# 2-Wire System Quick Guide



- Please read this manual carefully before using the product you purchase, and keep it well for future use.
- Please note that images and sketch maps in this manual may be different from the actual product.

### 1. How to increase the unlock time

### 1. 1 Set the unlock time via Monitor DX471

Step 1. On main menu page, touch the **Setting** icon, and then touch **Installer** item to enter installer page.



Step 2. Select Unlock time item to set.



Step 3. The Installer Setup with keypad will show up. Then input number from 01-99 and touch OK to set the unlock time as 1-99 seconds.



### 1.2 Set the unlock time via Monitor DX439

Step 1. On main menu page, touch the **Setting** icon.



Step 2. Select Unlock time item to set.



Step 3. The Installer Setup with keypad will show up. Then input number from 01-99 and touch OK to set the unlock time as 1-99 seconds.



### 1.3 Set the unlock time via Monitor DT17S

Step 1. On main menu page, press ③ (Setting button) six times to enter about page.





Step 2. When the screen stay in About page, press  $\bigcirc$  (UNLOCK button) on front panel and hold for 2 seconds.



Step 3. The Installer Setup will show up.



Step 4. Use  $\bigcirc$  /  $\bigcirc$  button to increase/decrease the value, use  $\bigcirc$  button to select next digital. Input number 8401~8499 to set the unlock time as 01~99 seconds

### 1.4 Set the unlock time via Monitor DT433

Step 1. On main menu page, press ( (Setting button) five times to enter about page.



Step 2. When the screen stay in About page, press  $\bigcirc$  (UNLOCK button) on front panel and hold for 2 seconds.



Step 3. The Installer Setup will show up.



Step 4. Use 2 / 4 button to increase/decrease the value, use 2 / 4 button to select next digital. Input number 8401~8499 to set the unlock time as 01~99 seconds

### 1.5 Set the unlock time via Monitor DT471

Step 1. On main menu page, touch 🔅 (Setting button) to enter about page.



Step 2. When the screen stay in About page, press  $\bigcirc$  (UNLOCK button) on front panel and hold for 2 seconds.



Step 3. The Installer Setup will show up.



Step 4.Input number 8401~8499 to set the unlock time as 01~99 seconds.

### 1.6 Set the unlock time via Monitor DT47MG(V2)

Step 1. On main menu page, touch *Logo* icon to enter *About* page.



Step 2. When the screen stay in *About* page, press *UNLOCK* button on front panel and hold for 2 seconds.



Step 3. The Installer Setup will show up.



Step 4.Input number 8401~8499 to set the unlock time as 01~99 seconds.

### 2.1 DT608, DT607, DT601





Power Supply can be A/C or D/C as long as it matches the needs of the magnetic lock.

By hooking up the ELK1 to the door release this saves the outdoor station from being damaged which is NOT covered by the warranty!

The reason for this is that all Magnetic Locks have more than 200mA and the panel relay Max is 200mA.

### 2.2 DMR11S, DMR18S, DMR21



**Note:** The mulnex Connector is located on the back of the outdoor station, and the black wire used for the connection is the second wire from the top next to the green wire.

## 3. Operation Guide On Power Supply for 2 Wire System

There are 3 power supplies can be used in 2 wire system. HDR-60-24 is UL approved, must work with DT-DPS power separator. PS5-24V must work with DT-DPS separator as well. PC6B is separator built-in, no need to work with DT-DPS. Please kindly read and connect the cables according to this guide.

#### 3.1 HDR-60-24 UL Power Supply

The HDR-60-24 power supply unit has won UL approvals, with UL File Number E183223.

It is designed for 2-wire system to support Max. 32 Monitors and Max. 4 Door Stations at the same time, depending on different environments.

- Universal AC input/full range.
- Multi protection: short sircuit, overload, over voltage
- · Cooling by free air convection
- DIN rail mounting.



#### **DT-DPS** Power Separator

**DPS:** This unit is a power supply adaptor for the HDR-60-24, PS5 or PS4 power supply, it transfers the power from the power supply to the suitable power for the non-polarity bus. Note that the DPS must work together with the PS5 or PS4 power supply.



