

DIGITAL FRONTIER

Hybrid Alarm System
DFA3300/3400

User Manual

Version 1 rev1

About Your Security System

Your DF security equipment has been designed to give the greatest possible flexibility and convenience. Read this manual carefully and have your installer instruct you on system operation and on which features have been implemented in your system. All user of this system should be equally instructed in its use. Fill out the system information page and store this manual in a safe place for future reference.

Testing

To ensure that you system continues to functions as intended, it is important that you test your system weekly. See the testing procedure elsewhere in this manual. If your system does not function properly, call your installing company for service.

Important Notice

A security system cannot prevent emergencies. It is only intended to alert you and, if included, a monitoring station, of an emergency situation. Security systems are generally very reliable but they may not work under all conditions and they are not a substitute for prudent security practices or life and property insurance. Your security system should be installed and serviced by qualified security professionals who should instruct you on the level of protection that has been provided and on system operations.

Features of DF Panel

General

- Signaling of panic alarm and 8 burglary sensor zones.
- System can be operated by up to 1 master user and 8 users with independent access codes.

Arming

- Operate in 3 arming mode: At Home, Away and Mix arming mode.
- One key arming for easy operation.
- Auto force arming. Do not need to close the entry/exit zone before arming.

Central Monitoring

- Communication with up to 2 monitoring stations (CMS) via the fast and popular format.
- The 8th user code can be programmed as Duress code.
- Ability to send both user manual test message and system periodic test message.

Phone Reporting/Control

- Controlling the system through phone including: arm, disarm and home automation control.
- Informing of alarms event with telephone messages including: zones status, siren status and arming status.
- Up to 4 user programmable phone numbers.
- Able to answer phone call.
- High phone security features. Only user with valid password is able to access the system; Auto hang up when password error.
- Double reporting features that enable the system to send message to CMS and followed with user reporting.

Keypad

- Keypad come with built in panic button
- Auto synchronization on password key in. No cancel key is required when wrong password is key in.
- Keypad locking feature prevents password guessing.

Other

- 2 built in home automation points.
- Controlling of home automation point using phone and keypad.
- User programmable door chime.
- Hybrid system, possibility to add wireless sensor and remote control to arm/disarm system.

Basic functions of DF alarm panel

Your security system is made up of a DF control panel, one or more keypads and various sensors and detectors. The control panel will be mounted out of the way in a utility closet or in a basement. The metal cabinet contains the system electronics, fuses and standby battery. The keypads have an audible indicator (buzzer), a group of zone and system status lights and command entry keys. The keypad is used to send commands to the system and to display the current system status. The keypad(s) will be mounted in convenient location inside the protected premises close to the entry/exit door(s).

The security system has several zones of area protection and each of these zones will have one or more sensors connected to it (motion detectors, glass break detectors, door contacts, vibrate sensors, etc.). When a sensor is in alarm, the zone of alarm will be indicated on the keypad (zone lights)

The DF Keypad

The keypad controls the operation of the DF alarm panel. It uses a series of command entry keys to input codes that can arm, disarm and program the system.

Indicator Lights

Home and Away Lights

Home Light On: The system is in Home mode.
Away Lights On: The system is in Away mode.
Both Light On: The system is in Mix mode.

Ready Light

On: The system is in ready mode. User can key in password to arm the system.
Off: The system is in command modes.
Blink: Trouble conditions exist.

Bypass Light

On: The system is in bypass mode.

Memory Light

On: The system is in memory mode.
Blink: The system is in trouble display mode.

Zone Lights

On: One or more sensors in that zone is opened.
Off: All sensors are closed properly.
Blink: Zone has been bypassed.

Keypad Beeper

Single short Beep	- Keypad press detected.
Double short Beep	- Command accepted.
Long Beep	- Illegal operation or keypad lock.
Short beep every 5 second	- Entry or exit delay in progress.
Continuous short beep	- The last 5 seconds before entry or exit delay expired.
Continuous long beep	- New trouble condition occurs.

