IR Emitter

HDL-M/IRAC.1

Introduction

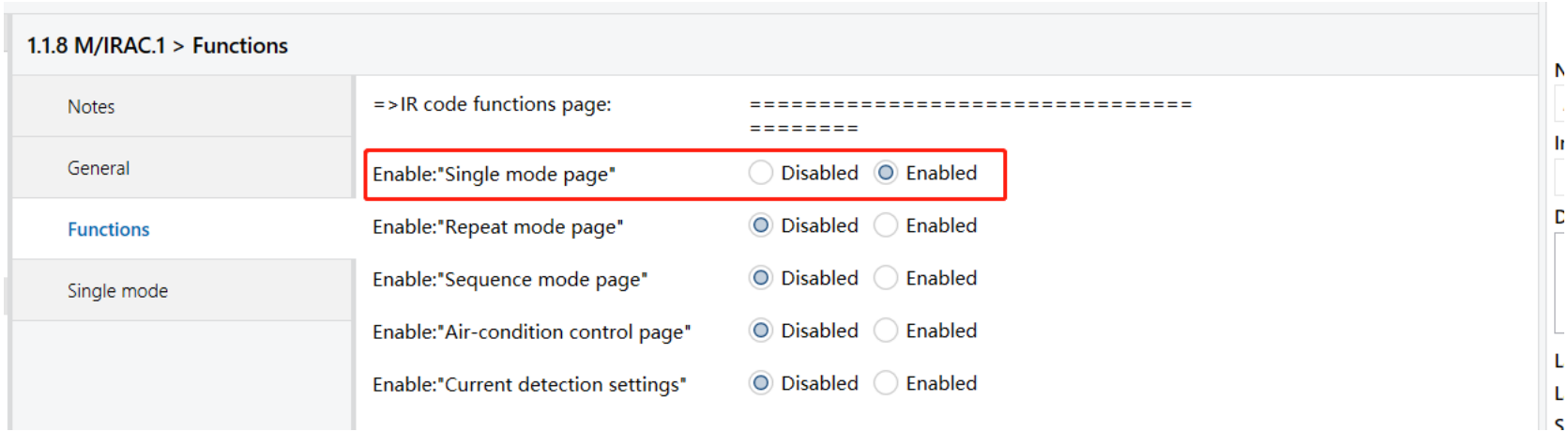
HDL-M/IRAC.1 supports 4 channel infrared interfaces, totally can store up to 650 IR codes. First part 150 IR codes are used for universal control, such as TV, DVD which has infrared receiving devices. The other 500 IR codes are used for AC control, compatible with any brand of AC device, the control modes are ON/OFF control, Temperature control, Cooling/Heating, Fan speed control, Swing control etc.

Function

- Working mode: Single mode, Repeat mode, Sequence mode , Air-condition control , Current detection.
- By using the HDL IR Learner to learn the IR codes from the normal remote, and download into IR Emitter by HDL KNX Assistant software, then it can control the IR device, such as TV, DVD, AC, Amplifier etc.
- Built-in current sensor, to assure the status of device is ON or OFF.

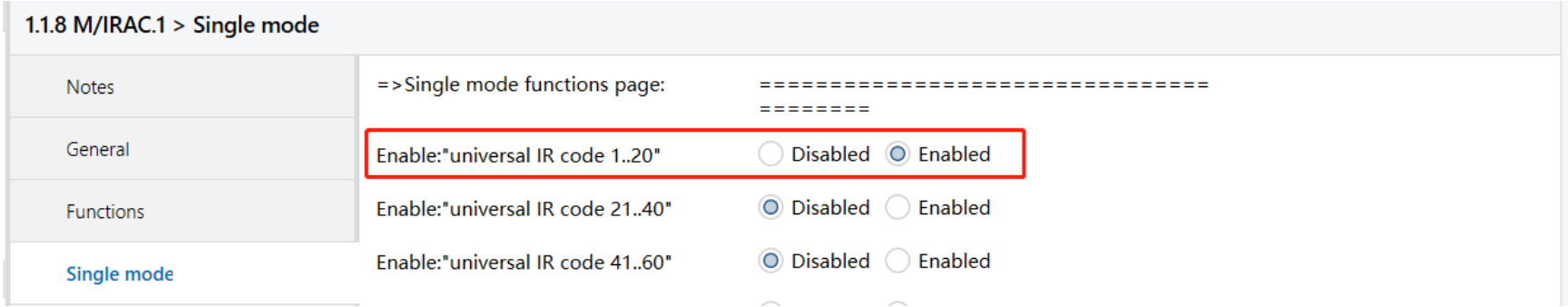
Single Mode

1.Enable “Single mode page”

