FDP3 Toshiba Interface v1.02

Field Programming Instructions

Field Programming

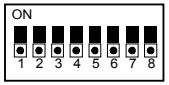
FDP3 Field programming allows FDP3 operating parameters to be set in the field using the 8 position DIP switch mounted on the FDP3.

ENTERING FIELD PROGRAMMING MODE

To enter field programming mode a sequence of switch positions must be entered in order. To begin the FDP3 should be powered down and switches 1.6, 1.7 and 1.8 switched to the ON position.

After powering up, follow the sequence of steps 2 to 7 in the following table, allowing at least 1 second between each step. When setting the switches for each step the switches do not have to be set in one go, each switch can be switched sequentially.

After completion of step 6 the LEDS 1 to 4 on the FDP3 should flash several times to indicate field programming mode has been selected.

Step	Action	
1	SW1.6,1.7,1.8 ON THEN Power-Up	
2	SW1.6,1.7,1.8 OFF	
3	SW 1.7,1.8 ON	
4	SW 1.7,1.8 OFF	
5	SW 1.8 ON	
6	SW 1.8 OFF	
7	LED 1 to 4 flash 3 times	FIELD PROGRAMMING ENABLED

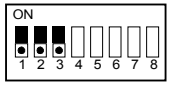
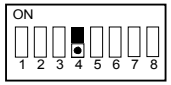
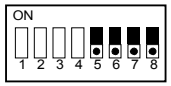
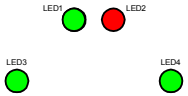
To exit out of Field Programming mode, remove power for 5 seconds and then re-power the device.

The FDP3 will remain in Field Programming mode for a maximum of 5 minutes after which it will revert to normal operation.

FIELD PROGRAMMING ELEMENTS

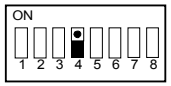
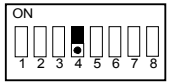
The FDP3 contains has 8 programmable fields that can be accessed using field programming. DIP switches 1.1 to 1.3 encode the field index in binary. These fields are referenced by their binary switch positions, so field 000 corresponds to SW1.1 to 1.3 all off, 001 corresponds to SW1.1 to 1.2 OFF and SW1.3 ON.

Each programmable field consists of a 4 bit value. The current value of the field is displayed by the LEDS 1 to 4. New values can be saved to the fields using SW1.5 to SW1.8 to encode a new value.

Field	Function	Description
	Field Index	Binary Index of the 4 bit field
	Field Store	Toggle to save new value
	Field Value	4 bit value to be written with the Field Save Command
	Field Value Display	Displays the 4 bit value of the current field index

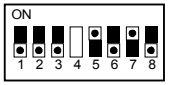
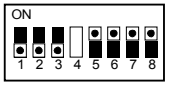
STORING A FIELD VALUE

A new field value is stored by setting SW1.4 ON for 1 second and then setting SW1.4 OFF as shown in the following table. Unless storing a value the SW1.4 switch should remain in the OFF position.

Step	Action	
1	SW1.4 ON	
2	SW1.4 OFF Configuration Saved	

FIELD 000: RS485 Configuration

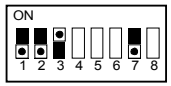
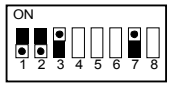
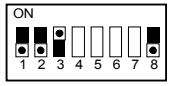
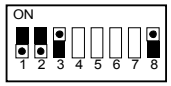
Field 000 contains the configuration for the RS485 network port. The configuration field default value is 1111 (9600 baud, no parity). The following field values can be programmed to set alternative baud rate and parity configurations.

Setting	Baud Rate	Parity
	4800	NONE
	4800	ODD
	4800	EVEN
	9600	NONE
	9600	ODD
	9600	EVEN
	19200	NONE
	19200	ODD
	19200	EVEN
	**9600 (DEFAULT)**	**NONE (DEFAULT)**

FIELD 001: Relay Configuration

Field 001 is used to configure the Relay outputs of FDP3 devices with Relay Outputs.

Each Relay can be configured to operate non-inverted (normal functionality) or inverted. If FDP3 Configuration Parameters have been customised then these will override the relay invert options and the Field Programming method should not be used.

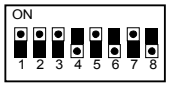
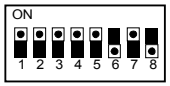
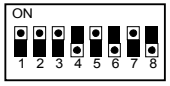
Setting	Relay	Output
	R1	Non-Invert
	R1	Invert
	R2	Non-Invert
	**R2**	**Invert**

FIELD 111: Device Command

Field 111 is used to execute device commands. The LED are always on when this field index is selected.

FACTORY RESET

Writing a field value of 1010 causes the FDP3 to execute a full factory reset. All field values are reset to the default value of 1111, and all configuration parameters are reset to their factory defaults.

Step	Action	
1	Select Device Command Field Select Factory Reset Command	
2	Toggle Field Store switch 1.4 ON	
3	Toggle Field Store switch 1.4 OFF	
4	FDP3 performs factory reset and resets the hardware. Exits Field Programming Mode	