the excelPTZ range

Installation and Operation Manual

8 x Alarm Input Module 240v AC

Models covered PTZ752



Version 2

For updates to these instructions visit <u>www.excelPTZ.com</u>

Please read this operation manual carefully <u>before</u> installing and using this unit !!!!

Please read the following:



- 1. Please read the operation manual carefully before installing and operating the product.
- 2. The PTZ752 Alarm Input Module requires a **240v** AC power supply. A 13amp plug is supplied with the unit.
- 3. Do not attempt to disassemble this unit. In order to prevent electric shock, do not remove screws or covers. There are no user-serviceable parts inside this unit.
- 4. Always use and adhere to current electrical safety standards to install and use the Alarm Input Module. The RS-485 cables should be kept way from high voltage equipment such as mains cables and especially fluorescent lights. Using an anti-surge protection device is recommended to prevent damage to this unit from lightning and mains surges. Damage caused by lightning or mains voltage surges is not covered under the PTZ752's warranty.
- 5. Do not operate in areas exceeding the stipulated limitations concerning temperature, humidity and power supply.
- 6. Note that the Alarm Input Module can only be connected to one PTZ dome.

The excelPTZ range –

Alarm Input Module

The Alarm Input Module has the ability to add alarm inputs to many PTZ domes that have the facility to save at least 64 presets and run on the Pelco-D protocol at 2400 baud rate. This module provides 8 alarm inputs that can be either triggered by normally open or normally closed circuits. When an alarm input is triggered the unit tells the dome to move to a pre-configured preset position.

The Alarm Input Module can be used with the PTZ300 range of domes to provide eight alarm input triggers and two alarm outputs. On the PTZ400 range it adds an additional eight alarm inputs bringing the total to twelve inputs and provides a total of three alarm outputs.

Setup Procedure

1. The alarm input ports $1 \sim 8$ call preset positions $39 \sim 46$ inclusive. See table below.

Alarm Input Port	Call Preset Position	Corresponding LED Lamp Indicator			
1	39	LED 1			
2	40	LED 2			
3	41	LED 3			
4	42	LED 4			
5	43	LED 5			
6	44	LED 6			
7	45	LED 7			
8	46	LED 8			

Decide on how many alarm inputs are required and set the corresponding presets positions in the PTZ dome. See "Setting the Alarm Presets in the PTZ Dome."

2. Set the address of the dome in the Alarm Input Module using the dip switches. The address is set in binary notation and must be identical to that set in the dome. Address $1 \sim 511$ may be used.

For example: To set the address at 1 put switch 1 down. To set the address at 2 put switch 2 down. To set the address at 3 put switches 1 & 2 down. ..and so on.. Please see Appendix A for full list.



SIDE VIEW DIPSWITCH SETTINGS



REAR VIEW UNIT CONNECTIONS

3. Now connect the RS485 connections in and out. Connect a CAT5 pair to the RS485 A+ line and B- line connections from the DVR or keypad outputs to the Alarm Input Module '485 IN'. (A)

Ensure that they are connected the correct way around.

- 4. Connect a CAT5 pair from the Alarm Input Module '485 OUT' to the RS485 in connections on the PTZ dome. Ensure that they are connected the correct way around. **(B)**
- 5. There are two alarm output relays in the PTZ752. One is marked as TO MATRIX and the other is marked CONTROL. These outputs provide a 0v normally open or normally closed switch to trigger an output device such as a siren, floodlight or DVR. The labelling of these units is immaterial as they both function similarly. (C)
- 6. Ensure that the red ALARM button is switched to ON by pressing the button in. The alarm will only work if this switch is set to ON. (D)
- The 'DC15V TO DOME' connection is not relevant and must <u>not</u> be connected to the dome. The external PTZ domes are generally run on 24v AC and therefore must not be connected to this terminal. (X)



FRONT VIEW ALARM INPUT CONNECTIONS

- 8. Now run a CAT5 pair for each input alarm channel to a normally open or normally closed alarm circuit. First start with channel 1. Using the COM1~4 (common for alarm channels 1 ~ 4) and either 1NC (channel 1 normally closed) or 1NO (channel 1 normally open). When the alarm is triggered LED 1 will be lit. It is recommended to use the 'NO' alarm port.
- 9. Set each subsequent alarm channel as above. Use COM5~8 (common for channels $5 \sim 8$).
- 10. It is recommended to use either normally open or normally closed circuits rather than a mixture of both. If a mixture is used then the LEDs lit will give confusing information as it will not be evident which circuits have been triggered and which have not.

