

## **ADDENDUM 1**

to

# DIGITAL CLOCK DISTRIBUTOR

## **500 SERIES**

# INPUT/OUTPUT REFERENCE GUIDE

# RELEASE 5.01.xx

#### 1. GENERAL

1.001 This is an addendum to Issue 2 of Telecom Solutions' Digital Clock Distributor 500 Series Input/Output Reference Guide Release 5.01.xx (part number 097-44018-05) which is part of the TL1 User's Guide (997-44018-15). Place this addendum in front of Issue 2 of the Input/Output Reference Guide, Release 5.01.xx.

**1.002** Whenever this addendum is reissued, the reason for reissue will be given in this paragraph.

#### 2. CHANGES

**2.001** The changes listed below were made. Changed areas are marked by change bars.

 On Page 29, a caution was added to the troublecode parameter for TO cards in the ED-EQPT command.

- On Page 61, a caution was added to the troublecode parameter for TO cards in the RTRV-EQPT command
- On Page 67, the RTRV-PM-PORT command format was modified.
- On Page 80, the SET-ATTR-PORT command format was modified.

**2.002** To implement the changes in the previous paragraph, do the following:

- Replace pages 29/30 of Issue 2 of 097-44018-05 with the attached pages 29/30.
- Replace pages 61/62 of Issue 2 of 097-44018-05 with the attached pages 61/62.
- Replace pages 67/68 of Issue 2 of 097-44018-05 with the attached pages 67/68.
- Replace pages 79/80 of Issue 2 of 097-44018-05 with the attached pages 79/80.

# COMMAND CODE: ED-EQPT (Contd)

# **INPUT FORMAT (Contd)**

aid	parameter	value	meaning
MRC-a	framing	(null)	(not applicable)
	troublecode		
	portseverity		
	osc1	RB	oscillator 1 (OSCA) is rubidium clock
		QTZ	oscillator 1 (OSCA) is quartz clock
		NONE	oscillator 1 (OSCA) is not equipped
	osc2	RB	oscillator 2 (OSCB) is rubidium clock
		QTZ	oscillator 2 (OSCB) is quartz clock
		NONE	oscillator 2 (OSCB) is not equipped
	integration	(null)	(not applicable)
TO-b	framing	CAS	channel assigned sequence
		CAS4	channel assigned sequence with frame aligned sequence with cyclic redundancy check 4
		CRC4	frame alignment sequence framing with cyclic redundancy check 4
		D4	D4 framing format
		ESF	ESF framing format
		FAS	frame alignment sequence framing
	troublecode	INH	all outputs are squelched upon card failure
		ALW	AIS is sent on all outputs upon card failure
			Caution: If any port on the card is set for ANALOG, the trouble-code must be set to INH.
	portseverity	MJ	port failure causes major alarm
		MN	port failure causes minor alarm
	osc1	(null)	(not applicable)
	osc2		
	integration		

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# **COMMAND CODE: ED-EQPT (Contd)**

## **EXAMPLE**

This example, tagged as command 134, changes the parameters for GTI-2 as follows:

- framing = FAS
- trouble code = outputs AIS during major alarm
- oscillator types are both rubidium
- alarm integration time is 4 hours for a minor alarm and 24 hours for a major alarm

# **COMMAND CODE: RTRV-EQPT (Contd)**

## **RESPONSE FORMAT (Contd)**

aid	parameter	value	meaning
PSM -b	framing	(null)	(not applicable)
	troublecode		
	portseverity		
	osc1		
	osc2		
	integration		
TO-c	framing	CAS	channel assigned sequence
		CAS4	channel assigned sequence with frame aligned sequence with cyclic redundancy check 4
		CRC4	frame alignment sequence framing with cyclic redundancy check 4
		D4	D4 framing format
		ESF	ESF framing format
		FAS	frame alignment sequence framing
	troublecode	INH	all outputs are squelched upon card failure
		ALW	AIS is sent on all outputs upon card failure
			Caution: If any port on the card is set for ANALOG, the trouble-code must be set to INH.
	portseverity	MJ	port failure causes major alarm
		MN	port failure causes minor alarm
	osc1	(null)	(not applicable)
	osc2		
	integration		

## **EXAMPLE**

Input:

```
RTRV-EQPT::TO-5:134;
```

Response:

```
SANJOSE-114 1997-12-08 15:04:13
M 134 COMPLD
"TO-5:FAS,INH,MN,,,;
```

This example, tagged as command 134, displays port 5 of timing output card 5 as: framing = FAS, all outputs will be squelched upon card failure, and a minor alarm will be generated upon port failure.

