-7拨球机地址, P型控制协议和D型控制协议下, 与A-C型红外球一 致,但地址只支持1-127。
- 2、SW1的第8-10拨控制协议

表E. SW1 控制协议的设置

1수 4세 77			开	关	设	置	
控制码	8	9	10				
D型2400B	ON	0FF	0FF				
P型2400B	0FF	ON	0FF				
P <u>型</u> 4800B	ON	ON	0FF				
P型9600B	0FF	0FF	ON				
D型4800B	ON	0FF	ON				
D型9600B	0FF	ON	ON				

表F. SW3 摄像机协议的设置

摄像机码的设置(位于摄像机附近主板上)

			开	关	设	=	
摄像机	1	2	3				
索尼、光影	0FF	0FF	0FF				
CNB 22倍	ON	0FF	0FF				
CNB 23倍	0FF	ON	0FF				
CNB 27倍	ON	ON	0FF				
为先 LG	0FF	0FF	ON				
暂无	ON	0FF	ON				
暂无	0FF	ON	ON				
国产索尼\中佳	ON	ON	ON				

4. 地址码设置

表G.SW2 P型控制码地址设置 地址1-66

球机				开关	设置					球机				开关	设置			
地址	1	2	3	4	5	6	7	8		地址	1	2	3	4	5	6	7	8
1	OFF		34	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF							
2	ON	OFF		35	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF						
3	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF		36	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
4	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF		37	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
5	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF		38	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
6	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF		39	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
7	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF		40	ON	ON	ON	OFF	OFF	ON	OFF	OFF
8	ON	ON	ON	OFF	OFF	OFF	OFF	OFF		41	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
9	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF		42	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
10	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF		43	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
11	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF		44	ON	ON	OFF	ON	OFF	ON	OFF	OFF
12	ON	ON	OFF	ON	OFF	OFF	OFF	OFF		45	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
13	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF		46	ON	OFF	ON	ON	OFF	ON	OFF	OFF
14	ON	OFF	ON	ON	OFF	OFF	OFF	OFF		47	OFF	ON	ON	ON	OFF	ON	OFF	OFF
15	OFF	ON	ON	ON	OFF	OFF	OFF	OFF		48	ON	ON	ON	ON	OFF	ON	OFF	OFF
16	ON	ON	ON	ON	OFF	OFF	OFF	OFF		49	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
17	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF		50	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
18	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF		51	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
19	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF		52	ON	ON	OFF	OFF	ON	ON	OFF	OFF
20	ON	ON	OFF	OFF	ON	OFF	OFF	OFF		53	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
21	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF		54	ON	OFF	ON	OFF	ON	ON	OFF	OFF
22	ON	OFF	ON	OFF	ON	OFF	OFF	OFF		55	OFF	ON	ON	OFF	ON	ON	OFF	OFF
23	OFF	ON	ON	OFF	ON	OFF	OFF	OFF		56	ON	ON	ON	OFF	ON	ON	OFF	OFF
24	ON	ON	ON	OFF	ON	OFF	OFF	OFF		57	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
25	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF		58	ON	OFF	OFF	ON	ON	ON	OFF	OFF
26	ON	OFF	OFF	ON	ON	OFF	OFF	OFF		59	OFF	ON	OFF	ON	ON	ON	OFF	OFF
27	OFF	ON	OFF	ON	ON	OFF	OFF	OFF		60	ON	ON	OFF	ON	ON	ON	OFF	OFF
28	ON	ON	OFF	ON	ON	OFF	OFF	OFF		61	OFF	OFF	ON	ON	ON	ON	OFF	OFF
29	OFF	OFF	ON	ON	ON	OFF	OFF	OFF		62	ON	OFF	ON	ON	ON	ON	OFF	OFF
30	ON	OFF	ON	ON	ON	OFF	OFF	OFF		63	OFF	ON	ON	ON	ON	ON	OFF	OFF
31	OFF	ON	ON	ON	ON	OFF	OFF	OFF		64	ON	ON	ON	ON	ON	ON	OFF	OFF
32	ON	ON	ON	ON	ON	OFF	OFF	OFF		65	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
33	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	_	66	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF

表G.SW2 P型控制码地址设置 地址67-132

球机				开关	设置			PILO?	球机				开关	设置			
地址	1	2	3	4	5	6	7	8	地址	1	2	3	4	5	6	7	8
67	OFF	OΝ	OFF	OFF	OFF	OFF	ON	OFF	100	ON	ON	OFF	OFF	OFF	ON	ON	OFF
68	ΟN	OΝ	OFF	OFF	ŒF	OFF	ON	OFF	101	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
69	OFF	OFF	ON	OFF	ŒF	OFF	ON	OFF	102	ON	OFF	ON	OFF	OFF	ON	ON	OFF
70	QΝ	OFF	ON	OFF	OFF	OFF	ON	OFF	103	OFF	ON	ON	OFF	OFF	ON	ON	OFF
71	OFF	OΝ	ON	OFF	OFF	OFF	ON	OFF	104	ON	ON	ON	OFF	OFF	ON	ON	OFF
72	OΝ	OΝ	ON	OFF	OFF	OFF	ON	OFF	105	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
73	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	106	ON	OFF	OFF	ΟN	OFF	ON	ON	OFF
74	OΝ	OFF	OFF	ON	OFF	OFF	ON	OFF	107	OFF	ON	OFF	ON	OFF	ON	ON	OFF
75	OFF	OΝ	OFF	ON	OFF	OFF	ON	OFF	108	ON	ON	OFF	ON	OFF	ON	ON	OFF
76	ΩN	ΟN	OFF	ON	OFF	OFF	ON	OFF	109	OFF	OFF	ON	ON	OFF	ON	ON	OFF
77	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	110	ON	OFF	ON	ON	OFF	ON	ON	OFF
78	OΝ	OFF	ON	ON	OFF	OFF	ON	OFF	111	OFF	ON	ON	OΝ	OFF	ON	ON	OFF
79	OFF	OΝ	ON	ON	OFF	OFF	ON	OFF	112	ON	ON	ON	OΝ	OFF	ON	ON	OFF
80	αN	OΝ	ON	ON	OFF	OFF	ON	OFF	113	OFF	OFF	OFF	OFF	OΝ	ON	ON	OFF
81	OFF	OFF	OFF	OFF	OΝ	OFF	ON	OFF	114	ON	OFF	OFF	OFF	OΝ	ON	ON	OFF
82	OΝ	OFF	OFF	OFF	OΝ	OFF	ON	OFF	115	OFF	ON	OFF	OFF	OΝ	ON	ON	OFF
83	OFF	OΝ	OFF	OFF	ON	OFF	ON	OFF	116	ON	ON	OFF	OFF	OΝ	ON	ON	OFF
84	OΝ	OΝ	OFF	OFF	OΝ	OFF	ON	OFF	117	OFF	OFF	ON	OFF	OΝ	ON	ON	OFF
85	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	118	ON	OFF	ON	OFF	ON	ON	ON	OFF
86	OΝ	OFF	ON	OFF	ON	OFF	ON	OFF	119	OFF	ON	ON	OFF	ON	ON	ON	OFF
87	OFF	OΝ	ON	OFF	OΝ	OFF	ON	OFF	120	ON	ON	ON	OFF	ON	ON	ON	OFF
88	αN	OΝ	ON	OFF	OΝ	OFF	ON	OFF	121	OFF	OFF	OFF	ΟN	OΝ	ON	ON	OFF
89	OFF	OFF	OFF	ON	OΝ	OFF	ON	OFF	122	ON	OFF	OFF	OΝ	OΝ	ON	ON	OFF
90	OΝ	OFF	OFF	ON	ON	OFF	ON	OFF	123	OFF	ON	OFF	ON	ON	ON	ON	OFF
91	OFF	ΟN	OFF	ON	ON	OFF	ON	OFF	124	ON	ON	OFF	ON	ON	ON	ON	OFF
92	CΝ	ON	OFF	ON	ON	OFF	ON	OFF	125	OFF	OFF	ON	OΝ	OΝ	ON	ON	OFF
93	OFF	OFF	ON	ON	ON	OFF	ON	OFF	126	ON	OFF	ON	ON	ON	ON	ON	OFF
94	ΩN	OFF	ON	ON	OΝ	OFF	ON	OFF	127	OFF	ON	ON	ON	ON	ON	ON	OFF
95	OFF	OΝ	ON	ON	OΝ	OFF	ON	OFF	128	ON	ON	ON	OΝ	ON	ON	ON	OFF
96	CΝ	ΟN	ON	ON	ON	OFF	ON	OFF	129	OFF	OΝ						
97	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	130	ON	OFF	OFF	OFF	OFF	OFF	OFF	OΝ
98	CΝ	OFF	OFF	OFF	OFF	ON	ON	OFF	131	OFF	ON	OFF	OFF	OFF	OFF	OFF	CΝ
99	OFF	OΝ	OFF	OFF	ŒF	ON	ON	OFF	132	ON	ON	OFF	OFF	OFF	OFF	OFF	OΝ