Setting the Alarm Presets in the PTZ Dome

Each of the eight alarm channels call a different dedicated preset number when the 0v switch is detected by the Alarm Input Module. This allows the dome to move immediately to the selected preset position in an alarm condition. The following alarm channels call the stipulated preset number when activated:

when Alarm Channel No 1 is activated it calls preset number 39 when Alarm Channel No 2 is activated it calls preset number 40 when Alarm Channel No 3 is activated it calls preset number 41 when Alarm Channel No 4 is activated it calls preset number 42 when Alarm Channel No 5 is activated it calls preset number 43 when Alarm Channel No 6 is activated it calls preset number 44 when Alarm Channel No 7 is activated it calls preset number 45 when Alarm Channel No 8 is activated it calls preset number 46

To set these special presets, if you have set up alarm channel 1, move the dome camera to where you wish alarm 1 preset to move to, and using the keypad press 39 followed by the Preset button. Then if you have set up alarm channel 2, move the dome camera to where you wish alarm 2 preset to move to, and using the keypad press 40 followed by the Preset button and so on.

When more than one alarm channel is utilised and activated, the dome will respond to each

alarm by calling the relevant preset and switching to the next preset after two seconds. The dome will lock on to the last alarm activated and will not resume a patrol, auto scan or record pattern until the alarm condition is cleared and the required dome operation manually restarted.

Example: Connecting Alarm 1 channel to a door contact

Here is an example scenario. A company requires a dome to run a patrol (tour) continuously viewing four preset points. One of the preset points is the main entrance door to the building. The requirement is to ensure that during out of hours the entrance door is not breached. The dome alarm 1 channel is connected to a door contact on the main entrance door. A CAT5 twisted pair is connected at the PTZ752 end to the 1NO and COM1~4 connection. At the door contact end the twisted pair is connected either way round. The dome is then set up for the tour using presets 01 to 04. In addition preset 39 is set up focusing the dome camera at the door entrance. When the building is vacated the dome is left running a tour of the four presets. If the door contact is closed a voltage free switch is made on the Alarm 1 channel. The dome then automatically calls preset 39, which locks onto the main entrance door.

Alarm Output Settings

In addition to the alarm inputs, the Alarm Input Module will activate two alarm outputs if an alarm input is triggered. There are two relays each having connections for an alarm output, a common and either a normally open or a normally closed connection. Again this is a 0 volt switch and could be used for example to close a circuit to an audible alarm, lighting or other warning device. Ensure that the switch line does not carry any voltage. Again this switch remains activated until the input alarm/s have been cleared/reset.

APPENDIX A

PTZ	ID-CODE Status											
Address	DIP-1	DIP-2	DIP-3	DIP-4	DIP-5	DIP-6	DIP-7	DIP-8	DIP-9	DIP-10		
1	ON	OFF										
2	OFF	ON	OFF									
3	ON	ON	OFF									
4	OFF	OFF	ON	OFF								
5	ON	OFF	ON	OFF								
6	OFF	ON	ON	OFF								
7	ON	ON	ON	OFF								
8	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF		
9	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF		
10	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF		
11	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF		
12	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF		
13	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF		
14	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF		
15	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF		
16	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF		
17	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF		
18	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF		

If ID is greater than that shown above then use the following table to determine switches to set.

32 value 2 4 8 16 64 128 256 512 1 DP8 DP9 DPSW DP 1 DP2 DP3 DP4 DP5 DP6 DP7 **DP10** √ \checkmark Example ID'is 79. First look for value equal to or less than ID value required and tick box. Now subtract the value from the ID value i.e. 79 = 64 = 15Now look for value equal to or less than 15 and tick box, Now subtract the value, from 15 i.e $15 \rightarrow 8$ Now look for value equal to or less than 7 and tick box. Now subtract the value from 7 i.e 7 - 4 = 3Now look for value equal to or less than 3 and tick box. Now subtract the value from 3 \i.e. 3 - 2 = 1Now tick box displaying value = 1.

To set dipswitches for ID value = 79 set the following dipswitches to on:- 1, 2, 3, 4 and 7.