

Economy functional & digital audio access systems

Video 8 & 16 Digital Installation Manual

vinital Video

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Engineers Notes

Digital Systems

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Video Digital System Basic with 16 way Controllers Overview





Video Digital System with 16 way Landing Controllers Overview



Digital 50VAC Main Power Supply Overview



Digital Main Controller Overview



Digital Main Controller Overview



Digital Riser Controller Overview





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Network and Power wiring detail



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Concierge Building Interface Card (Multi-Building) wiring detail

Video Digital System Flat Programming Form



Digital Entrance Panel Programming Instructions

System Function Programming

Function	Description	Parameters	Notes
1	Lock Release Time	1 - 255 Seconds	
2	Door Open Duration Time	1 - 255 Minutes	
3	Door Alarm Delay Time	1 - 255 Minutes	Zero minutes will disable the Door Alarm
4	Service Access Code (AC)	1 - 5 Digits	Code + Trades to release door
5	Engineers Access Code (EA) 1 - 5 Digits		Code + Trades to release door
6	Monitor Ring Time	1 - 255 Seconds	
7	Call Duration Time	1 - 255 Seconds	
8	Set Digital Panel Number	1 - 9	
9	Communication Test facility	-	Controller Interface Data Continuity Test
10	Panel Facility Configuration	A ← → F	Alpha Numeric, Cameras, Concierge and Door Tone On/Off
27	Erase All Memory and Reset	-	90 Second Erase on a 30 count will automatically re-set the default values

Function 1 (Lock Release)

Press 1 on the Digital Panel keypad and then press the **PROG** button. Enter between 1 and 255 seconds and press **CALL**. **This will set the Lock Release duration time for that Panel.**

Function 2 (Door Open Alarm Duration)

Press 2 on the Digital Panel keypad and then press the **PROG** button. Enter between 1 and 255 minutes and press **CALL**. **This will set the Door Alarm Duration time**.

Function 3 (Door Open Alarm Delay)

Press 3 on the Digital Panel keypad and then press the **PROG** button. Enter between 1 and 255 minutes and press **CALL**. **This will set the Door Alarm Delay time**.

Function 4 (Service Access Code)

Press 4 on the Digital Panel keypad and then press the **PROG** button. Enter up to 5 digits and press **CALL**. This will establish a Service Access Code. If a 5 digit service code has already been entered the Digital Panel will display **AC**? alternating with the remaining 4 numbers, i.e. **AC1 - 2345**. This can, if required be deleted by pressing the **CANCEL** button. **Press the TRADES button, Enter Code and then press Trades or Call to release the Door.**

Function 5 (Engineering Access Code)

Press 5 on the Digital Panel keypad and then press the **PROG** button. Enter up to 5 digits and press **CALL**.This will establish an Engineering Access Code. If a 5 digit engineering code has already been entered the Digital Panel will display **EA1** alternating with the remaining 4 numbers, i.e. **EA1 - 2345**. This can, if required be deleted by pressing the **CANCEL** button. **Press the TRADES button, Enter Code and then press Trades or Call to release the Door.**

Function 6 (Telephone Ring Time)

Press 6 on the Digital Panel keypad and then press the **PROG** button. Enter between 1 and 255 seconds and press **CALL**. This can if required be deleted by using the **CANCEL** button. **This will set the Digital Panel to Telephone ring time**.

Function 7 (Call Duration Time)

Press 7 on the Digital Panel keypad and then press the **PROG** button. Enter between 1 and 255 seconds and press **CALL**. This can if required be deleted by using the **CANCEL** button. **This will set the Digital Panel to Telephone Call Duration time**.

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Digital Entrance Panel Programming Instructions cont...

System Function Programming cont...

Function 8 (Setting Digital Panel Number(s)

Press 8 on the Digital Panel keypad and then press the **PROG** button.

Enter from 1 to a maximum of 9 depending on the position of the Digital Panel in the system and press **CALL**.

If required a set Panel position can be deleted by using the CANCEL button.

This will set the Digital Panel position in a Single or Multi Entrance system.

Function 9 (Data Communication Test Facility)

Press 9 on the Digital Panel keypad and then press the **PROG** button. The display will now scroll through all connected Controller Interfaces on the system only pausing when data continuity is broken. **This will establish all Controllers have continuity of Data.**

Function 10 (Panel Facility Configuration)

Press 10 on the Digital Panel keypad and then press the **PROG** button.

The display will now show the factory default setting as shown on the rear of the Digital panel. If there is a requirement to change the default mode then press **CANCEL**, enter the new code number and press **CALL** to accept the change.

	Concierge with	Concierge with	Non Concierge	Non Concierge
	Panel & Lobby	Panel & Lobby	Panel & Lobby	Panel & Lobby
	Camera	Camera	Camera	Camera
	<u>without</u> Door	<u>with</u> Door	<u>without</u> Door	<u>with</u> Door
	Open Tone	Open Tone	Open Tone	Open Tone
Non Alpha	006	070	007	071
A	014	078	015	079
AB	022	086	023	087
ABC	030	094	031	095
ABCD	038	102	039	103
ABCDE	046	110	047	111
ABCDEF	054	118	055	119

Function 27 (Erase All Memory and Reset System to Default)

Press 27 on the Digital Panel keypad and then press the **PROG** button. This will put the system into erase mode. Erase mode will be indicated by the Display initially reading **E.000** and then following on with a count of 30. The system will not reset itself to default at 30. To initiate the default setting, the batteries must be disconnected and the Fused spur must be switched off. This must be for a period of no less than 5 seconds or the extinguishing of the on board healthy LED's

Once instigated the erasing of the system cannot be stopped until completion (Approximately 90 seconds).