表G.SW2 P型控制码地址设置 地址133-198

球机				开关	设置				球机				开关	设置			
地址	1	2	3	4	5	6	7	8	地址	1	2	3	4	5	6	7	8
133	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	166	ON	OFF	ON	OFF	OFF	ON	OFF	OΝ
134	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	167	OFF	ON	ON	OFF	OFF	ON	OFF	ΟN
135	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	168	ON	ON	ON	OFF	OFF	ON	OFF	ΟN
136	ON	ON	ON	OFF	OFF	OFF	OFF	ON	169	OFF	OFF	OFF	ON	OFF	ON	OFF	ΟN
137	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	170	ON	OFF	OFF	ON	OFF	ON	OFF	ΟN
138	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	171	OFF	ON	OFF	ON	OFF	ON	OFF	OΝ
139	OFF	OΝ	OFF	ON	OFF	OFF	OFF	ON	172	ON	ON	OFF	ON	OFF	ON	OFF	OΝ
140	ON	ON	OFF	ON	OFF	OFF	OFF	ON	173	OFF	OFF	ON	ON	OFF	ON	OFF	OΝ
141	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	174	ON	OFF	ON	ON	OFF	ON	OFF	OΝ
142	ON	OFF	ON	ON	OFF	OFF	OFF	ON	175	OFF	ON	ON	ON	OFF	ON	OFF	ΟN
143	OFF	ON	ON	ON	OFF	OFF	OFF	ON	176	ON	ON	ON	ON	OFF	ON	OFF	OΝ
144	ON	ON	ON	ON	OFF	OFF	OFF	ON	177	OFF	OFF	OFF	OFF	ON	ON	OFF	ΟN
145	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	178	ON	OFF	OFF	OFF	ON	ON	OFF	αN
146	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	179	OFF	ON	OFF	OFF	ΟN	ON	OFF	ΟN
147	OFF	OΝ	OFF	OFF	OΝ	OFF	OFF	ON	180	ON	ON	OFF	OFF	OΝ	ON	OFF	ΟN
148	ON	ON	OFF	OFF	ON	OFF	OFF	ON	181	OFF	OFF	ON	OFF	ON	ON	OFF	OΝ
149	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	182	ON	OFF	ON	OFF	ON	ON	OFF	ΟN
150	ON	OFF	ON	OFF	ON	OFF	OFF	ON	183	OFF	ON	ON	OFF	ON	ON	OFF	OΝ
151	OFF	ON	ON	OFF	ON	OFF	OFF	ON	184	ON	ON	ON	OFF	ON	ON	OFF	OΝ
152	ON	ON	ON	OFF	ON	OFF	OFF	ON	185	OFF	OFF	OFF	ON	ON	ON	OFF	ΟN
153	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	186	ON	OFF	OFF	ON	ON	ON	OFF	ΟN
154	ON	OFF	OFF	ON	ON	OFF	OFF	ON	187	OFF	ON	OFF	ON	OΝ	ON	OFF	ΟN
155	OFF	ON	OFF	ON	ON	OFF	OFF	ON	188	ON	ON	OFF	ON	ΟN	ON	OFF	ΟN
156	ON	ON	OFF	ON	ON	OFF	OFF	ON	189	OFF	OFF	ON	ON	ON	ON	OFF	OΝ
157	OFF	OFF	ON	ON	ON	OFF	OFF	ON	190	ON	OFF	ON	ON	ON	ON	OFF	OΝ
158	ON	OFF	ON	ON	ON	OFF	OFF	ON	191	OFF	ON	ON	ON	ON	ON	OFF	OΝ
159	OFF	ON	ON	ON	ON	OFF	OFF	ON	192	ON	ON	ON	ON	ON	ON	OFF	OΝ
160	ON	ON	ON	ON	ON	OFF	OFF	ON	193	OFF	OFF	OFF	OFF	OFF	OFF	ON	OΝ
161	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	194	ON	OFF	OFF	OFF	OFF	OFF	ON	ΟN
162	ON	OFF	OFF	OFF	OFF	OΝ	OFF	ON	195	OFF	ON	OFF	OFF	OFF	OFF	ON	OΝ
163	OFF	OΝ	OFF	OFF	OFF	ON	OFF	ON	196	ON	ON	OFF	OFF	OFF	OFF	ON	OΝ
164	ON	ON	OFF	OFF	OFF	OΝ	OFF	ON	197	OFF	OFF	ON	OFF	OFF	OFF	ON	OΝ
165	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	198	ON	OFF	ON	OFF	OFF	OFF	ON	OΝ