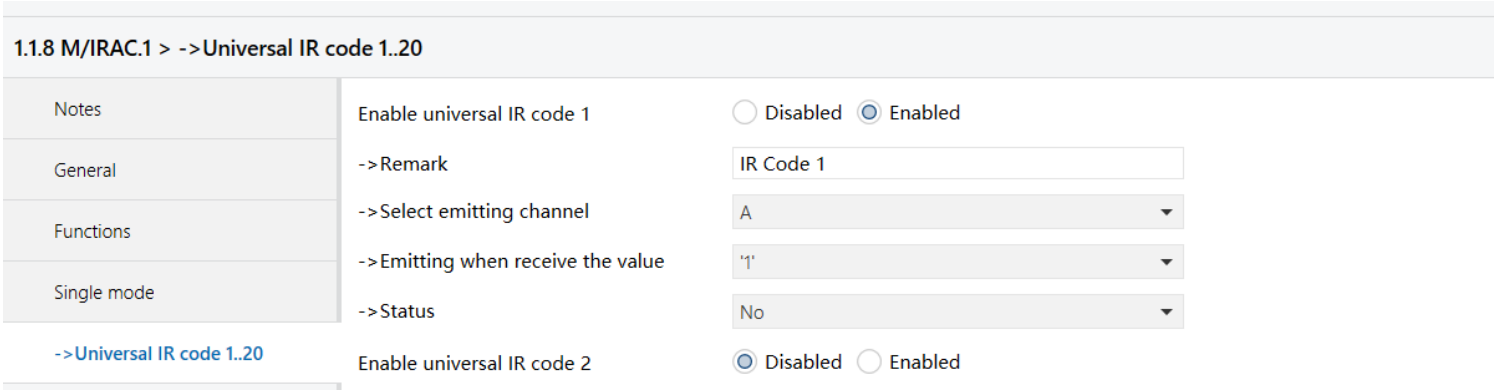


Single Mode

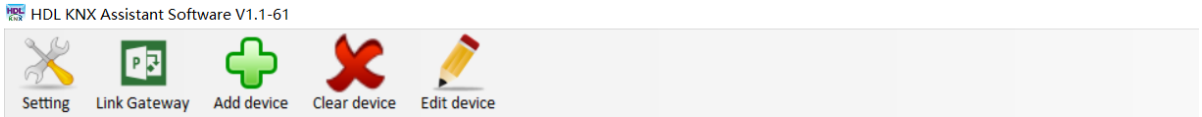
2. Enable: “universal IR code 1...20 ”



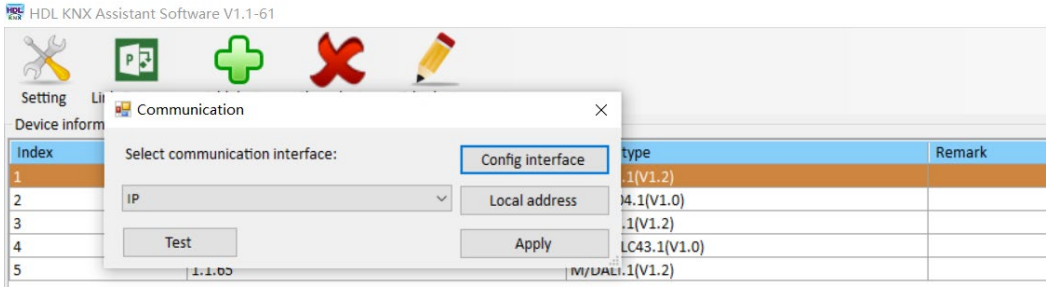
3.Enable the code that we want to use.