#### Technical Specifications(DPS)

Power input:	24Vdc (supplied by HDR-60-24)
Power output:	18Vdc
Power Consumption:	0.25W in standby, 0.5 W in actting
Working temperature:	-5°C +45°C

#### DIN Installation



#### **Electronic Specifications**

Input Voltage:	85~264Vac, 120~370Vdc
Input Frequency:	50/60 Hz
Leakage Current:	>2mA / 240Vac
AC current (TYP.):	0.88A /115Vac, 0.48A / 230Vac
Output VADJ range:	21.6~26.4 Vdc_adjustable
Rated Voltage:	24Vdc
Rated Current:	2.5A
Rated Power:	36W

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### PS5 - Power Supply

The PS5 power supply unit is design for DT system to supply Max. 32 Monitors and Max. 4 Door Stations at the same time, dependingon different environments.

- Universal AC input/full range.
- · Multi protation: short sircuit, overload, over voltage
- Cooling by free air convection
- DIN bar mounting.



#### 1. Dimension and Terminal



- L(AC): AC input.
- N(AC): AC input.
- ・ 上 : Earth Ground.
- V-: DC power output.(21.5~26.5 adjustable)
- V+: DC power output.(21.5~26.5 adjustable)
- VADJ: Output voltage adjustment.
- LED: Working state indication

### 2. Installation

Fix the PS5 and DPS and the bar together. Note they MUST installed side by side on the DIN bar.



### <u>3. Wiring</u>

The PS5 can not be connected to the system directly, it must acompany with DPS(power supply adaptor), and the power will supply via the non-polarised bus to the devices over the system. Note that the V- must connect to the V+ of the DPS, theV- must connect to the - of the DPS.



#### Electronic Specifications

InputVoltage:	85~260Vac, 120~370Vdc
Input Frequency:	47~63 Hz
Leakage Current:	>2mA / 240Vac
AC current (TY P.)	1.5A /150Vac, 0.9 A / 230Vac
OutputVADJ range:	21.5~26.5 Vdc adjustable
Rated Voltage:	24Vdc
Rated Current:	3.2A
Rated Power:	76.8W

# 3.3 Power Comb--PC6B



### 3. Mounting:

Step1: Mount the din rail to the wall with screws ; Step2; Pull down the mounting buckle, then hang the unit on din rail.



### 4. Wiring:

Open the AC cover: 1. push the cover bottom towards the center with your hand; 2. turn over and pull it out. After connect the AC cable, it is suggested to close the cover.



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#### Note:

 the AC cable is not included in the package, it must comply with requirements of different country.
pin1&2 should be short-circuited with a C3-3P line(included in the package) if the unit work as a normal power comb. But if it work as a auxiliary power comb, pin 1&2 should be taken off.

### 5. Specification:

Input Voltage: Input Frequency: Rated Output Voltage: Rated Output Current: Working Temperature: SW Port Input Voltage: Dimension: 100~240Vac 50~60Hz DC 26V±2V 1.5A. -20°C~55°C Max.230Vac, 2A. 140\*90\*60mm

### 6. Warning:

- The unit can only be used in DT 2 wire products supplied by our company.

 Don't connect the unit with any non-specified power source. Fire or electric shock could result.

- Don't dismantle or alter the unit. Fire or electric shock could result.

- The unit must be installed and wired by a qualified technician.

 Keep the unit away from water or any other liquid. Fire or electric shock could result.

# 4. Monitor User Code Setup

There are 2 kinds of Door Station in 2 wire system.

The first one is Villa Door station, which is only 1-2 buttons, such as DT591, DT592, DT607FE-S1, DT607FE-S2, Use for 1-2 families.

The second one is Apartment Door Station, which is multiple buttons or keypad buttons, such as DMR11S, DMR21, DMR18S, DT608, DT607FE-S3, DT607FE-S4. Use for more than 3 apartments.

The monitor user code setup will be different when work with villa door station or apartment door station.

### 4.1 Monitor User Code Setup when work with Villa Door Station

[1] For APT 1, start at 0-15 (switch all DOWN).

[2] For APT 2, start at 16-31 (switch 5 ON).

[3] When use IN-OUT wiring without any distributor, switch 6 ON for last monitor on the line.(see page 2 for the example).

When use Star wiring with distributor, switch 6 ON for every monitor. (See page 3 for the example).