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COMMAND CODE: RTRV-EQPT (Contd)

55 LT 50 11 00 70

# **EXAMPLE**

Input:

```
RTRV-EQPT::TO-5:134;
```

Response:

```
SANJOSE-114 1997-12-08 15:04:13
M 134 COMPLD
"TO-5:FAS,INH,MN,,,;
```

This example, tagged as command 134, displays port 5 of timing output card 5 as: framing = FAS, all outputs will be squelched upon card failure, and a minor alarm will be generated upon port failure.

#### **COMMAND CODE: RTRV-PM-PORT**

## **PURPOSE**

## RETRIEVE PERFORMANCE MONITORING PORT

This command displays the current set of PM data for one or more facilities. The PM data may be used to examine events that are not reported by automatic messages, or to evaluate the system after maintenance operations. PM data is retrieved from the specified time period to the current time period.

#### **INPUT FORMAT**

The output parameter values in the table below are as follows:

$$a = 1-2$$

$$c = 1-11$$

aid	parameter	value	meaning
MRC-a-b	montype	ALL	all montypes for this <aid></aid>
		BPV	bipolar violations
		CRC	cyclic redundancy check errors
	mondat	(null)	current day
	montm1	(null)	current time

# **COMMAND CODE: RTRV-PM-PORT (Contd)**

# **INPUT FORMAT (Contd)**

aid	parameter	value	meaning
PSM-c-b montype		SLIPS	number of slips since the previous midnight (used with mondat and montm1)
		BPV	bipolar violations since the previous 15-min reset (used with montm2)
		CRC	cyclic redundancy check errors since the previous 15-min reset (used with montm2)
		MTIE	900-second MTIE accumulated between monitor time 2 and 1 hour after monitor time 2 (units of measure for MTIE are nanoseconds)
		TDEV	128-second TDEV accumulated between monitor time 2 and 1 hour after monitor time 2 (units of measure for TDEV are nanoseconds)
		PHASE1M	1-minute average phase accumulated between monitor time 2 and 1 hour after monitor time 2 (units of measure for PHASE1M are nanoseconds)
	mondat	(null)	current day
		mm-dd	month-day (mm = 1-12, dd = 1-31)
	montm1	(null)	current time
	montm2	hh-00	hh = 00-23 (hour of the day)
		hh-15	15 minutes past hour hh
		hh-30	30 minutes past hour hh
		hh-45	45 minutes past hour hh

## **RESPONSE FORMAT**

For BPV (CRC, SLIPS, and PHASE1M will appear similarly):

```
<sid> <date> <time>
M <ctag> COMPLD
  "<aid>:<montype>,<monval>,<vldty>,,,,<mondat>,<montm>"...;
```

#### COMMAND CODE: SET-ATTR-CONT (Contd)

## **INPUT FORMAT**

```
SET-ATTR-CONT:[<tid>]:<aid>:<ctag>::<conttype>;
```

The parameter values in the table below are as follows:

```
a = 1-8 \text{ or ALL}
```

*Note:* When configuring cards for 1-for-1 or 1-plus-1, both the odd and even slots must be configured identically. The SET-ATTR-CONT command must be issued to both cards, otherwise a database mismatch will occur. The 1-for-1 or 1-plus-1 pairing is 1 and 2, 3 and 4, 5 and 6, 7 and 8.

aid	conttype	meaning	
TO-a	NO	no protection	
	1-1	1-for-1 protection	
	1+1	1-plus-1 protection	
SYSTEM	RVRT	revertive	
	NRVRT	nonrevertive	

## **EXAMPLE**

Input:

```
SET-ATTR-CONT::TO-ALL:140::1-1;
```

Response:

```
SANJOSE-114 1997-12-08 15:04:13 M 140 COMPLD :
```

This example, tagged as command 140, sets the timing output cards for 1-for-1 protection.

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#### **COMMAND CODE: SET-ATTR-PORT**

## **PURPOSE**

## SET ATTRIBUTE PORT

This command sets the notification code associated with the specified event. This attribute governs whether the event is reported automatically. Alarmed events are reported automatically by the REPORT ALARM message. Non-alarmed events are reported automatically by the REPORT EVT message.

#### **INPUT FORMAT**

The parameter values in the table below are as follows:

$$a = 1-2$$

b = 
$$1-4$$
 or ALL

$$c = 1-10$$

aid	ntfcncde	condtype	meaning
MRC-a-b	RC-a-b CR, MJ, MN, NA, or NR	AIS	alarm indication signal
		BPV	bipolar violations
		CRC	cyclic redundancy check errors
		FFREQ	fractional frequency threshold exceeded
		LOS	loss of signal
		OOF	out of frame errors
		ALL	all condtypes