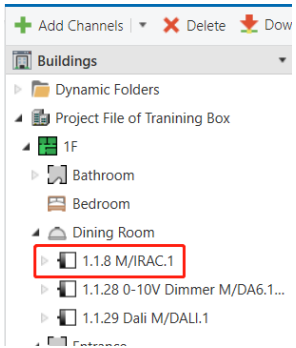
1.Please go to KNX Assitant Software

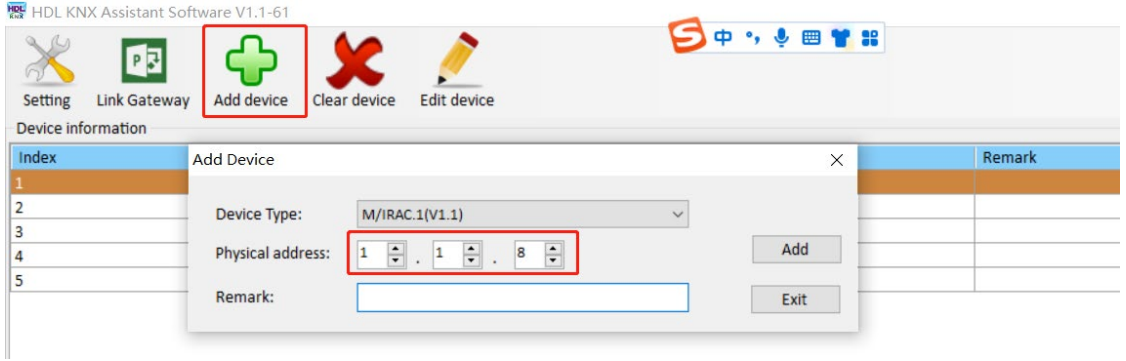


2. Select Communication mode in Setting

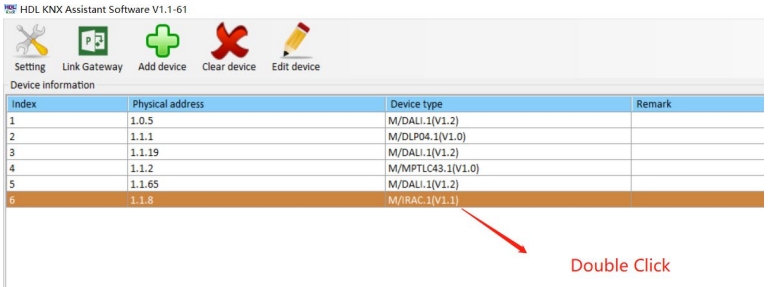


3.Add IR Emitter and enter its physical address

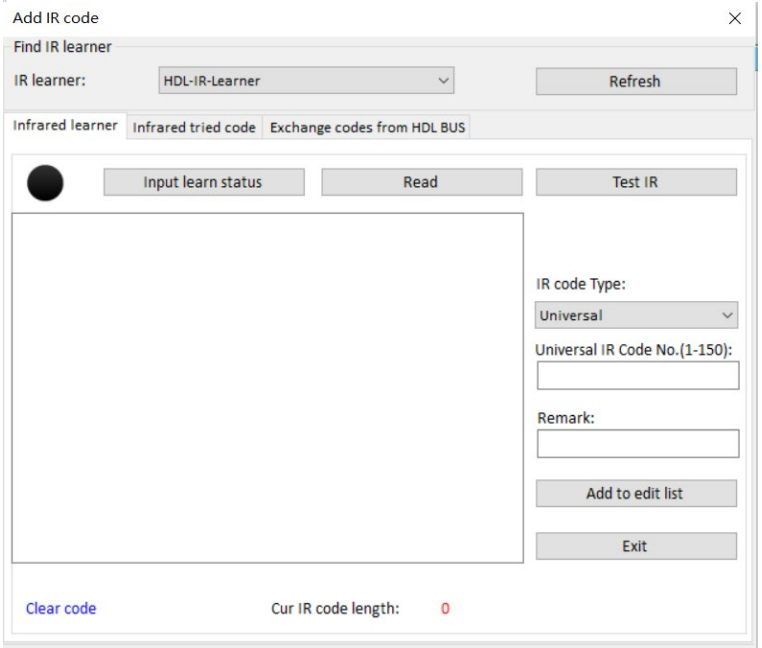




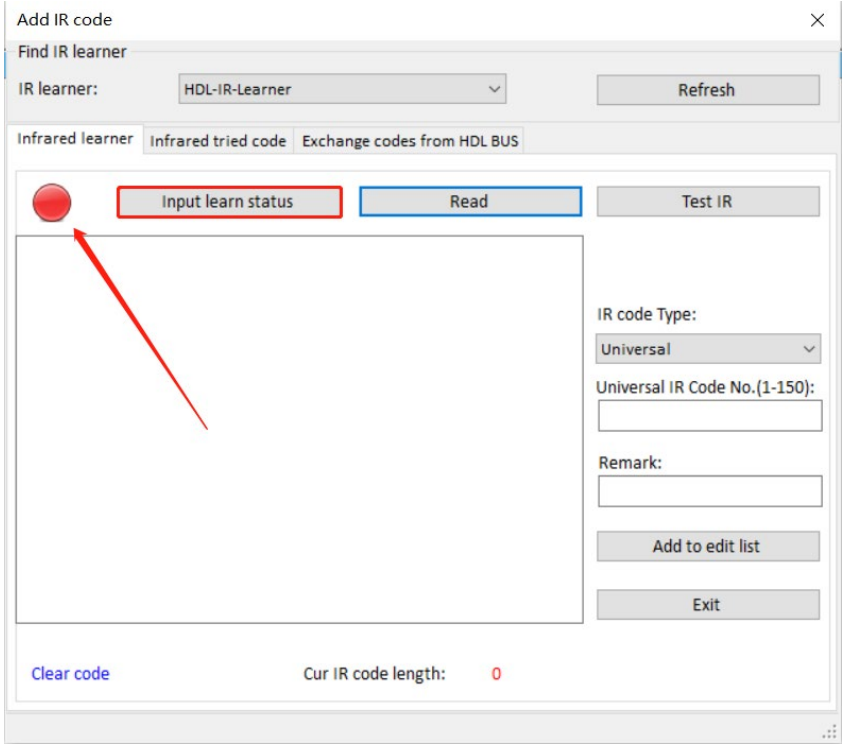
4.After adding the IR Emitter, double click to enter setting.



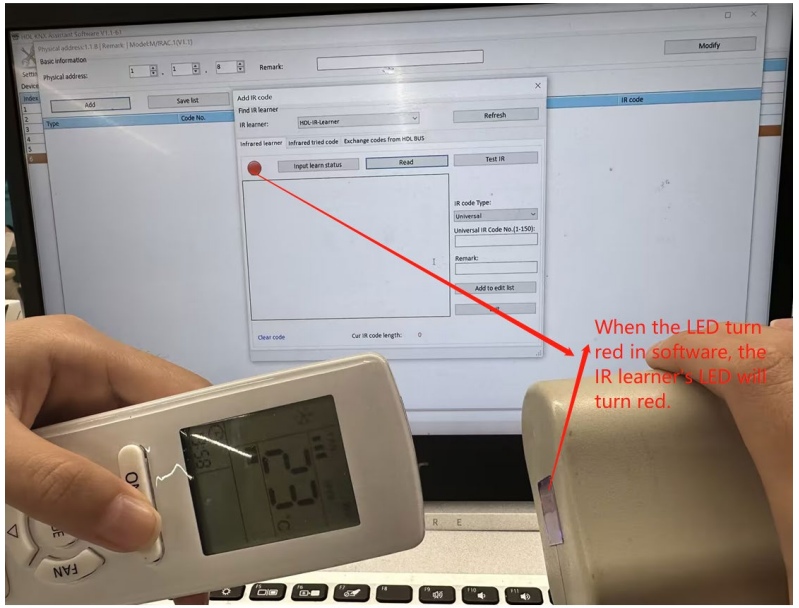
5. Click “Add”, the code learning page will pop up.