Arming the System

Make sure the “Ready” light is on before arming. If the “Ready” light is off that means the system is in command mode, press the # key a few times until the “Ready” light is on. There are two ways to arm the system: one key arming or password arming. The “One Key Arming” allowed the user to arm the system in selected mode by holding down one single key for three seconds. This is the fastest and easiest way to arm the system. If this feature is disabled, the user can armed the system by entering the 4 digits access code. As each digit is entered, the keypad sounder will beep. If the correct password is entered, the keypad sounder will beep twice and the “Armed” lights will come on. If the access code was entered incorrectly, just continue to enter the correct code. The intelligent “Auto Password Synchronization” feature will recognize the access code automatically. If more than 12 digits of key is pressed and still does not match the access code(s), the system will lock out the keypad for 60 seconds. During keypad lock out period, the system will respond long beep with every key press and no arm/disarm operation are allowed. This help to prevent password guessing.

To adapt the alarm system to various situations the control panel offers several arming mode:

At Home Arming (* 1)

In this arming mode the system protect all perimeter zones (e.g. door and windows) and automatic isolated all interior zone (e.g. infra red sensors) to allow movement in the premises. This mode will also cancel the delay time of entry/exit zone and any violation of entry/exit zone will cause alarm immediately.

To arm the system in this mode:

- Hold H key for about 3 second (until Armed lights come on)
- * 1 [password]

Away Arming (* 2)

This arming mode activated all zones and put the system in maximum security. The system expects no one in the premises and all interior sensors will turn on. To arm the system in this mode:

- Hold A key for about 3 second (until Armed lights come on)
- * 2 [password]

The keypad sounder will beep every 5 seconds to indicate the entry/exit delay is in progress. Exit the premises through the door indicated by your installer as the entry/exit door. During the last 5 seconds before the entry/exit delay expired, the keypad sounder will beep rapidly. After that the system is fully armed.

Mix Arming (* 3)

This feature will allow you to arm the system in the situation that part of residents is in premises while still expecting other residents to come back. This mode will isolate all interior zones to allow movement in the premises. The entry/exit zone will have delay to allow the last resident to enter the premises and disarmed the system. To arm the system in this mode:

- Hold H and A key for about 3 second (until Armed lights come on)
- * 3 [password]

Disarming the System

Enter the premises only through the door(s) designated by your installer as the entry door. Entering by any other door will sound an immediate alarm. As soon as the door is opened, the keypad sounder will beep every 5 seconds to indicate that the system should be disarmed. Enter your four digits access code to disarm the system. The system confirmed the entry by two short beeps and the “Armed” light goes off. If an error is made entering the code, just continue to enter the correct code. The intelligent “Auto Password Synchronization” feature will recognize the access code automatically. If more than 12 digits of key is pressed and still does not match the access code(s), the system will lock out the keypad for 60 seconds. During this period no disarm operation is allowed through keypad.

Duress

If Duress code feature is activated and the 8th user code is key in to disarm the system, the system will send a Duress message to the monitoring station.

Zone Bypassing (* 4)

Use zone bypassing to arm the system partially or disable temporary out of service sensors due to damaged wiring or contacts until repairs can be made. User can only enter bypass mode while the system is disarmed.

Example: bypassing zone 3 and 5.

- * 4 [Password] - entering bypass mode.
- 3 5 - bypassing zone 3 and 5. As each zone is bypassed, the zone light will come on. If a zone is bypassed in error, press that zone number again and the zone light will go off indicating that the zone is not bypassed.
- # - return to ready mode.

While in ready mode, zones that have been bypassed will have its lights blinking. The zones remain bypassed till the user disabling the bypass. To disabling the bypass, follow the steps above and turn off that zone lights in bypass mode.

Alarm Memory Display (* 5)

Pressing * 5 displays the information about the most recent alarm condition. The “Memory” light will turn on and one or more zone light will turn on to indicate the zone(s) that cause the most recent alarm. Pressing # key will quit memory display immediately.