表G.SW2 P型控制码地址设置 地址199-254

球机				开关	设置				球机				开关	设置			
地址	1	2	3	4	5	6	7	8	地址	1	2	3	4	5	6	7	8
199	OFF	OΝ	ON	Œ	OFF	OFF	ON	ON	227	ŒF	ON	OFF	OFF	OFF	ON	ON	OΝ
200	OΝ	QΝ	ON	ŒΨ	OFF	OFF	ON	ON	228	OΝ	ON	OFF	OFF	OFF	ON	ON	OΝ
201	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	229	ŒF	ŒΨ	OΝ	OFF	OFF	ON	ON	QΝ
202	OΝ	OFF	OFF	ON	OFF	OFF	ON	ON	230	OΝ	O∓F	OΝ	OFF	OFF	ON	OΝ	ŒΝ
203	ŒF	QΝ	OFF	ON	OFF	OFF	ON	ON	231	OFF	ON	OΝ	OFF	OFF	ON	ON	OΝ
204	OΝ	OΝ	OFF	ON	OFF	OFF	ON	ON	232	OΝ	ON	OΝ	OFF	OFF	ON	ON	QΝ
205	OFF	OFF	ON	ON	OFF	OFF	ON	ON	233	ŒF	OFF	OFF	ŒΝ	OFF	ON	ON	QΝ
206	OΝ	OFF	ON	ON	OFF	OFF	ON	ON	234	ΟN	OFF	OFF	ŒΝ	OFF	ON	OΝ	QΝ
207	ŒF	OΝ	ON	ON	ŒF	OFF	ON	ON	235	ŒF	ON	OFF	OΝ	OFF	ON	ON	OΝ
208	OΝ	OΝ	ON	ON	OFF	OFF	ON	ON	236	OΝ	ON	OFF	QΝ	OFF	ON	ON	QΝ
209	OFF	OFF	OFF	ŒΨ	OΝ	OFF	ON	ON	237	ŒF	Œ	OΝ	OΝ	OFF	ON	ON	OΝ
210	OΝ	OFF	OFF	OŦ	OΝ	OFF	ON	ON	238	OΝ	OFF	OΝ	ŒΝ	OFF	ON	ON	QΝ
211	OFF	OΝ	OFF	OŦ	OΝ	OFF	ON	ON	239	ŒF	ON	OΝ	ŒΝ	OFF	ON	ON	QΝ
212	OΝ	OΝ	OFF	OŦ	OΝ	OFF	ON	ON	240	OΝ	ON	OΝ	ŒΝ	OFF	ON	ON	QΝ
213	OFF	OFF	ON	ŒΨ	OΝ	OFF	ON	ON	241	ŒF	OFF	OFF	OFF	OΝ	ON	OΝ	OΝ
214	OΝ	OFF	ON	ŒΨ	OΝ	OFF	ON	ON	242	ΟN	OFF	OFF	OFF	OΝ	ON	OΝ	QΝ
215	OFF	OΝ	ON	ŒΨ	OΝ	OFF	ON	ON	243	ŒF	ON	OFF	OFF	OΝ	ON	OΝ	OΝ
216	OΝ	OΝ	ON	OŦ	OΝ	OFF	ON	ON	244	OΝ	ON	OFF	OFF	OΝ	ON	ON	OΝ
217	ŒF	OFF	OFF	ON	OΝ	OFF	ON	ON	245	ŒF	Œ	OΝ	OFF	QΝ	ON	ON	QΝ
218	OΝ	OFF	OFF	ON	ON	OFF	ON	ON	246	OΝ	OFF	ON	OFF	OΝ	ON	ON	OΝ
219	OFF	OΝ	OFF	ON	OΝ	OFF	ON	ON	247	ŒF	ON	OΝ	OFF	OΝ	ON	OΝ	OΝ
220	OΝ	OΝ	OFF	ON	OΝ	OFF	ON	ON	248	OΝ	ON	OΝ	OFF	OΝ	ON	OΝ	OΝ
221	OFF	OFF	ON	ON	OΝ	OFF	ON	ON	249	ŒF	OFF	OFF	ŒΝ	ŒΝ	ON	ON	QΝ
222	OΝ	OFF	ON	ON	OΝ	OFF	ON	ON	250	OΝ	OFF	OFF	ŒΝ	OΝ	ON	ON	OΝ
223	OFF	OΝ	ON	ON	OΝ	OFF	ON	ON	251	OFF	ON	OFF	QΝ	OΝ	ON	OΝ	OΝ
224	OΝ	OΝ	ON	ON	OΝ	OFF	ON	ON	252	ΟN	ON	OFF	ŒΝ	ŒΝ	ON	ON	QΝ
225	OFF	OFF	OFF	OŦ	OFF	OΝ	ON	ON	253	OFF	OFF	OΝ	QΝ	OΝ	ON	OΝ	QΝ
226	OΝ	OFF	OFF	Œ	OFF	ΟN	ON	ON	254	ΟN	ŒΨ	ON	OΝ	ŒΝ	ON	OΝ	ŒΝ

表H.SW2 D型控制码地址设置 地址1-64

球机				开关	 设置				球机				开关	设置			
地址	1	2	3	4	5	6	7	8	地址	1	2	3	4	5	6	7	8
1	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	33	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
2	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	34	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
3	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	35	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
4	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	36	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
5	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	37	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