Note:

Default settings are as follows,

	0	
Function 1	Lock Time	10 seconds
Function 2	Door Alarm Delay Time	OFF
Function 3	Door Open Duration Time	OFF
Function 4	Service Access Code	Blank
Function 5	Engineers Access Code	Blank
Function 6	Telephone Ring Time	30 seconds
Function 7	Call Duration Time	30 seconds
Function 8	Digital Panel Position No.	1
Function 10	Panel Facility Configuration	007 (No Door Open Tones)
Note:		,

On a Multi Entrance system it is important that all Digital Panels are assigned an individual position number (FUNCTION 8) AFTER Downloading system data. <u>14</u>.

Digital Entrance Panel Programming Instructions cont...

Main and Riser/Landing Controllers

- 1) Program the Main and Riser/Controllers to the Controller Programming Sheet..
- 2) Set all Controllers to their specified Riser/Landing positions for a Digital System. (See Controllers and Flat Location form).

Digital Entrance Panel Programming

An existing or previously used Digital Panel at switch on having pressed the **PROG** button should read **01.01** and will then alternate between **01.01** and a clear display or the previously entered flat number.

To Start Programming

- 1) Press the **PROG** button. The Panel display should now read **01.01**, **Blank or Digits**.
- 2) Press **CANCEL** to clear the previously programmed flat number(s) if required.
- 3) Enter flat number required and press **CALL** to store the flat number you have selected.
- 4) The display should now read **01.02**.
- 5) If a new Digital Panel continue with item 3 until all required flats are programmed.
- 6) If you are programming an existing or previously used Digital Panel continue with items 2 & 3 until all required flats are programmed.

Finally press the PROG button to exit the programming mode.

Note 1:

When there is a need to edit or check an already programmed flat on the system use the following procedure.

Enter Controller number i.e. 2. Enter Line Output number i.e. 03 and press **PROG**. To edit a flat number press **CANCEL** enter new flat number and press **CALL** to store. Finally press **PROG** to exit edit mode.

The Edit/Check flat number operation is now complete.

Note 2:

01.01 relates to **01.** Controller position and **.01** Telephone/Monitor Line 1.

Note 3:

On initial programming if the Red Busy Indicator on the Digital Panel illuminates when a flat is called and does not ring, either the flat has not been programmed or the Privacy is in the **ON** mode.

Digital Entrance Panel Controls

- **PROG** button Used to put the Digital Panel in and out of programming mode.
- **UPLOAD** button With the Primary Digital Panel programmed pressing the **UPLOAD** button(s) on all Secondary Panels will make them ready for information to be downloaded.

DOWNLOAD button Pressing the **DOWNLOAD** button on the Primary Digital Panel will send program information to all prepared Secondary Digital Panels.

- **INTERNAL** Volume Digital Panel to Telephone/Monitor volume adjustment
- **EXTERNAL** Volume Telephone/Monitor to Digital Panel volume adjustment

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Digital System Summary Digital Entrance Panel Board

1	Speaker Input
2	Microphone Input
+VE	12VDC Positive Input
-VE	12VDC Negative Input
12V	12VDC Positive Output
0V	12VDC Negative Output
12V	12VDC Positive Output
0V	12VDC Negative Output
Vout	Video Core Output
SCN	Video Screen Output
RTE T	Request to Exit (Timed)
RTE T	Request to Exit (Timed)
DMS	Door Monitoring Switch
DMS	Door Monitoring Switch
PAC	PAC Input
CTS	Data Select
CTS	Data Select
SD	Data Output
SD	Data Output
0V	Ovolts
Stb+	Positive External Alarm Strobe/Sounder
Stb-	Negative External Alarm Strobe/Sounder
SA	Fail Safe Lock Release Output
SA	Fail Secure Lock Release Output
LC	Lock Release Common
LS1	12-24VAC/DC Positive Lock Release Power Input
LS2	12-24VAC/DC Negative Lock Release Power Input
SW1	Programming Button
SW2	Upload Button
SW3	Download Button
CAM1-2 12V	Camera 12VDC
CAM1-2 0V	Camera 120V
CAM1-2 SCN	Camera 1-2 Video Screen Input
CAM1-2 SIG	Camera 1-2 Video Signal Input
Interface Board	C .
AC1	50VAC Input
AC2	50VAC Input
AC1	50VAC Output
AC2	50VAC Output
CTS	Data Select Input
CTS	Data Select Output
SD	Data Input
SD	Data Output
2	Microphone Input
2	Microphone Output
1	Speaker Input
1	Speaker Output
0V	0 Volt Input
0V	0 Volt Output
тс	Trades Clock with Landing Control Input
TC	Trades Clock with Landing Control Output
	5
Camera Connections	
TC1	0V Camera Power Input
TC2	+ 12VDC Camera Power Input
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	· •

Digital System Wiring Colour Codes Main Controller To Digital Entrance Panel Board

Main Controller

Digital Entrance Panel Board

12V	1mm Mains Type Cable	+12VDC Output
0V	1mm Mains Type Cable	-12VDC Output

Main Controller Interface to Digital Entrance Panel Board

Main Controller

Digital Entrance Panel Board

1Blue of White2White of BlueSDWhite of BrownCTSBrown of White0VOrange of White

Speech Input Microphone Input Data Output Data Select 0V Common Line

Main Controller Interface to Riser/Landing Controller Interface Riser/Landing Controller Interface

Main Controller Interface

AC1 2.5mm Mains Type CableAC2 2.5 Mains Type Cable

CTS Brown of White

SD White of Brown

1 Blue of White

2 White of Blue

0V Orange of White

TC Green of White

50VAC System Power Input/Output 50VAC System Power Input/Output

Data Select Data Output Speech Output Microphone Output 0V Common Line Trades Clock with Landing Control



wiring detail





Digital Panel and Video Distributor wiring detail



Digital Panel and Video Distributor wiring detail















Note:

a) If Door Monitoring is not required, then link DMS to DMS with a wire link.

b) It is important that a **1N4007** diode is fitted at the lock release if you are using the System Controller for lock release power, This is to protect the System Controller against back EMF. If the locks are being powered by a PAC Controller then use the MOV supplied with the PAC reader.