Trouble Display (* 5 0)

The DF alarm panel continuously monitors a number of possible trouble conditions. If one of these trouble conditions occurs, the keypad will beep continuously and the “Ready” indicator will light. Pressing * 5 0 will acknowledge the trouble signal, silence the sounder and go into trouble display mode. One or more zone light will come on to indicate which type of trouble exists. Press # to return to Ready.

Zone 1 light - No AC supply

Zone 2 light - Battery low

Zone 3 light - CMS reporting fail.

Zone 5 light – Wireless sensor Supervision Fail

Zone 6 light – Wireless sensor Battery Low

The “Ready” light will keep on blinking until all trouble condition is cleared. If new trouble condition occurs, the keypad sounder will beep again.

Programming Security Code (* 6)

The system comes with one factory-set code (master user code): 1 2 3 4. It is possible to program additional 8 user access codes. Only master user is allowed to modify other user codes. While modifying security code, new security code will need to key in two times in order to store in memory.

Changing master code

* 6 [current master code] 0 [new master code (repeat 2 times)]

Adding user code

* 6 [master code] - The keypad zone lights will indicate programmed user code.
If zone lights 1 and 3 are on that means user #1 and #3 are programmed.

2 - programming the 2nd user code.

[new user code (repeat 2 times)]

- key in the new user code two times.

Delete user code

* 6 [master code] - The keypad zone lights will indicate programmed user code.

3 - choose to program the 3rd user code.

* - key in star key to delete the user code.

Duress

The system can send an emergency signal to the Central Monitoring Station if you are forced to enter the premise. This feature can be programmed by your installer. If active, then user #8 is the ambush code. Key in this code will disarm the system and alert the Central Monitoring Station.

Alarm Reporting

The DF alarm panel is able to send system status to a subscribe Central Monitoring Station. Beside that, the system also comes with personal reporting feature that allows dialer reports to be sent to a person. When an alarm occurs, the system will automatically seize the telephone line and dial a pre-programmed phone number. The system will then output beeping sound every 5 seconds to indicate this is an alarm call. If after 40 seconds no key has been pressed, the alarm panel will hang up and try again. During reporting in personal format mode, prior to finish dialing all the phone

number digits, the report may be aborted by entering any valid user code on the keypad.

There are a total of four phone numbers that can be programmed by the user. In the event of an alarm, the system will dial out the numbers sequentially. The user is able to disarm the system upon receiving the call and abort the dialing sequence. If the system is not disarmed the system will try on other phone numbers and each phone number will be dial a few time (programmable by the installer).

Upon receiving the call, enter your four digit master code (user code is not accepted) and the system will respond with single or double beeps to indicate the current system arming status. A single beep means that the system is disarmed and double beeps mean the system is armed.

The user can now control the system with the following key on the phone.

KEY	SYSTEM REPOSE	STATUS
1	A single beep	■
2	A double beep	■■
3	A long beep and a single beep	— ■
	A long beep and a double beep	— ■■
	A single beep	■
	A double beep	■■
0	Eight consecutive single (zone close) or double beep (zone open), depending on Zone 1 to 8's status	Checking all zones status. For example: [■ ■■ ■ ■ ■■ ■ ■ ■] mean zone 2 and 5 is triggered.

Your alarm panel may have been set up to allow you to telephone the system to determine if it is ON or OFF. You can also turn the system ON or OFF remotely by telephone. The call can be made from any telephone capable of tone dialing, including DTMF-capable mobile telephones. To operate your system by a telephone call, follow the steps below:

1. Call the telephone number that the system is connected to.
2. Wait for 8 rings (programmable by your installer) until the system answer the call.
3. Enter your four digit master code and the system will respond with single or double beeps to indicate the current system arming status. A single beep means that the system is disarmed and double beeps mean the system is armed.
4. The caller now can control the system using the command as mention in the table above.