### Bit-6 line terminal setting:



ON DIP	ON DIP	ON DP	ON DP 1 2 3 4 5 6	ON DP	ON DP	ON DP	ON DP
ID0	ID1	ID2	ID3	ID4	ID5	ID6	ID7
ON DP	ON DIP 123456	ON DP 123456	ON DP 1 2 3 4 5 6	ON DP 123456	ON DP 123456	ON DP 123456	OH DIP 123456
ID8	ID9	ID10	ID11	ID12	ID13	ID14	ID15
ON DP 123456	ON DP 123456	ON DIP 123456	ON DIP 123456	ON DIP 123456	ON DP 123456	0N DP 123456	ON DP 123456
ID16	ID17	ID18	ID19	ID20	ID21	ID22	ID23
ON DP	ON DP 1 2 3 4 5 6	ON DIP 123456	ON DIP 123456	ON DIP 1 2 3 4 5 6	ON DIP 1 2 3 4 5 6	ON DP 123456	ON DP 123456
ID24	ID25	ID26	ID27	ID28	ID29	ID30	ID31

### 4.2 Monitor User Code Setup when work with Apartment Door Station

The user code of monitors should start from 1-32. Generally one button of door station can call one monitor with the according address.

### Bit-6 line terminal setting:





Bit state	Setting	Bit state	Setting
ON 1 2 3 4 5 6	Monitor not at the end of the line.	ON 1 2 3 4 5 6	Monitor at the end of the line.

Bit state	User Code	Bit state	User Code	Bit state	User Code
ON 1 2 3 4 5 6	Code=1	ON 1 2 3 4 5 6	Code=12	ON 1 2 3 4 5 6	Code=23
ON 123456	Code=2	ON 1 2 3 4 5 6	Code=13	ON 1 2 3 4 5 6	Code=24
ON 1 2 3 4 5 6	Code=3	ON 1 2 3 4 5 6	Code=14	ON 1 2 3 4 5 6	Code=25
ON 1 2 3 4 5 6	Code=4	ON 1 2 3 4 5 6	Code=15	ON 1 2 3 4 5 6	Code=26
ON 1 2 3 4 5 6	Code=5	ON 1 2 3 4 5 6	Code=16	ON 1 2 3 4 5 6	Code=27
ON 1 2 3 4 5 6	Code=6	ON 1 2 3 4 5 6	Code=17	ON 1 2 3 4 5 6	Code=28
ON 1 2 3 4 5 6	Code=7	ON 1 2 3 4 5 6	Code=18	ON 1 2 3 4 5 6	Code=29
ON 1 2 3 4 5 6	Code=8	ON 1 2 3 4 5 6	Code=19	ON 1 2 3 4 5 6	Code=30
ON 123456	Code=9	ON 1 2 3 4 5 6	Code=20	ON 1 2 3 4 5 6	Code=31
ON 1 2 3 4 5 6	Code=10	ON 1 2 3 4 5 6	Code=21	ON 1 2 3 4 5 6	Code=32
ON 1 2 3 4 5 6	Code=11	ON 1 2 3 4 5 6	Code=22		

## 5. Wirings for villa and multiple apartments

### 5.1 Wiring for villa

The 2 wire villa system usually use 1-2 buttons door station, for 1-2 families.

[1] For one button door station, the code address of indoor units start at 0-15 (switch all DOWN).

[2] For two buttons door station, the code address of indoor units start at16-31 (switch 5 ON).

[3] When use IN-OUT wiring without any distributor, switch 6 ON for last monitor on the line.

When use Star wiring with distributor, switch 6 ON for every monitor.

# **One Apartment Connection**







### Special One Apartment Connection (1 Master and 1 Slaver)



### **Two Apartments Connection**



### **Three Apartments Connection**



### Four Apartments Connection



### 5.2 Wiring for Multiple Apartments

5.2.1 IN-OUT wiring without any distributor



NOTE: Here we take DT47MG(the monitor) for example.

[1]: Door Station, when there is only one Door Station, the DIP bit-1 and bit-2 should be set to <u>00</u>.

[2]: Power Supply(DR-60-24), MUST be installed side by side with the DPS unit.

[3]: Power Separator, MUST be installed side by side with the DR-60-24 unit.

[4]: Monitor, each one with a unique User Code (Max.32 Monitors), the bit-6 of the DIP should be set to  $\underline{o}$  (off) if the Monitor is not at the end of the bus line.

**[5]:** Monitor, the bit-6 of the DIP should be set to  $\underline{1}$  (on) if the Monitor is connected at the and of the bus line.

#### When Monitor quantity < 20

Cable Usage	А	в
Twisted cable 2x0.00116 sq.in	196ft	196ft
Twisted cable 2x0.00155 sq.in	262ft	262ft

#### When Monitor quantity > 20

Cable Usage	А	в
Twisted cable 2x0.00155 sq.in	229ft	98ft
Twisted cable 2x0.00233 sq.in	229ft	164ft

Note: The thicker the copper wire is, the longer distances will be. Best wire to use is 18 Guage twisted, while Cat 5 or 6 are not recommended.