Proximity Access wiring detail for Landing/Deck Access if required.









Video System Controller Summary

Connection Detail

<u>Controller</u> 1,C 2 6	<u>Video Monitor</u> Speaker/Electronic Call Microphone Common	<u>Controller</u> TC TC Note: N/O Clean Con	<u>Trades Clock</u> Secondary Trades Clock Secondary Trades Clock tacts
9 PS PL DL	Lock Release Privacy Switch Privacy On Indicator Door Monitoring Indicator	0V 12V	Auxiliary Supplies 3 x 0V Output 3 x 12VDC Output
R2	18VDC MonitorSupply 18VDC Monitor Supply	Note: 3 Amp Overall	Output
1 2	Panel Amplifier Detail Speaker Microphone	TX TX	<u>Power Input to Controller</u> 12Vac Input 12Vac Input
-	-6VDC -6VDC Entrance Panel Detail	B+ B-	Battery Back Up +12VDC Battery Input 0V Battery Input
CC	Door Monitor/Release Indicator Button Common	System Busy Output	to Landing Panels Panel 1 Busy Indicator
TR	<u>Trades Detail</u> Trades Button	Sbl2	Panel 2 Busy Indicator
TR	Trades Button	+)	Video Distribution + 18VDC Distributor Supply
RTE RTE	<u>Request To Exit</u> Request To Exit (Momentary) Request To Exit (Momentary)) Video Distributior -)	0V Distributor Supply
RTET RTET	Request To Exit (Timed) Request To Exit (Timed)	Vout Video Sig Scn Video Scr CamB Video Ris	outs and Outputs SML2021-3 nal Output to Distributor een Output to Distributor er Signal Output
LC SA SE LAC LAC	Lock Release Detail Lock Common (DC) Fail Safe (DC) Fail Secure (DC) Fail Secure (DC) Fail Secure (DC)	Scn Video Ris CamDP Video Dig Scn Video Dig Cam2P Video Lar Scn Video Lar Cam1P Video Lar	er Screen Output ital Panel Camera Signal Input ital Panel Camera Screen Input nding Panel 2 Camera Signal Input nding Panel 2 Camera Screen Input nding Panel 1 Camera Signal Input
PAC	PAC Detail PAC Pre-wired Lock Release Serial Connection	Cam1L Video Lot Scn Video Lot Cam2L Video Lot Scn Video Lot	bby/Landing 1 Camera Screen Input bby/Landing 1 Camera Signal Input bby/Landing 2 Camera Signal Input bby/Landing 2 Camera Screen Input
Rx 0V	Transmit Receive Common	+))Camera Supply x -)	Camera 12VDC Output +12VDC Camera Supply 2 0V Camera Supply
		+))Monitor Output -)	18VDC Monitor Supply 18VDC Monitor Supply 0V Monitor Supply

Video System Controller Summary

Connection Detail Controller	Video Monitor
1,C 2 6 9 PS PL DL R1 R2	Speaker/Electronic Call Microphone Common Lock Release Privacy Switch Privacy On Indicator Door Monitoring Indicator 0V Monitor Supply 18VDC Monitor Supply
1 2 + -	Entrance Panel Amplifier Detail Speaker Microphone +6VDC - 6VDC
DML CC	Entrance Panel Detail Door Monitor/Release Indicator Button Common
TR1 TR2	<u>Trades Detail</u> Trades Button Trades Button
RTET RTET	Request To Exit (Timed) Request To Exit (Timed)
LC SA SE	Lock Release Detail Lock Common (DC) Fail Safe (DC) Fail Secure (DC)
PAC	PAC Detail PAC Pre-wired Lock Release
Tx Rx 0V	<u>Serial Connection</u> Transmit Receive Common
TC TC Note: N/O Clean Contacts	Trades <u>Clock</u> Secondary Trades Clock Secondary Trades Clock

Video System Controller Summary cont...

Connection Detail

Controller 0V 12V Note: 3 Amp Overall Output	Auxiliary Supplies 3 x 0V Output 3 x 12VDC Output
TX TX	Power Input to Controller 12VAC Input 12VAC Input
B+ B-	Battery Back Up +12VDC Battery Input 0V Battery Input
SBL SCL DML	<u>System Busy Output to Functional Panel</u> Panel 1& 2 Busy/DDA Display Panel 1&2 Busy/DDA Display Panel 1&2 Busy/DDA Display
+)) Video Distribution -)	<u>Video Distribution</u> + 18VDC Distributor Supply 0V Distributor Supply
VOUT Scn CamR Scn CamDP1 Scn CamDP2 Scn Cam1P Scn Cam2P Scn Scn	Video Inputs and Outputs SML2021-4 Video Signal Output to Distributor Video Screen Output to Distributor Video Riser Signal Output Video Riser Screen Output Video Digital Panel Camera 1 Signal Input Video Digital 2 Panel Camera Screen Input Video Digital 2 Panel Camera Signal Input Video Digital Panel Camera 1 Screen Input Video Functional Panel 1 Camera Signal Input Video Functional Panel 2 Camera Signal Input Video Functional Panel 2 Camera Signal Input
+)) Camera Supply x 2 -)	<u>Camera 12VDC Output</u> + 12VDC Camera Supply - 0V Camera Supply
+)) Monitor Output -)	<u>Monitor Supply</u> 18VDC Monitor Supply 0V Monitor Supply

System, Main and Riser/Landing Controller Default Settings..