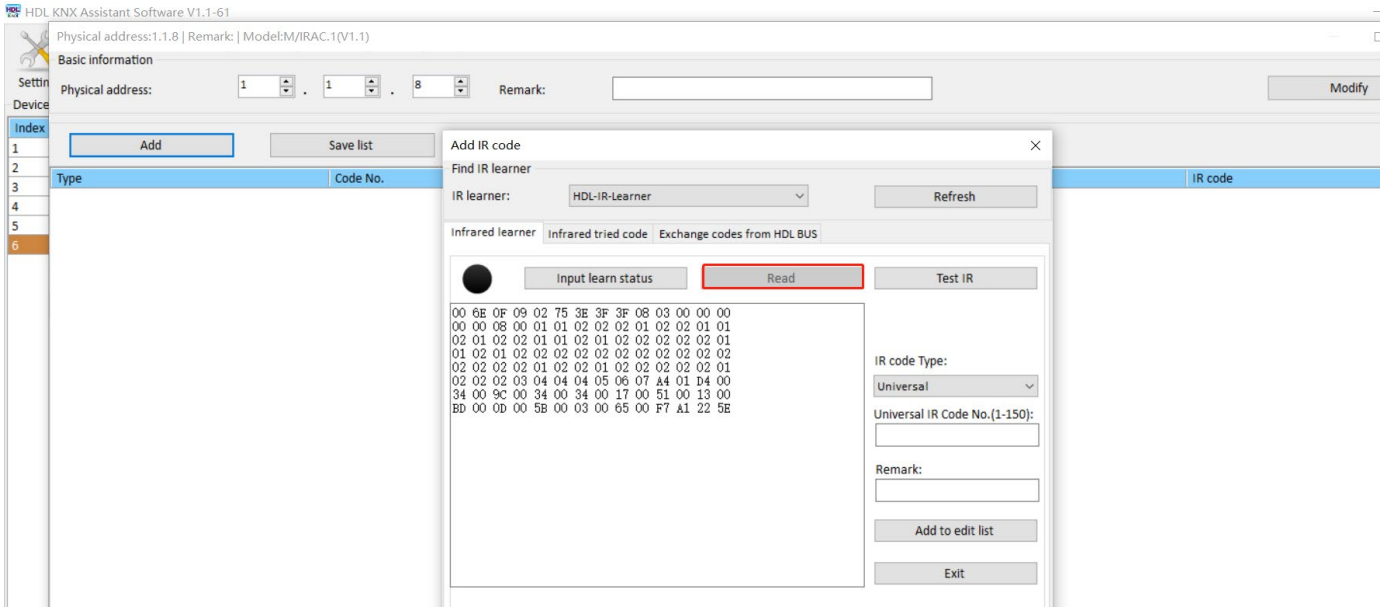
6. Click “Input learn status”, the black LED will turn red.



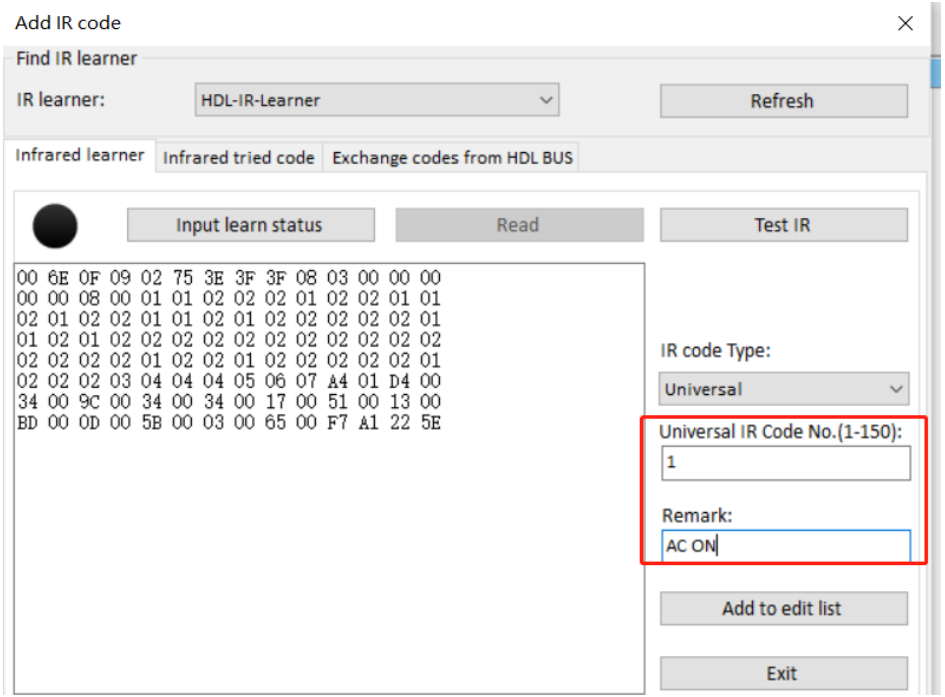
7. Then you can learn the code by using remote controller to send code to the IR Leaner.