Programming Telephone Number (* 7)

This function is available only to mater user.

Adding new phone number

- * 7 [master code] - The keypad zone lights will indicate the programmed phone number. If zone lights 1 and 3 are on that means phone number #1 and #3 are programmed.
- 2 - programmed the 2nd phone number.
- [phone number] - exclude area code if the phone number to program has the same area code as the phone line that the alarm is connected to. E.g. while programming phone number 0387335579 for alarm that is install at Selangor, take out 03 and key in 87335579 only.
- # - save the phone number and back to Ready mode

Delete phone number

- * 7 [master code] - The keypad zone lights will indicate the programmed phone number.
- 1 - choose to programmed the 1st phone number.
- # - clear the phone number and back to Ready mode.

Review phone number

- * 7 [master code] - The keypad zone lights will indicate the programmed phone number.
- 3 - choose to the 3rd phone number to review. The first digit of the phone number is represent on the zone lights. Refer to table below.
- * - forward the phone number one digit. Keep on pressing star key until system respond with double beep and back to ready.

Zone 8	Zone 7	Zone 6	Zone 5	Zone 4	Zone 3	Zone 2	Zone 1	Number
Off	Off	Off	Off	Off	Off	Off	ON	1
Off	Off	Off	Off	Off	Off	ON	Off	2
Off	Off	Off	Off	Off	Off	ON	ON	3
Off	Off	Off	Off	Off	ON	Off	Off	4
Off	Off	Off	Off	Off	ON	Off	ON	5
Off	Off	Off	Off	Off	ON	ON	Off	6
Off	Off	Off	Off	Off	ON	ON	ON	7
Off	Off	Off	Off	ON	Off	Off	Off	8
Off	Off	Off	Off	ON	Off	Off	ON	9
Off	Off	Off	Off	ON	Off	ON	ON	0

Door Chime (* 8 1)

The door chime feature is used to alert the user with a tone from the keypad each time a door or window is opened. The user can programmed the doors and windows that will provide this indication.

Setting Door Chime Zone

- * 8 1 - enter door chime setting mode.
- 3 5 - activate door chime feature of zone 3 and 5. As each zone is activated, the zone light will come on. If a zone is activated in error, press that zone number again and the zone light will go off indicating that the zone is deactivated.
- # - return to ready mode.

Walk Test (* 8 2)

Walk test mode allow all zones and the siren to be tested. As Zones are triggered the siren will squawk and the relevant zone light will turn on. This allows a "one man" walk-test by walking through all zones.

Setting Walk Test Zone

- * 8 2 - enter walk test setting mode.
- 1 2 3 4 5 6 7 8 - activate walk test feature on all zones. As each zone is activated, the zone light will come on. If a zone is activated in error, press that zone number again and the zone light will go off indicating that the zone is deactivated.
- # - return to ready mode. Open the zones and observed the squawk sound on the siren.

CMS Manual Test (* 8 3)

User can test their CMS feature by sending a manual test message to the monitoring station by pressing * 8 3. Wait for at least 2 minutes if no trouble condition occurs (keypad sounding and Ready light blinking) that mean the signal is send successfully to CMS.

Home Automation

Your DF alarm system may have home automation feature implemented. You can control the on/off of up two independent electric appliances (e.g. lighting, radio, autogate, electric lock etc) using your keypad or through phone.