The following system functions are selected by using the FUNCTION ans DATA dil switches located on the Controller motherboard below the Digital Trade clock.

Each of the above switches contains 8 ON and 8 OFF positions that can be selected in various combinations to achieve varying system functions.

Available Functions:

Description	<u>Default</u>
Default settings for all functions	Available
Setting line number for apartment	Set 1 - 16
Serial link set up	OFF
Medium Volume Electronic Call	ON
Privacy Time	8 Hours
Call with Strobe	OFF
Landing Entrance Door 1 (Adjustable Time Functions)	<u>Default</u>
Lock Release time Telephone Ringing time System active duration time Door Open Alarm delay time Door Open Alarm duration time	10 Seconds 20 Seconds 30 Seconds OFF OFF
Landing Entrance Door 2 (Adjustable Time Functions)	<u>Default</u>
Lock Release time Telephone Ringing time System active duration time Door Open Alarm delay time Door Open Alarm duration time	10 Seconds 20 Seconds 30 Seconds OFF OFF

Main and Riser/Landing Controller Programming Instructions

To be used in conjunction with the Controller Programming Instruction.

PROGRAMMING LINES

By setting all **FUNCTION** switches to **ON** and then pressing enter will set the system to default. (See System function Programming for set up and manufactures default settings).

Select the line number to program using the **FUNCTION** switches 1 - 5, note that position 6, 7 and 8 are always in the **OFF** position. (See Controller Programming Instruction).

Next using the **DATA** switches 1 to 4 set the Privacy time. For Call volume and Call type, set **DATA** switches 5, 6 and 7 to the required positions. At this time, setting **DATA** switch 8 to the **ON** position will program a Strobe, Sounder or both. (See Controller Programming Instruction).

Finally pressing the enter button will save the current Line information to memory. Continue until all Lines are programmed.

LOCK RELEASE PROGRAMMING

Use the **FUNCTION** switches to select Entrance Panel 1 and the **DATA** switches to select the number of seconds for the release duration. Select the lock release duration time using the **TIME SELECTION** seconds chart. (See Controller Programming Instruction).

Repeat for Entrance Panel 2

MONITOR RING TIME FROM THE ENTRANCE PANEL

Use the **FUNCTION** switches to select Entrance Panel 1 and the **DATA** switches to select the number of seconds for the ringing time duration. Select the ring time duration using the **TIME SELECTION** seconds chart.(See Controller Programming Instruction).

Repeat for Entrance Panel 2

ENTRANCE PANEL TO MONITOR CALL DURATION TIME

Use the FUNCTION switches to select Entrance Panel 1 and the DATA switches to select the number of seconds for the call duration time. Select the call duration time using the **TIME SELECTION** seconds chart. (See Controller Programming Instruction).

Repeat for Entrance Panel 2

DELAY BEFORE DOOR ALARM ACTIVATION

Use the FUNCTION switches to select Entrance Panel 1 and the DATA switches to select the number of minutes for the delay time. Select the Door Alarm delay duration time using the **TIME SELECTION** minutes chart. (See Controller Programming Instruction).

Repeat for Entrance Panel 2

DOOR ALARM DURATION TIME

Use the FUNCTION switches to select Entrance Panel 1 and the DATA switches to select the number of minutes for the alarm duration. Select the Door Alarm duration time using the **TIME SELECTION** minutes chart. (See Controller Programming Instruction).

Repeat for Entrance Panel 2

If required, the System, Main or Riser/Landing Controller can send serial data to a PC.