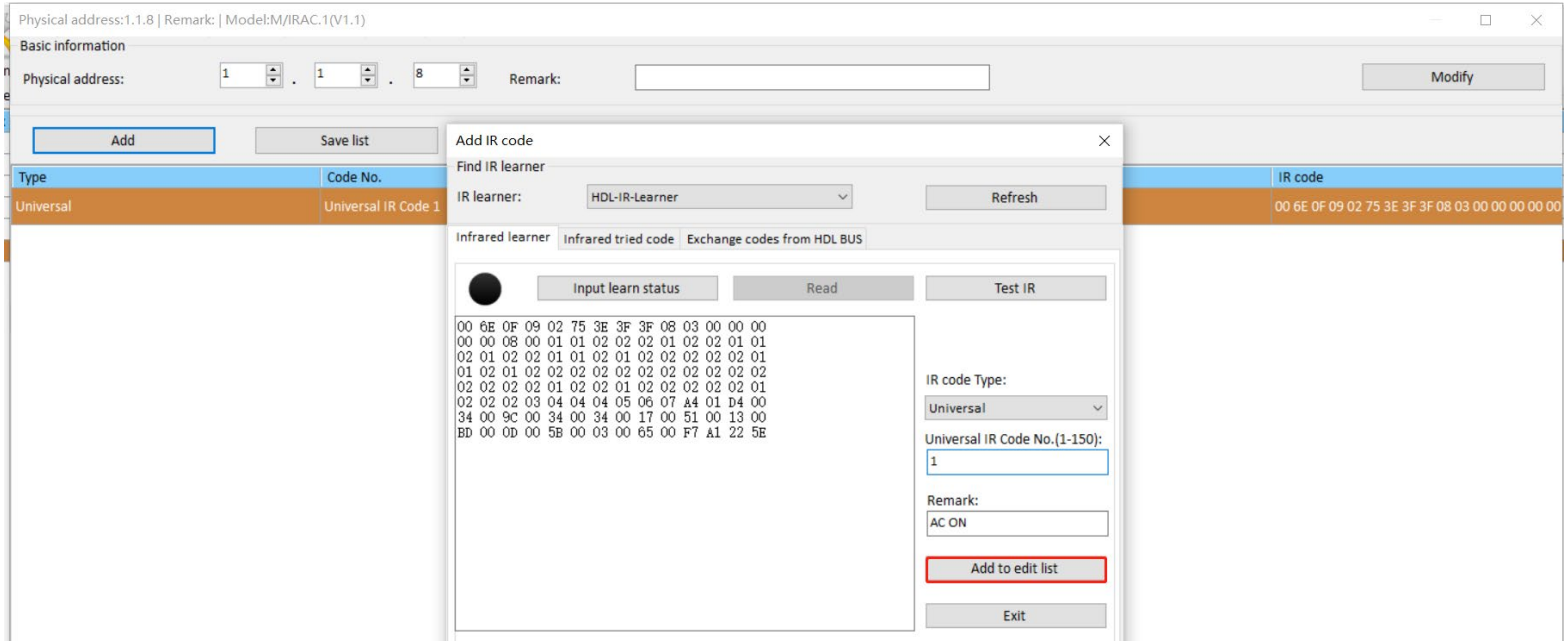
8.After learn the code, please click “Read”



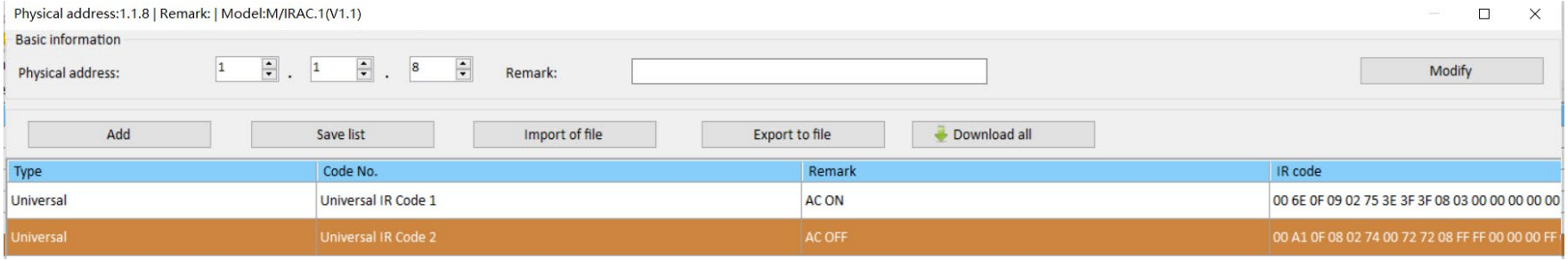
9.Select “Universal type”; set the code number, and give it a remark.



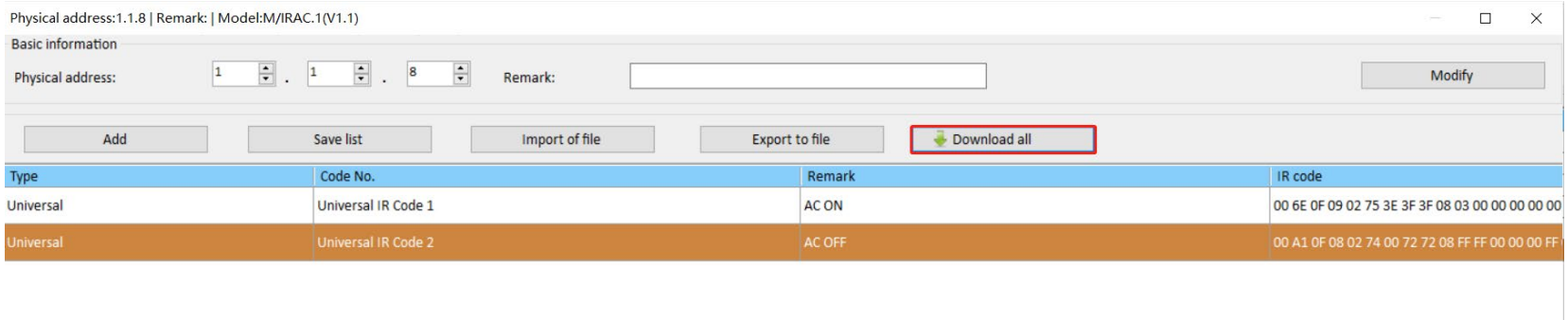
10.Click “Add to edit list”



11.Follow the same way to learn the code controlling AC OFF.