On/Off using Keypad

COMMAND	SYSTEM REPOSE		STATUS
* 9 4	A long beep and a single beep	— I	Turn off device 1
* 9 5	A long beep and a double beep	— II	Turn on device 1
* 9 6	A long beep and a single beep	— I	Device 1 is off
	A long beep and a double beep	— II	Device 1 is on
* 9 7	A long beep and a single beep	— I	Turn off device 2
* 9 8	A long beep and a double beep	— II	Turn on device 2
* 9 9	A long beep and a single beep	— I	Device 2 is off
	A long beep and a double beep	— II	Device 2 is on

On/Off using phone

The user also has the choice of turn on or off the electric appliances through phone. First dial into the system, wait for the system answer call, enter your four digit master code and control the electric appliances using the additional home automation commands below:

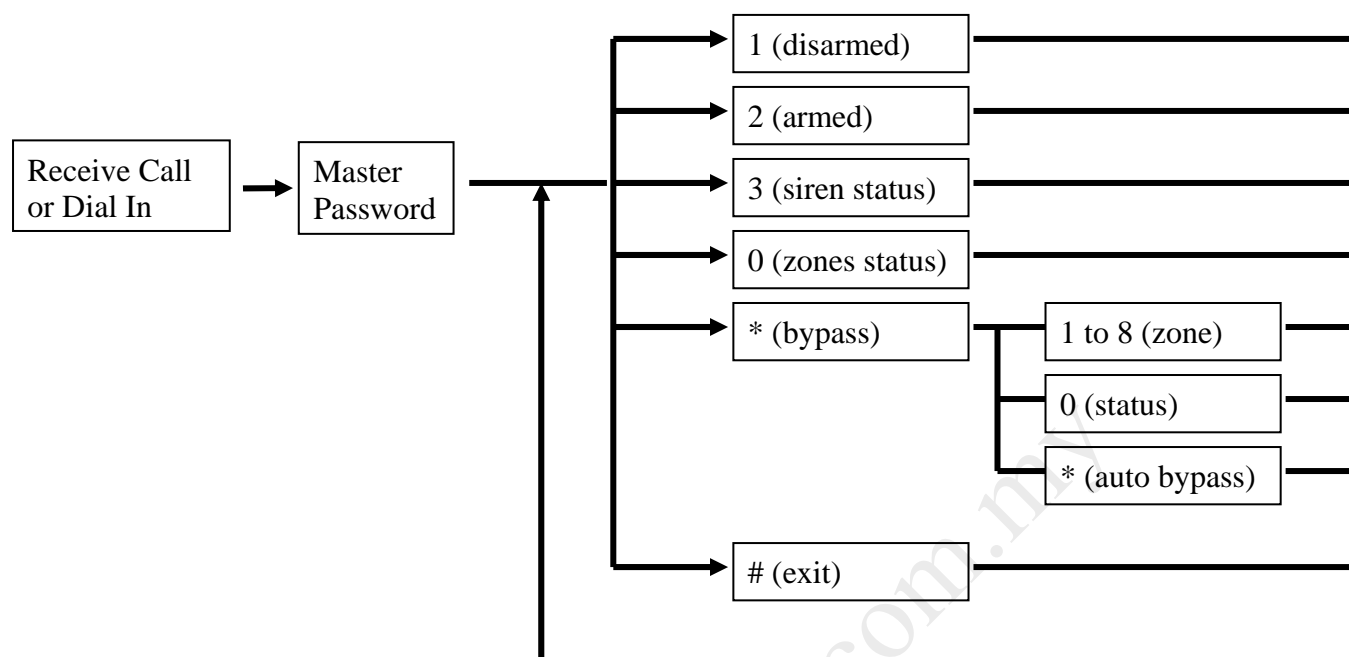
KEY	SYSTEM RESPOND		STATUS
FOR DEVICE 1			
4	A single beep	I	Turn off device 1
5	A double beep	II	Turn on device 1
6	A single beep	I	Device 1 is off
	A double beep	II	Device 1 is on
FOR DEVICE 2			
7	A single beep	I	Turn off device 2
8	A double beep	II	Turn on device 2
9	A single beep	I	Device 2 is off
	A double beep	II	Device 2 is on