Controller Programming Settings

				ON	1				_	0	N						
				1	2	3 4	5	6	7 8		2	3	4	5	6	7	8
SYSTEM C	ONFIGURATION		Notes		FU	NCTIC	N SW	лтс	н			DAT	A SI	WIT	сн		
				1	2	3 4	5	6	7 8	1	2	3	4	5	6	7	8
Default setting for all ite	ms			1	1	1 1	1	1	1 1		X	X	X	X	Х	Х	Х
Send setup to serial Por	rt			0	0	0 0	0	1	1 1		0	0	0	0	0	0	0
Low Call Volume and Pr	rivacy Time		1	L	L	LL	L	0	0 0	F	P	Ρ	Ρ	0	1	1	Е
Medium Call Volume an	d Privacy Time		1	L	L	LL	L	0	0 0	F	P	P	P	0	0	1	E
High Call Volume and P	nd Privacy Time		1		L	LL	L	0	0 0		2 P 2 P	P	P	0	0	0	E
Buzzer and Privacy Tim	e		1	L	L	LL	L	0	0 0	F	P	Ρ	Ρ	1	0	0	E
Look Polocoo Timo Est	trance Danal 1		2	1	0	0 0	0	0	1 0			c	c	c	c	c	c
Lock Release Time. Ent	trance Panel 2		2	0	1	0 0	0	0	1 0		, <u>s</u>	S	S	S	S	S	S
						0 -			4 2						~	<u> </u>	
Telephone Ring Time. E	Intrance Panel 1		2	1	0	0 0	0	1	1 0		S S	S	S	S	S	S	S S
			<u> </u>		_ ·			•			. 0		5	5	5	5	
Call Duration Time. Entr	rance Panel 1		2	1	0	0 0	0	0	0 1		S S	S	S	S	S	S	S
Call Duration Time. Entr	rance Panel 2		2	0	1	0 0	0	0	0 1		5	S	5	5	5	5	5
Delay before Door Alarn	n. Entrance Panel	1	3	1	0	0 0	0	1	0 1		1 M	M	M	M	M	M	M
Delay before Door Alarm. Entrance Panel 2			4	1	0	0 0	0	0	1 1		1 M	M	M	M	M	M	M
Door Alarm Duration Time. Entrance Panel 2 4			4	0	1	0 0	0	0	1 1	Ν	1 M	М	М	М	М	М	М
Controller Address (Functional switch always the same)				1	1 1			N Dr	N	N	N	N	N				
	o not forget to pre	ess the Ente	er Dutte	on art	erm		jase '	elec	tion.	(0)							
1) If an Extension Sounder or	r Strobe be required se	et Data switch	8 (E) to 0	DN.		1 = ON 0 = OF	F					S	: = A : = S	ny F eco	osi nds	tion	
 2) Do not set a value of Zero 3) Set all Data switches to the 	seconds or the system	n will not time o oor Alarm is ree	out. quired			L = Lin D – Dri	e Nun	1ber	(Telep	hone	e)	M	= M	linut	es		
4) Set all Data switches to Of	N position if the Door A	Alarm is to oper	rate cont	inuousl	ly.	E = Ex	tensio	n St	robe/S	Sound	e) ler as	s req	uire	d (S	ee r	note	1)
LINE SELECTION (L)	TIME SELECTI	ON (M/S) & C	ONTRO	LLER	ADD	RESS	(N)		PRI	/ACY	TIM	ER S	SELE	ECT	ION	I (P))
Line		Number (M)inut	r of les		Co	ntrolle Idress	r		Pr	vacy	Tim	er		Dat	ta S	wite	ch
Number Function Switch	Data Switch	or (S)ecc	onds		(N)	umbe	r		(M)ir	utes	and I	Hour	s	1	2	3	4
	1 ON	1	1			1		NO TIME (Remains on				0	0	0	0		
2 0 1 0 0 0	2 ON 3 ON	4	4			4			10 Min	utes	SWILC	neu ()))	0	1	0	0
3 1 1 0 0 0	4 ON	8				8		1	20 Min	utes				0	0	1	0
4 0 0 1 0 0	5 ON	16		 		16		3	<u>30 Min</u>	Vinutes					1	1	0
6 0 1 1 0 0	6 ON 7 ON	<u> </u>	64			40 Minutes					0	1	0	1			
7 1 1 0 0	8 ON	128	Not Used		e	60 Min	0 Minutes					0	1	1			
8 0 0 0 1 0	Noto:						70 Min	utes				0	1	1	1		
10 0 1 0 1 0	10 0 1 0 1 0 1 0 1 0 1 0 1 1 1 Select the combination that adds un				up to the			<u>2 Hour</u> 1 Hour	<u>)Urs</u>				1	1	0	0	
11 1 0 1 0 required time period (Max 255)			x 255 S	Secon	ds/N	linute	s)	6	B Hour	s				1	0	1	0
12 0 0 1 1 0	or Controller A	ddress Num	ber (Ma	ax 99).				8	B Hour	S				1	1	1	0
13 1 0 1 1 0	10110				in th	•		10 Hours						1	1	0	1
14 0 1 1 1 0	2) All Switches	s not requir	ea mus	stbei	in ui	C		111	12 Hours					1 1		~ .	
14 0 1 1 0 15 1 1 1 1 0	OFF positio	n.	ea mus	stbei	in ui	C			12 Hou 14 Hou	irs irs				1	0	1	1

Controller Programming Example Settings

			-	ON							0	N						
											-							
				1	2	3	4	5	6	7 8	1	2	3	4	5	6	7	8
			Ē		-													
EXAMPLE SYSTEM SETTINGS				FUNCTION SWITCH DATA S						SWI	ГСН							
				1	2	3	4	5	6	7 8	1	2	3	4	5	6	7	8
Default setting for all items				1	1	1	1	1	1	1 1	<u>)</u>	(X	Х	X	Х	Х	Х	Х
Send setup to serial Port				0	0	0	0	0	1	1 1	C	0	0	0	0	0	0	X
			п	4				0								4	4	
Low Call Volume and Privacy Time	Line1-Privacy 10 Mins	1	H	1		0	0	0	0	0 0			0	0	0		1	0
Medium Call Volume and Privacy Lime	Line5-Privacy 50 M ins		H	1			0	0	0	0 0			0		0	0	1	0
Nominal Call Volume and Privacy Lime	Line9-Privacy 4 Hours+Strobe		H	0		0	1	0	0	0 0			0	0	0		0	1
High Call Volume and Privacy Time	Line12-Privacy 8 Hours	1	⊢	0	0	1	1	0	0	0 0		1	1	0	0	0	0	0
Buzzer and Privacy Lime	Line16-Privacy 12 Hours+Strobe	1	L	0	0	0	0	1	0	0 0		1	0	1	1	0	0	1
Lock Release Time. Entrance Panel 1	16 seconds	2	Г	1	0	0	0	0	0	1 0		0	0	0	1	0	0	0
Lock Release Time. Entrance Panel 2	10 Seconds	2		0	1	0	0	0	0	1 0	C	1	0	1	0	0	0	0
Telephone Ring Time, Entrance Panel 1	32 Seconds	2	Г	1	0	0	0	0	1	1 0			0	0	0	1	0	0
Telephone Ring Time, Entrance Panel 2	24 Seconds	2	- E	0	1	0	0	0	1	1 0		0	0	1	1	0	0	0
				-			-	-				÷	-				-	-
Call Duration Time. Entrance Panel 1	20 Seconds	2	ſ	1	0	0	0	0	0	0 1	0	0	1	0	1	0	0	0
Call Duration Time. Entrance Panel 2	32 Seconds	2		0	1	0	0	0	0	0 1	C	0	0	0	0	1	0	0
Delay before Door Alarm Entrance Bond 1	5 Minutos	3	Г	1		0	0	0	1	0 1	1		1	0	0		0	
Delay before Door Alarm, Entrance Parlel 1	S Minutes	3	- H	0	1	0	0	0	1	0 1				1	0	0	0	0
Delay before Door Alam. Entrance Pariel 2	o Millutes	3	h	1		0	0	0			H	1 1	1		1		1	1
Door Alarm duration Time. Entrance Panel 2	15 Minutos	4	- F	0	1	0	0	0	0	1 1			1		1		0	
Noto:	15 Millules		ŀ	0	1-		0	0	0	1 1		- 4 pv		ition			0	
1) If an Extension Sounder or Stroke are required out Date switch 9 to CN					0-						~	– Any – Soo	PUS	nion				
2) Do not set a value of zero seconde or the system will not time out					U -	UF F	Jum	hor /	Tolor	(hone)	М	- 0e0						
2) Do not set a value of Zero seconds of the system will not time out.						L = Line (value) (Telephone) Vi = Windles												
4) Set all Data switches to ON if the Deser Open A	lorm is to operate continuously				F =	Evto	acy I	nne Sec	(Tele	or Strok		auiro	4 (6~	onct	o 1)			
	tarm is to operate continuously.				C -	Exter	15101	1 301	lingel	013000	= as re	quire	u (36	:e 1101	e I)			