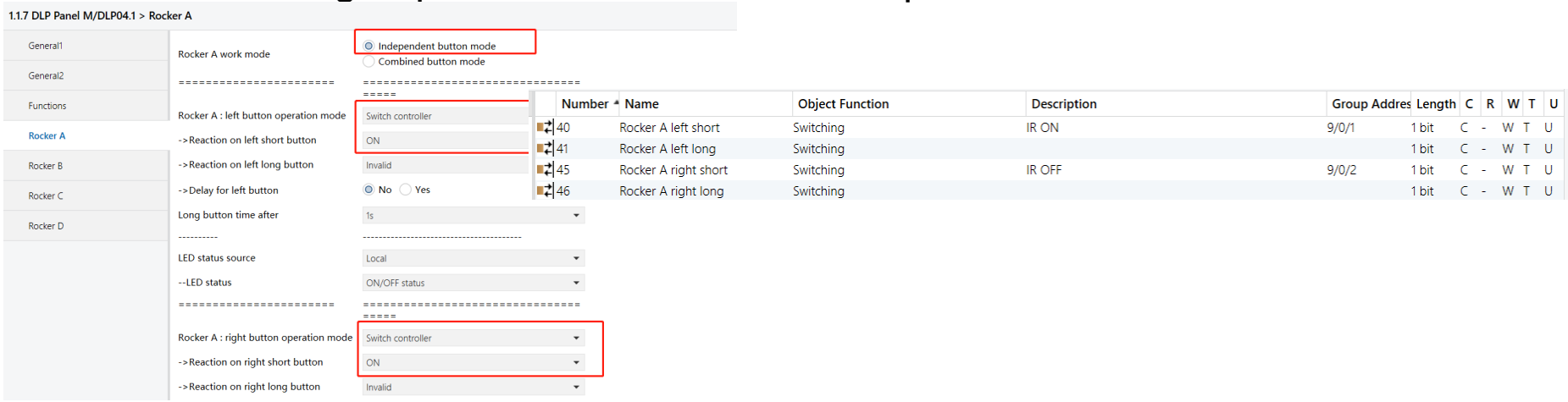
12. Click “Download all” to download the codes.



13. Create group address for IR 1 and IR 2 .

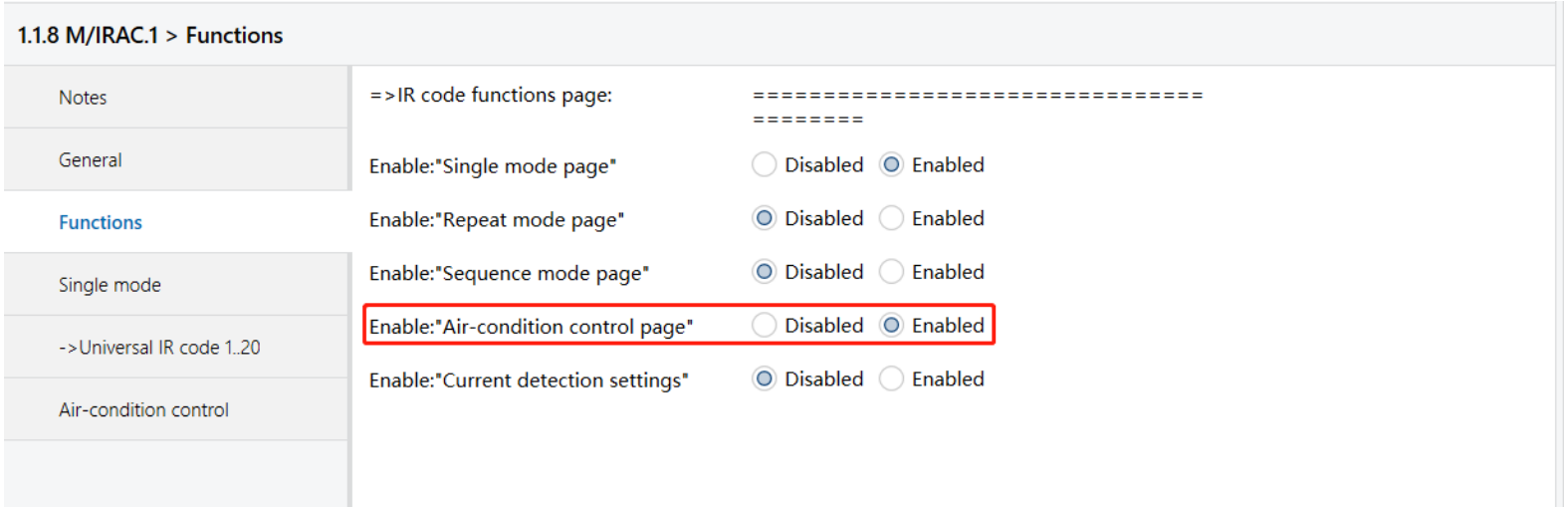
Number	Name	Object Function	Description	Group Addres	Length	C	R	W	T	U
11	Single mode	IR 1 (1-emitting)	IR ON	9/0/1	1 bit	C	-	W	-	U
12	Single mode	IR 2 (1-emitting)	IR OFF	9/0/2	1 bit	C	-	W	-	U