Keypad Command Summary

Arm/Disarm Alarm	[User Password] or [Master Password]
At Home Arming	H (hold 3 sec) or * 1 [Password]
Away Arming	A (hold 3 sec) or * 2 [Password]
Mix Arming	H + A (hold 3 sec) or * 3 [Passsword]
Bypass	* 4 [Password] [Zones to bypass] #
Display Memory	* 5 [Any key to end]
Display Trouble	* 5 0 [Any key to end]
Add/Modify Password	* 6 [Master password] n [New password (Repeat 2 times)] Value of n: 0: master password 1 to 8: user 1 to 8
Delete Password	* 6 [Master password] n * Value of n: 0: master password 1 to 8: user 1 to 8
Change Reporting Phone Number	* 7 [Master password] [1 or 2 or 3 or 4] [Phone number] #
Door Chime	* 8 1 [Zones] #
Walk Test	* 8 2 [Zones] #
Send CMS Test Message	* 8 3
Control Device 1	* 9 [4(off) or 5(on) or 6(status)]
Control Device 2	* 9 [7(off) or 8(on) or 9(status)]
Back to Ready	#

Smart Dialer Operation Summary

Receive alarm call from the system or Dial into the system:



KEY	SYSTEM REPOSE		STATUS
1	A single beep	I	Disarmed system
2	A double beep	II	Armed system
3	A long beep and a single beep	— I	Siren on, system disarmed
	A long beep and a double beep	— II	Siren on, system armed
	A single beep	I	Siren off, system disarmed
	A double beep	II	Siren off, system armed
0	Eight consecutive single (zone close) or double beep (zone open), depending on Zone 1 to 8's status		Checking all zones status. For example: [I II I I II I I I] mean zone 2 and 5 is triggered.

System Installation Information

Description	Zone	Entrance	Internal delay	Internal	Instant	24 hour
	1					
	2					
	3					
	4					
	5					
	6					
	7					
	8					

* The zone numbers that have been circle will have auto-reset/bell cut-off feature.

Timer

Entry Time (_ _ _) seconds

Exit Time (_ _ _) seconds

Bell Cut off Time (_ _ _) minutes

Telephone

Number of Ring before answer (_ _) rings

Each number will be dial (_ _) times

Service

Installer Company Name (_____)

Contact person (_____)

Installer Service Tel: (_____)

Testing Your System

It is recommended that you test your system weekly.

The elements of the alarm system are subject to various outside influences, for example weather conditions, lightning (overhead telephone lines, power lines, sensor lines) and mechanical damage (keypads, detectors). Only regular testing of the alarm system operation ensures keeping high level of burglary and fire protection.

The control panel is equipped with a number of safeguards and auto diagnostic functions testing the reliability of the system. The control panel signals failure detection by blinking the Ready lights on the keypad. **The signal should be immediately taken care of – if necessary, the installer should be consulted.**

Perform system tests in the off-peak hours, such as early morning or late evening. If your system is monitored by a central station then contact them prior to performing this test. Test your system once a week using the following procedure:

Siren Test

1. Arm your alarm system and activate the system by opening a zone (example window or door).
2. Confirm that the alarm sounding device (bell or siren) activates.
3. Disarm your system.

CMS Test

1. This test is necessary only if you are subscribed to a central monitoring station.
2. Sending a testing code to central station by pressing * 8 3.
3. Wait for about 2 minutes, if central station reporting fail then the keypad will sound and Ready light blinking. Press * 5 0 to review the trouble condition.
4. If trouble occurs, consult your central station authority or installer.

Battery Test

It is recommended that the standby battery be replaced every year.

1. Turn off the power supply to your alarm system.
2. Observed the trouble condition occurs. The keypad will sound and the Ready light will blink. Press * 5 0 to acknowledge the trouble condition.
3. Arm your alarm system and activated the system by opening a zone.
4. Observed if your siren can sound for 1 minute.
5. Disarmed your system.

Zone Test

1. Close all windows and doors properly.
2. Activate the Walk Test feature of the system.
3. Open a single sensor and observed the siren squawk.
4. If opening of any sensors does not cause a siren squawk. Consult your installer for the faulty sensor.