LINE SELECTION (L)										
		Function Switch								
Line	F									
Number	1	2	3	4	5					
1	1	0	0	0	0					
2	0	1	0	0	0					
3	1	1	0	0	0					
4	0	0	1	0	0					
5	1	0	1	0	0					
6	0	1	1	0	0					
7	1	1	1	0	0					
8	0	0	0	1	0					
9	1	0	0	1	0					
10	0	1	0	1	0					
11	1	1	0	1	0					
12	0	0	1	1	0					
13	1	0	1	1	0					
14	0	1	1	1	0					
15	1	1	1	1	0					
16	0	0	0	0	1					

Note:

	TIME SELEC	Number of
	Data Switch	(M)inutes or (S)econds
1	ON	1
2	ON	2
3	ON	4
4	ON	8
5	ON	16
6	ON	32
7	ON	64
8	ON	128

PRIVACY TIMER SELECTION (P)										
Privacy Timer	Privacy Timer Da									
(M)inutes and Hours	1	2	3	4						
NO TIM E (remains on	0	0	0	0						
until manually switched off)	-	-	-	-						
10 Minutes	0	1	0	0						
20 Minutes	0	0	1	0						
30 Minutes	0	1	1	0						
40 Minutes	0	0	0	1						
50 Minutes	0	1	0	1						
60 Minutes	0	0	1	1						
70 Minutes	0	1	1	1						
2 Hours	1	0	0	0						
4 Hours	1	1	0	0						
6 Hours	1	0	1	0						
8 Hours	1	1	1	0						
10 Hours	1	0	0	1						
12 Hours	1	1	0	1						
14 Hours	1	0	1	1						
16 Hours	1	1	1	1						

1) Select the combination that adds up to the required time period.(Maximum 255 Min/Seconds).

2) All switches not required must be in the OFF position.

Digital Trades Clock Operating Instructions



Programming

Only two setting buttons are required, Change and Program In normal use the Change Button is used to switch ON or OFF overriding the time switch until the next program ON or OFF time. During programming the Change Buttonis used to set the Hours and Minutes. The Program Button is only used when setting or adjusting the clock Time or the 4 programmed ON/OFF times, although it can be used to review the ON/OFF times once they have been set.. Each time the Program Button is pressed the display will flash either the hours or minutes in turn, starting with the clock, then the firstON time, first OFF time, second ON time etc.

Wherever the hours or minutes are flashing they maybe set using the Change Button Once the Program Button is pressed again to proceed to the next stage.

Normal Operating Mode

In normal operation the time clock will display the correct time with the colon flashing. The output status will be shown be either ON or OFF on the display.

1. To Reset Display Mode

To clear programme from memory and reset the time controller press and hold down both buttons until the display goes blank. Release buttons and the display will fill with its complete range of

characters and then clear to show the clock and hour digit flashing. Programming Sequence

Setting Clock Programme 1 ON



Note:

Button pauses greater than One minute during programming will result in automatic return to the operating mode.

2. Setting Clock (after reset)

i. Hour setting- Press the Change Button to advance the hour setting. Note: For rapid hour selections press and hold the Change Button.

ii. Minute Setting- Press the Program Button once to select the minutes display shows clock symbol and minute digits flashing. Press the Change Button to advance the minutes setting. Note: For rapid minute selection press and hold the Change Button

(16 hours shown as example of hours set).

iii. Press the Program Button once-clock is now set and display shows ready for the first ON programme time with ON and the hours digit flashing.



3. To Set Programme ON/OFF Times (After clock setting)

Program1 ON time

i. Press Change Button to advance the hour setting.

ii. Press the Program Button once to select the minute time-display shows minute digits and ON Flashing. PressChange Button to advance the minute setting. Note: 16 hours shown as example of hours set).



iii. Press the Program Button once - the first ON time is now set and the display will show ready for the first OFF programme time.



iv. Now set the hours and minutes as before.

v. Repeat steps I to iv to set the remainder of the 3 ON/OFF times as required. Note: Any unused ON/OFF programs should be skipped until the display shows normal operating mode. Do not program '0's into unused programs.