14. Link the the group address of Rocker A of a panel

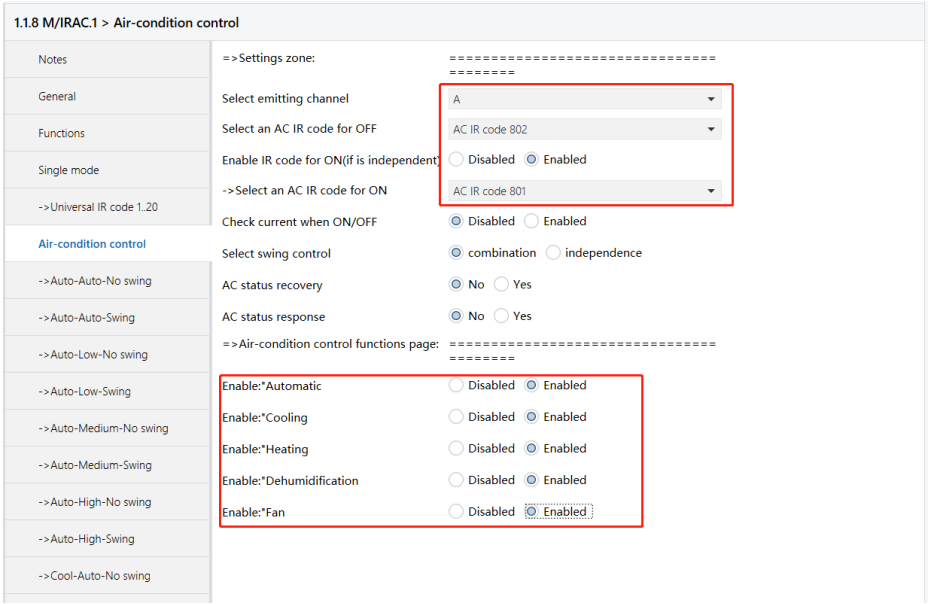


Number	Name	Object Function	Description	Group Addres	Length	C	R	W	T	U
40	Rocker A left short	Switching	IR ON	9/0/1	1 bit	C	-	W	T	U
41	Rocker A left long	Switching			1 bit	C	-	W	T	U
45	Rocker A right short	Switching	IR OFF	9/0/2	1 bit	C	-	W	T	U
46	Rocker A right long	Switching			1 bit	C	-	W	T	U

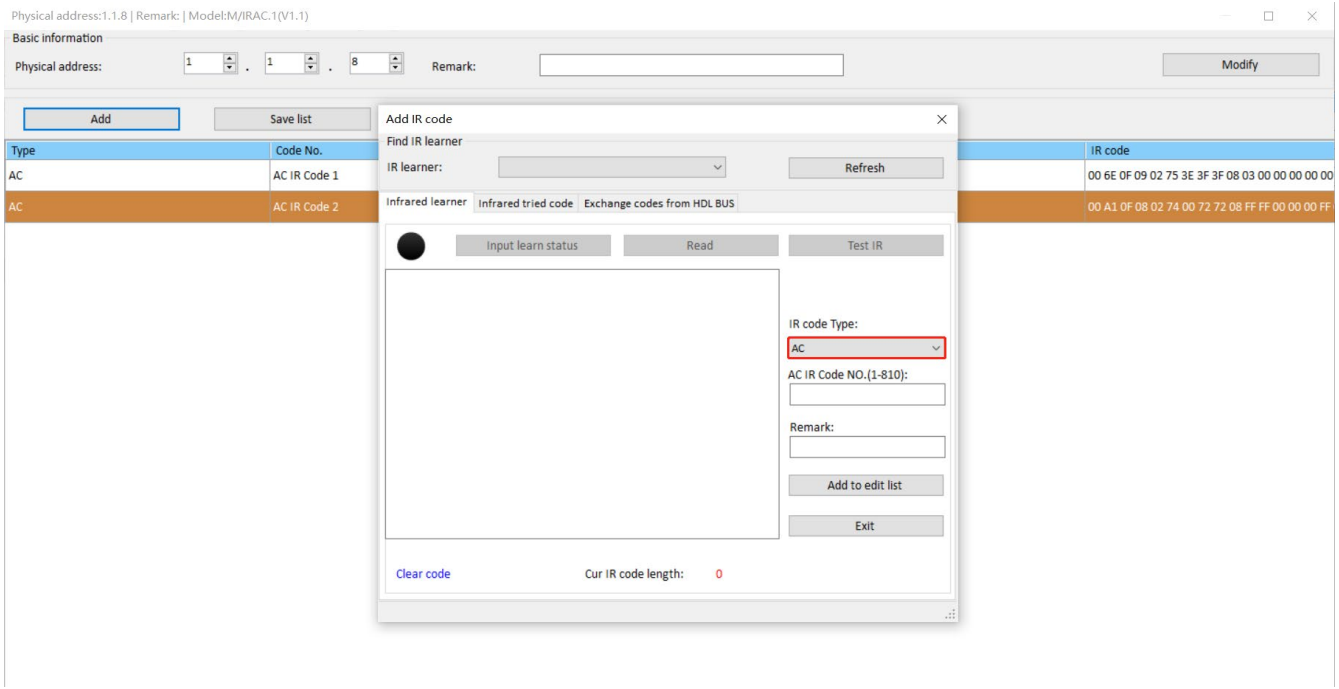
1.Enable “Air-condition control page”



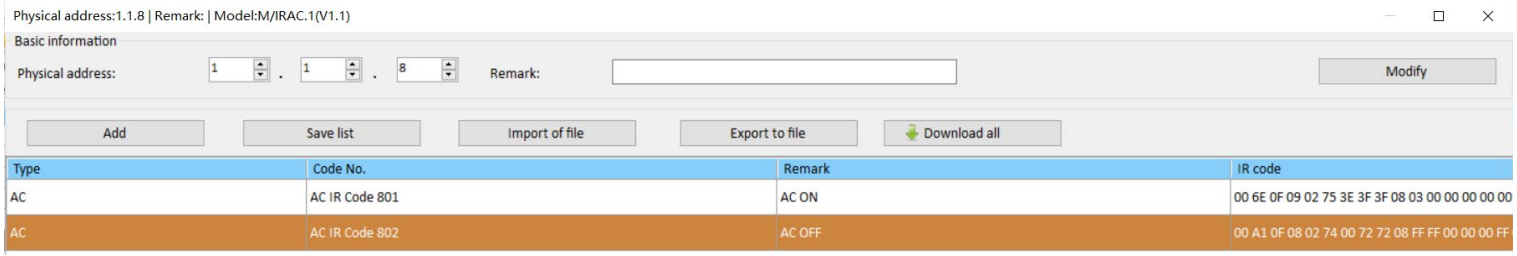
2.Go to “Air condition control”page, and set AC IR code 802 for off , AC IR code 801 for on. And, enable other functions like automatic,Cooling and heating.