6	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	38	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
7	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	39	ON	ON	ON	OFF	OFF	ON	OFF	OFF
8	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	40	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
9	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	41	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
10	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	42	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
11	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	43	ON	ON	OFF	ON	OFF	ON	OFF	OFF
12	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	44	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
13	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	45	ON	OFF	ON	ON	OFF	ON	OFF	OFF
14	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	46	OFF	ON	ON	ON	OFF	ON	OFF	OFF
15	ON	ON	ON	ON	OFF	OFF	OFF	OFF	47	ON	ON	ON	ON	OFF	ON	OFF	OFF
16	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	48	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
17	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	49	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
18	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	50	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
19	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	51	ON	ON	OFF	OFF	ON	ON	OFF	OFF
20	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	52	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
21	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	53	ON	OFF	ON	OFF	ON	ON	OFF	OFF
22	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	54	OFF	ON	ON	OFF	ON	ON	OFF	OFF
23	ON	ON	ON	OFF	ON	OFF	OFF	OFF	55	ON	ON	ON	OFF	ON	ON	OFF	OFF
24	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	56	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
25	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	57	ON	OFF	OFF	ON	ON	ON	OFF	OFF
26	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	58	OFF	ON	OFF	ON	ON	ON	OFF	OFF
27	ON	ON	OFF	ON	ON	OFF	OFF	OFF	59	ON	ON	OFF	ON	ON	ON	OFF	OFF
28	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	60	OFF	OFF	ON	ON	ON	ON	OFF	OFF
29	ON	OFF	ON	ON	ON	OFF	OFF	OFF	61	ON	OFF	ON	ON	ON	ON	OFF	OFF
30	OFF	ON	ON	ON	ON	OFF	OFF	OFF	62	OFF	ON	ON	ON	ON	ON	OFF	OFF
31	ON	ON	ON	ON	ON	OFF	OFF	OFF	63	ON	ON	ON	ON	ON	ON	OFF	OFF
32	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	64	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF

表H.SW2 D型控制码地址设置 地址65-128

球机				开关	设置				球机				开关	设置			
地址	1	2	3	4	5	6	7	8	地址	1	2	3	4	5	6	7	8
65	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	97	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
66	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	98	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
67	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	99	ON	ON	OFF	OFF	OFF	ON	ON	OFF
68	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	100	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
69	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	101	ON	OFF	ON	OFF	OFF	ON	ON	OFF
70	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	102	OFF	ON	ON	OFF	OFF	ON	ON	OFF
71	ON	ON	ON	OFF	OFF	OFF	ON	OFF	103	ON	ON	ON	OFF	OFF	ON	ON	OFF
72	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	104	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
73	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	105	ON	OFF	OFF	ON	OFF	ON	ON	OFF
74	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	106	OFF	ON	OFF	ON	OFF	ON	ON	OFF
75	ON	ON	OFF	ON	OFF	OFF	ON	OFF	107	ON	ON	OFF	ON	OFF	ON	ON	OFF
76	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	108	OFF	OFF	ON	ON	OFF	ON	ON	OFF
77	ON	OFF	ON	ON	OFF	OFF	ON	OFF	109	ON	OFF	ON	ON	OFF	ON	ON	OFF
78	OFF	ON	ON	ON	OFF	OFF	ON	OFF	110	OFF	ON	ON	ON	OFF	ON	ON	OFF
79	ON	ON	ON	ON	OFF	OFF	ON	OFF	111	ON	ON	ON	ON	OFF	ON	ON	OFF
80	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	112	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
81	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	113	ON	OFF	OFF	OFF	ON	ON	ON	OFF
82	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	114	OFF	ON	OFF	OFF	ON	ON	ON	OFF
83	ON	ON	OFF	OFF	ON	OFF	ON	OFF	115	ON	ON	OFF	OFF	ON	ON	ON	OFF
84	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	116	OFF	OFF	ON	OFF	ON	ON	ON	OFF
85	ON	OFF	ON	OFF	ON	OFF	ON	OFF	117	ON	OFF	ON	OFF	ON	ON	ON	OFF
86	OFF	ON	ON	OFF	ON	OFF	ON	OFF	118	OFF	ON	ON	OFF	ON	ON	ON	OFF
87	ON	ON	ON	OFF	ON	OFF	ON	OFF	119	ON	ON	ON	OFF	ON	ON	ON	OFF
88	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	120	OFF	OFF	OFF	ON	ON	ON	ON	OFF
89	ON	OFF	OFF	ON	ON	OFF	ON	OFF	121	ON	OFF	OFF	ON	ON	ON	ON	OFF
90	OFF	ON	OFF	ON	ON	OFF	ON	OFF	122	OFF	ON	OFF	ON	ON	ON	ON	OFF
91	ON	ON	OFF	ON	ON	OFF	ON	OFF	123	ON	ON	OFF	ON	ON	ON	ON	OFF
92	OFF	OFF	ON	ON	ON	OFF	ON	OFF	124	OFF	OFF	ON	ON	ON	ON	ON	OFF
93	ON	OFF	ON	ON	ON	OFF	ON	OFF	125	ON	OFF	ON	ON	ON	ON	ON	OFF
94	OFF	ON	ON	ON	ON	OFF	ON	OFF	126	OFF	ON	ON	ON	ON	ON	ON	OFF
95	ON	ON	ON	ON	ON	OFF	ON	OFF	127	ON	OFF						
96	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	128	OFF	ON						