4. Program Review

To fast review the set program or for quick exit to normal operating mode press and hold the Program Button

5. Initiating Programme Mode

This can be initiated at any time during the normal operating mode. Press Program Button and the clock, hours and minutes symbols on the display will flash- this is the review mode. If any change to the programmes is required press the Change Button to initiate programme mode and then follow steps 2 and 3.

6. Cancelling Programmes

Any ON/OFF programme can be cancelled by



clearing its ON and OFF time. Follow step 5 and when into the ON/OFF programme to be cancelled press the Change Button until the digits show then press the Program

Button to clear the programme. The display will show the hour and minute digits and ON or OFF flashing.

Self Cancelling Override

To change the output status from ON to OFF or vice versa during normal operation press the Change Button. The output status will change and indicate override is in operation by flashing.



GMT/BST TIME SWITCH

Programming Instructions

Select Manufacturing Limited Unit G3 The Seedbed Centre Wyncolls Road Colchester Essex CO4 9HT

Connection

The 2 screw terminals marked 'PWR' need to be connected to an AC or DC power supply within the following voltages:-

AC:- 7V to 21V R.M.S.

DC:- 10V to 30V

Note that if using a dc supply, it can be connected with either polarity.

The remaining 3 screw terminals are cleanSPCO relay contacts for connection to the target system.

Contact rating:-2A @ 30VDC

0.6A @ 150VAC

Display

The large LCD display shows the following information:-The left hand 8 digits normally shows the date in DD/MM/YY format. Every 30 seconds this changes to show the relay state and the day of the week for a few moments. The right hand 8 digits shows the time in HH:MM 24 hour format. The colon flashes to show the clock is running. The last digit shows either 'W' during winter periods (ie. GMT) or'S' during summer periods (ie. BST). Also the last digit flashes during times when the time switch settings determine that the relay should be on.



Programming

The Time Clock is simply programmed using the three coloured buttons. The three buttons are used as follows:-PROG (Yellow) Steps between the PROG modes

(date times etc).

RIGHT (Green) Moves the curser to the next number. (Grey) Increments the number at the curser. UP The button auto-repeats if held down for several seconds. The left half of the display shows a description of the data to be entered, and the right half shows the data as it is entered.

Step by Step Example Press PROG (Yellow) button.



Display shows:-

Press and hold (or repeatedly press) the_UP (Grey) button until the number at the underlined curser equals the current date (ie. 1-31).

Press RIGHT (Green) button once.

The underline curser moves to the months column. Repeat pressing the UP (Grey) button until the underlined number equals the current month (ie 1-12)

Press RIGHT (Green) button once.

The underline curser moves to the years column.

Repeat pressing the UP (Grey) button until the underlined

number equals the current year i.e. (1-99)

Note:- It is important for proper GMT/BST operation that the correct date is entered. When the display shows the correct date:-

Press the PROG (Yellow) button.

Display shows:-



Using the Green and Grey buttons as previously set the display to the correct time (24 hour clock).

Note:- The time entered is always normal 'clock' time i.e. GMT during winter and BST during summer-time. Press the PROG (Yellow) button.

Display shows:-

Using the Green and Grey buttons as before set the time at which you wish the time switch to come on. The third column (dy) is the day or days when this setting will operate. When this is underlined each press of the Grey button will step through the available options, which are:-

- DY Every day
- MF -Weekdays i.e. Monday to Friday
- SS -Weekend i.e. Saturday and Sunday
- Monday Only Mn -
- Tuesday Only Tu
- Wd -Wednesday Only
- Th -Thursday Only
- _ Fr Friday Only
- SA -Saturday Only
- Su Sunday Only
- -Off i.e. Never Of



Press the PROG (Yellow) button.

Display shows:-

Set the time you wish the time switch to switch off.



Press the yellow button and set the ON and OFF times for the remaining 5 settings.

Note:- If one or more ON/OFF settings are not required then they can be disabled by either:- i. Setting the OFF time to be before, or the same as, the ON time. Ii. Setting the day code to 'Of' After setting the 'OFF 6' time the time switch resets and starts running with the new settings.

Manual Override

A single press of the Grey button changes the state of the output. This stays in operation until the next on or off time is reached, or the Grey button is pressed again, when normal programmed operation resumes.

Clear

If required the time switch can be completely cleared, including the date, time and all ON/OFF settings, by the following procedure.

Press and hold the Yellow button.

Press and hold the Green and Grey buttons for several seconds. **Display shows:- CLEAR?** Y/<u>N</u> Release all three buttons.

Press the Green button until the 'Y' is underlined. Press the Yellow button.

Option Link

If summer-time correction is not required then cut the 'BST INHIBIT' link on the circuit board.

Engineers Notes

Video System Wiring Colour Codes cont...

Controllers to Landing Entrand	<u>ce Panels</u> Entrance Panel
 Brown of White White of Brown Slate of White White of Slate Red of Orange Orange of Red Green of Red Red of Green Brown of Red Red of Brown Black of Blue Blue of Black Black of Green Green of Black Green of Black Green of Black Black of Green Cange of Black Black of Green 	Button1Button2Button3Button4Button5Button6Button7Button8Button9Button10Button11Button12Button13Button14Button15Button16Button16
TR Brown of Black TR Black of Brown Note: The CC connection on the Controller Panel button common should always I.e. Slate of Red and Red of Slate.	Trades Button Trades Button to the Entrance be a pair.
Controller to Entrance Panel Amplifier <u>Controller</u> 1 Blue of White 2 White of Blue + Blue of Red and Red of Blue - White of Orange and Orange of W	1 2 + /hite -
Controller to Landing Entrance Panels SBL Black of Slate FCL Slate of Black DML Controller Panel 1 SBL Black of Slate FCL Slate of Black DML Controller Panel 2 SBL Black of Slate FCL Slate of Black DML Note:	SBL FCL DML SBL FCL DML Panel2 Display SBL FCL DML

a) The above colour codes are based on a 15 Pair CW1308 Multi-pair cable.