3.Similarly, we also need to use KNX's assistant software to learn the corresponding infrared code, but this time, due to the use of air conditioning control , we need to add the infrared code in AC format in the IR code type.



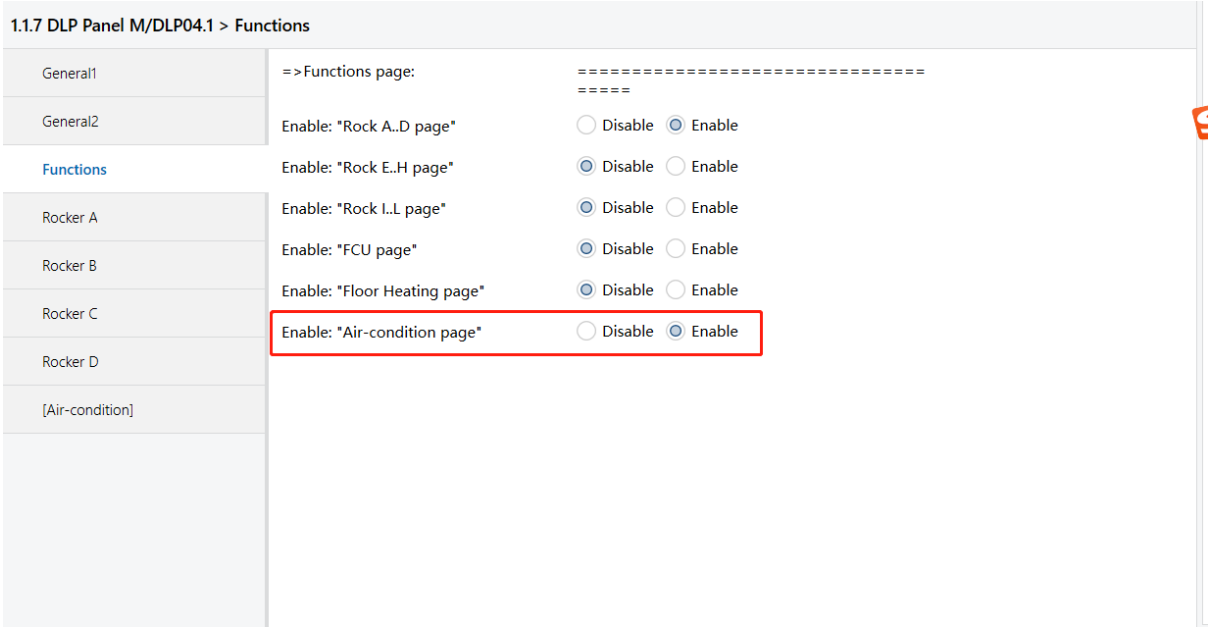
4.AC IR code 801 and AC IR code 802 are for air conditioning control on and off, respectively. After this, Click “Download all”to download all of them.



5. Creat a address for the AC

Number	Name	Object Function	Description	Group Addres	Length	C	R	W	T	U
11	Single mode	IR 1 (1-emitting)	IR ON	9/0/1	1 bit	C	-	W	-	U
12	Single mode	IR 2 (1-emitting)	IR OFF	9/0/2	1 bit	C	-	W	-	U
361	AC switch	Switch(1-ON,0-OFF)	AC ON/OFF	9/0/3	1 bit	C	-	W	-	U
362	AC Temperature	Setpoint temperature(16..35)			2 bytes	C	-	W	-	U

6. Enable “Air-condition page” in DLP panel



7.Link group address with the panel.

Number	Name	Object Function	Description	Group Addres	Length	C	R	W	T	U
40	Rocker A left short	Switching	IR ON	9/0/1	1 bit	C	-	W	T	U
41	Rocker A left long	Switching			1 bit	C	-	W	T	U
45	Rocker A right short	Switching	IR OFF	9/0/2	1 bit	C	-	W	T	U
46	Rocker A right long	Switching			1 bit	C	-	W	T	U
50	Rocker B left	Percentage			1 byte	C	-	W	T	U
55	Rocker B right	Percentage			1 byte	C	-	W	T	U
60	Rocker C short	Call scene			1 byte	C	-	W	T	U
70	Rocker D left short	Sequence			1 bit	C	-	W	T	U
71	Rocker D left long	Sequence			1 bit	C	-	W	T	U
75	Rocker D right short	Sequence			1 bit	C	-	W	T	U
76	Rocker D right long	Sequence			1 bit	C	-	W	T	U
222	Air-condition	Switch ON/OFF	AC ON/OFF	9/0/3	1 bit	C	-	W	T	U
224	Air-condition Temperature	Setpoint temperature			2 bytes	C	-	W	T	U
225	Air-condition Fan	ON CMD for automatic			1 bit	C	-	W	T	U
226	Air-condition Fan	ON CMD for low speed			1 bit	C	-	W	T	U
227	Air-condition Fan	ON CMD for medium speed			1 bit	C	-	W	T	U
228	Air-condition Fan	ON CMD for high speed			1 bit	C	-	W	T	U
230	Air-condition Mode	ON CMD for automatic			1 bit	C	-	W	T	U
231	Air-condition Mode	ON CMD for cooling			1 bit	C	-	W	T	U
232	Air-condition Mode	ON CMD for heating			1 bit	C	-	W	T	U
233	Air-condition Mode	ON CMD for dehumidification			1 bit	C	-	W	T	U
234	Air-condition Mode	ON CMD for fan			1 bit	C	-	W	T	U