表H.SW2 D型控制码地址设置 地址129-192

球机				开关	设置				球机				开关	设置			
地址	1	2	3	4	5	6	7	8	地址	1	2	3	4	5	6	7	8
129	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	161	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
130	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	162	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
131	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	163	ON	ON	OFF	OFF	OFF	ON	OFF	ON
132	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	164	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
133	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	165	ON	OFF	ON	OFF	OFF	ON	OFF	ON
134	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	166	OFF	ON	ON	OFF	OFF	ON	OFF	ON
135	ON	ON	ON	OFF	OFF	OFF	OFF	ON	167	ON	ON	ON	OFF	OFF	ON	OFF	ON
136	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	168	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
137	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	169	ON	OFF	OFF	ON	OFF	ON	OFF	ON
138	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	170	OFF	ON	OFF	ON	OFF	ON	OFF	ON
139	ON	ON	OFF	ON	OFF	OFF	OFF	ON	171	ON	ON	OFF	ON	OFF	ON	OFF	ON
140	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	172	OFF	OFF	ON	ON	OFF	ON	OFF	ON
141	ON	OFF	ON	ON	OFF	OFF	OFF	ON	173	ON	OFF	ON	ON	OFF	ON	OFF	ON
142	OFF	ON	ON	ON	OFF	OFF	OFF	ON	174	OFF	ON	ON	ON	OFF	ON	OFF	ON
143	ON	ON	ON	ON	OFF	OFF	OFF	ON	175	ON	ON	ON	ON	OFF	ON	OFF	ON
144	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	176	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
145	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	177	ON	OFF	OFF	OFF	ON	ON	OFF	ON
146	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	178	OFF	ON	OFF	OFF	ON	ON	OFF	ON
147	ON	ON	OFF	OFF	ON	OFF	OFF	ON	179	ON	ON	OFF	OFF	ON	ON	OFF	ON
148	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	180	OFF	OFF	ON	OFF	ON	ON	OFF	ON
149	ON	OFF	ON	OFF	ON	OFF	OFF	ON	181	ON	OFF	ON	OFF	ON	ON	OFF	ON
150	OFF	ON	ON	OFF	ON	OFF	OFF	ON	182	OFF	ON	ON	OFF	ON	ON	OFF	ON
151	ON	ON	ON	OFF	ON	OFF	OFF	ON	183	ON	ON	ON	OFF	ON	ON	OFF	ON
152	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	184	OFF	OFF	OFF	ON	ON	ON	OFF	ON
153	ON	OFF	OFF	ON	ON	OFF	OFF	ON	185	ON	OFF	OFF	ON	ON	ON	OFF	ON
154	OFF	ON	OFF	ON	ON	OFF	OFF	ON	186	OFF	ON	OFF	ON	ON	ON	OFF	ON
155	ON	ON	OFF	ON	ON	OFF	OFF	ON	187	ON	ON	OFF	ON	ON	ON	OFF	ON
156	OFF	OFF	ON	ON	ON	OFF	OFF	ON	188	OFF	OFF	ON	ON	ON	ON	OFF	ON
157	ON	OFF	ON	ON	ON	OFF	OFF	ON	189	ON	OFF	ON	ON	ON	ON	OFF	ON
158	OFF	ON	ON	ON	ON	OFF	OFF	ON	190	OFF	ON	ON	ON	ON	ON	OFF	ON
159	ON	ON	ON	ON	ON	OFF	OFF	ON	191	ON	ON	ON	ON	ON	ON	OFF	ON
160	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	192	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON

表H.SW2 D型控制码地址设置 地址193-254

球机				开关	设置				球机				开关	设置			
地址	1	2	3	4	5	6	7	8	地址	1	2	3	4	5	6	7	8
193	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	224	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
194	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	225	ON	OFF	OFF	OFF	OFF	ON	ON	ON
195	ON	ON	OFF	OFF	OFF	OFF	ON	ON	226	OFF	ON	OFF	OFF	OFF	ON	ON	ON
196	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	227	ON	ON	OFF	OFF	OFF	ON	ON	ON
197	ON	OFF	ON	OFF	OFF	OFF	ON	ON	228	OFF	OFF	ON	OFF	OFF	ON	ON	ON
198	OFF	ON	ON	OFF	OFF	OFF	ON	ON	229	ON	OFF	ON	OFF	OFF	ON	ON	ON
199	ON	ON	ON	OFF	OFF	OFF	ON	ON	230	OFF	ON	ON	OFF	OFF	ON	ON	ON
200	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	231	ON	ON	ON	OFF	OFF	ON	ON	ON
201	ON	OFF	OFF	ON	OFF	OFF	ON	ON	232	OFF	OFF	OFF	ON	OFF	ON	ON	ON
202	OFF	ON	OFF	ON	OFF	OFF	ON	ON	233	ON	OFF	OFF	ON	OFF	ON	ON	ON
203	ON	ON	OFF	ON	OFF	OFF	ON	ON	234	OFF	ON	OFF	ON	OFF	ON	ON	ON
204	OFF	OFF	ON	ON	OFF	OFF	ON	ON	235	ON	ON	OFF	ON	OFF	ON	ON	ON
205	ON	OFF	ON	ON	OFF	OFF	ON	ON	236	OFF	OFF	ON	ON	OFF	ON	ON	ON
206	OFF	ON	ON	ON	OFF	OFF	ON	ON	237	ON	OFF	ON	ON	OFF	ON	ON	ON
207	ON	ON	ON	ON	OFF	OFF	ON	ON	238	OFF	ON	ON	ON	OFF	ON	ON	ON
208	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	239	ON	ON	ON	ON	OFF	ON	ON	ON
209	ON	OFF	OFF	OFF	ON	OFF	ON	ON	240	OFF	OFF	OFF	OFF	ON	ON	ON	ON
210	OFF	ON	OFF	OFF	ON	OFF	ON	ON	241	ON	OFF	OFF	OFF	ON	ON	ON	ON
211	ON	ON	OFF	OFF	ON	OFF	ON	ON	242	OFF	ON	OFF	OFF	ON	ON	ON	ON
212	OFF	OFF	ON	OFF	ON	OFF	ON	ON	243	ON	ON	OFF	OFF	ON	ON	ON	ON
213	ON	OFF	ON	OFF	ON	OFF	ON	ON	244	OFF	OFF	ON	OFF	ON	ON	ON	ON
214	OFF	ON	ON	OFF	ON	OFF	ON	ON	245	ON	OFF	ON	OFF	ON	ON	ON	ON
215	ON	ON	ON	OFF	ON	OFF	ON	ON	246	OFF	ON	ON	OFF	ON	ON	ON	ON
216	OFF	OFF	OFF	ON	ON	OFF	ON	ON	247	ON	ON	ON	OFF	ON	ON	ON	ON
217	ON	OFF	OFF	ON	ON	OFF	ON	ON	248	OFF	OFF	OFF	ON	ON	ON	ON	ON
218	OFF	ON	OFF	ON	ON	OFF	ON	ON	249	ON	OFF	OFF	ON	ON	ON	ON	ON
219	ON	ON	OFF	ON	ON	OFF	ON	ON	250	OFF	ON	OFF	ON	ON	ON	ON	ON
220	OFF	OFF	ON	ON	ON	OFF	ON	ON	251	ON	ON	OFF	ON	ON	ON	ON	ON
221	ON	OFF	ON	ON	ON	OFF	ON	ON	252	OFF	OFF	ON	ON	ON	ON	ON	ON
222	OFF	ON	ON	ON	ON	OFF	ON	ON	253	ON	OFF	ON	ON	ON	ON	ON	ON
223	ON	ON	ON	ON	ON	OFF	ON	ON	254	OFF	ON	ON	ON	ON	ON	ON	ON