b) The main colour is the first colour stated above. The banding is the second colour stated above. Therefore, a wire stated as Black of Slate would be a Black - 35 main colour with a Slate banding. Bevision 1.08 Date: 05/01/2009

Controllers to Monitors

<u>Controller</u>

Blue of White	1
White of Blue	2
White of Orange and Orange of White	6
White of Green	9
Green of White	PS
Brown of White	PL
White of Brown	DL
Grey of White & White of Grey	R1
Red of Blue & Blue of Red	R2
RG59 Coaxial Cable	V3
RG59 Coaxial Cable	V5
	Blue of White White of Blue White of Orange and Orange of White White of Green Green of White Brown of White White of Brown Grey of White & White of Grey Red of Blue & Blue of Red RG59 Coaxial Cable RG59 Coaxial Cable

Video Monitor

Note:

a) The above colour codes are based on a 4 Pair CW1308 Multi-pair cable.b) The maximum length between the Controller and a Telephone should not exceed 50 metres.

Video Monitor to Strobe/Sounder (See Strobe & Sounder wiring detail.

Controller to Door Contact

Contro	oller	Door Contact
DMS	Green of White	Switch Contact
DMS	White of Green	Switch Contact

Controller to Lock Release Monitor Contacts

oller	Door Contact
Green of White	Switch Contact
White of Green	Switch Contact
	<u>ller</u> Green of White White of Green

Note:

a) The above colour codes are based on a 4 Pair CW1308 Multi-pair cable.

b) If Door Contacts and Lock Release Monitoring Contacts are both to be used, then both switches must be wired in series back to the DMS terminals in the Controller.

c) The main colour is the first colour stated above. The banding is the second colour stated above. Therefore, a wire stated as Black of Slate would be a Black main colour with a Slate banding.

Video System Wiring Colour Codes cont...

Controller to Lock Release (DC)

<u>Contro</u>	ller	Lock Release (Fail Safe DC)
LC)) dava Tuia Maina Tuna Cabla	Lock Release Connection
SA)) The Twin Mains Type Cable	Lock Release Connection
<u>Contro</u>	ller	Lock Release (Fail Secure DC)
LC)		Lock Release Connection
SE)) 1mm Twin Mains Type Cable	Lock Release Connection
<u>Contro</u>	ller	<u>Request To Exit Button (Timed)</u>
RTE T RTE T	White of Green Green of White	Switch Contact (Normally Open Contacts) Switch Contact (Normally Open Contacts)

Note:

a) the above colour codes are based on a 4 Pair CW1308 Multi-pair cable.

b) The main colour is the first colour stated above.

The banding is the second colour stated above.

Therefore, a wire stated as Black of Slate would be a Black main colour with a Slate banding.

Power Specification

Power Input

System Controller Main Controller/Local Power Supply Riser/Landing Controller Working Voltage Amplifier

Controller Outputs

Lock Release (Fail Secure) Lock Release (Fail Safe) Auxiliary Supply 230VAC 50VAC 12VAC 6-12VDC

230VAC

12VDC (Normally Open)(Rated 1Amp) 12VDC (Normally Closed)(Rated 1Amp) 3 x 12VDC (Rated 3Amp overall)

Battery Back Up:

System & Riser Controllers 12V7Ah Sealed Lead Acid Battery Main Controllers 12V17Ah Sealed Lead Acid Battery

System Controller Default Settings..

The following system functions are selected by using the FUNCTION and DATA dil switches located on the Controller motherboard below the Digital Trade clock.

Each of the above switches contains 8 ON and 8 OFF positions that can be selected in various combinations to achieve varying system functions.

Available Default Functions for Functional and Digital Entrances:

Controller Settings:

Default settings for all functions Setting line number for apartment Serial link set up Medium Volume Electronic Call Privacy Time Strobe

Entrance Door 1 (Adjustable Time Functions)

Lock Release time Telephone Ringing time System active duration time Door Open Alarm delay time Door Open Alarm duration time

Entrance Door 2 (Adjustable Time Functions)

Lock Release time Telephone Ringing time System active duration time Door Open Alarm delay time Door Open Alarm duration time Video Monitor User Instruction Leaflet.



Once the Visitor has called you have the following options and indicators available to you:

To Release the Door

Press the **Door Release button** <u>when illuminated</u> : this will cause the **RED Door Open** indicator to flash to confirm the door is being released for your visitor.

Door Open Warning

Once the Main door has been opened the **RED Door Open** indicator will stop flashing and will stay illuminated until the Entrance door is closed.

To Set Video Monitor Privacy

By pressing the **Privacy Off/On** button you will activate the system timer and illuminate the **GREEN Privacy On** indicator stopping all incoming calls for a timed period. You can, at any time if you wish, cancel the timed Privacy period by pressing the **Privacy Off/On** Button. This cancellation will be confirmed by the extinguishing of the **GREEN Privacy On** indicator.

To Adjust Call Volume

Rotate the **Call Volume Adjuster** clockwise to decease the call volume or counter-clockwise to increase the call volume.

	Select Manufacturing Limited Tel: 01206 855800 Fax: 01206 855801														
	Functional & Digital Audio/Video Systems Commissioning/Final Inspection Test Sheet.											T			
Client I Site Ad	Client Name: Site Address:							Commissioning Engineer:							
							Installer	Name							
Telephone No.:															
Controll No. ()	er Number Fiz	t Number C2	r. MITONE.	seech.	ock Release	se pening	dicator	Idicator Video Pictur	» Con	nment	S				
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