#### 5.2.2 Star wiring with 4 output distributor DBC4A1



[1]: Door Station, when there is only one Door Station, the DIP bit-1 and bit-2 should be set to  $\underline{OO}$ .

[2]: Power Supply(DR-60-24), MUST be installed side by side with DPS unit.

[3]: Power Separator, MUST be installed side by side with the DR-60-24 unit.

[4]: Monitor, each one with a unique User Code, note that all the bit-6 of the DIP should be set to  $\underline{1}$  (on) in this case.(Max.32 Monitors)

[5]: 4 output distributor DBC4A1,Impedance switch of all DBC4A1 should be set to OFF, except the last DBC4A should be set to ON.

NOTE: Here we take DT47MG(the monitor) for example.

#### When Monitor quantity < 20

Cable Usage	Α	в	с
Twisted cable 2x0.00116 sq.in	196ft	196ft	98ft
Twisted cable 2x0.00155 sq.in	262ft	262ft	131ft

#### When Monitor quantity > 20

Cable Usage	А	в	с
Twisted cable 2x0.00155 sq.in	229ft	98ft	65ft
Twisted cable 2x0.00233 sq.in	229ft	164ft	98ft

Note: The thicker the copper wire is, the longer distances will be. Best wire to use is 18 Guage twisted, while Cat 5 or 6 are not recommended.

# 6. Setup for push buttons

The section explains how to program push buttons of door station DT607 series, DMR11S series, so each button can call corresponding monitor or monitors.

### 6.1 Programming buttons for DT607 series

First step, you should remove metal front panel/cover. Check sketch map on the right.

Each operation is indicated by the lighting up of the LED indicator on the unit, and by the sounding of the buzzer.





### 1. One-to-many call (by default)

**Call button A:** Call all monitors in group address from **00~15**. (one of the monitor should be set to **00**).

**Call button B:** Call all monitors in group address from16~31. (one of the monitor should be set to 16).

### 2. One-to-one call

Call button A: call the monitor with address 01 only. Call button B: call the monitor with address 02 only.



Call button A: call the monitor with address 01 only. Call button B: call the monitor with address 02 only. Call button C: call the monitor with address 03 only. Call button D: call the monitor with address 04 only.

### 2. One-to-many call

**Call button A:** Call all monitors in group address from **00~15**. (one of the monitor should be set to **00**).

Call button B,C,D: Each all monitors in group address from16~31. (one of the monitor should be set to 16).



To change this setting, please follow the steps:



- If setting mode has not been exited, you can change the calling mode by pressing KEY1 circularly.
- The LED\_NAME indicator will blink all the time until exit out the setting mode.
- If without any operation in 10 seconds, it will exit out setting mode automatically.
- In this step, press KEY\_SET button three times to exit out the setting mode manually.

### 6.2 Programming buttons for DMR11S series

Step 1, Format the SD card (not more than 8G), and copy "Namelist.bin" <u>folder</u> to the root directory of SD card.

For DMR11S D2/D4/D6/D8 copy from "Namelist\_D2toD8" For DMR11S D10/D12/D14/D16 copy from "Namelist\_D10toD16" For DMR11S S1/S2/S3/S4 copy from "Namelist\_S1toS4" For DMR11S S5/S6/S7/S8 copy form "Namelist\_S5toS8"

Step 2, Set DIP6 to ON before power up the unit.



Step 3, Power up the unit, and then insert the SD card on the side of DMR21.



Step 4, once the SD card is inserted, the update will automatically start, with sound long "Beep" twice means the update is successful.

Step 5, take out SD card, and Set DIP6 to OFF, and Set DIP4 to ON to activate the list.

Step 6, set DIP3 to ON for double row button, set DIP3 to OFF for double row button. That is,

For DMR11S S1/S2/S3/S4/S5/S6/S7/S8, set DIP3 to ON;

For DMR11S D2/D4/D6/D8/D10/D12/D14/D16, set DIP3 to OFF.

# HOW YOU DELETE AND ADD A NEW MASTER CARD IF YOU LOSE THE MASTER KEYFOB

For DT607 - power off at least 20s, power on, press and hold KEY\_SET for 3s, press KEY\_2, first card tap as ADD, scond as DELETE

FOR DMR11S/DT821 Connect EB+,EB-, switch DIP4 4 times, first card tap as ADD, scond as DELET

FOR TECHNICAL SUPPORT CALL 1516-387-6606 FROM 9AM TILL 4PM MONDAY THRU FRIDAY OUR WEBSITE WWW.NYWINT.COM