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PRODUCT : UTC

OTU CONFIGURATION
TC12 INTEGRAL GREEN WAVE BOX

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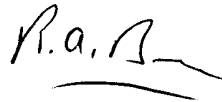
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The document comprises the following components :-

Pages	Current Issue	Type	Part ID	File ID
i to ii	1	1	667//22940 /001	
6 sheets	1	10	EM24323	

This is a file in TIE_MGR archive on the Traffic Server

1 INTRODUCTION

1.1 Purpose

This document acts as a vehicle to allow the EM specification for the TC12 OTU within the Integral Green Wave Box to be called up on the items list in order that a print be shipped with each Box.

1.2 Scope

This document covers the Integral green wave box 667/1/22940 000 only.

1.3 Related Documents

667/UH/22940/000 Requirements Specification

2 EM SPEC

The following 6 pages are a printed copy of the works specification for the Integral Green Wave Box.

TC12 INTEGRAL GREEN WAVE BOX WORKS SPECIFICATION

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STATION DATA TRANSMISSION EQUIP

CUSTOMER Generic Specification

CUSTOMER'S ORDER NUMBER
CUSTOMER'S ORDER DATE

WORKS ORDER NUMBER

EM NUMBER EM 24323

ELECTRICITY SUPPLY 240 VOLTS

INSTALLATION BY STCL

CUSTOMER'S ENGINEER

TELEPHONE NUMBER

PROJECT ENGINEER A Pickering
DATE OF LAST UPDATE 24/04/95

POWER FEED REQUIREMENT = 3 AMP FUSE RATING
TOTAL AVERAGE POWER LOADING = 30 WATTS

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Works Order Number
Em No EM 24323
Engineer A Pickering

TYPE APPROVAL MAINTENANCE PROVISION (TAMP)

1. PRODUCT REFERENCE

TC12 OTU Outstation Transmission Equipment

2. SPECIFICATIONS

The equipment is designed to meet the following
Department of Transport specifications :-

MCE 0361, also sections B10.2 and D9 of TR 0141A

3. INSTALLATION and COMMISSIONING

Methods of Installation and Commissioning are detailed in
Siemens Plessey document :-

666/HE/43100/000 TC12 OTU Installation, Commissioning & Maintenance Handbook

4. SPARES and MAINTENANCE

All maintenance and repairs should be carried out in accordance
with Siemens Plessey documents :-

666/HE/43100/000 TC12 OTU Installation, Commissioning & Maintenance Handbook

5. MODIFICATIONS

There are no approved modifications, with the exception of those
listed in the following Siemens Plessey document :-

666/HE/43100/000 TC12 OTU General Handbook

6. ** WARNING **

Use of components other than those permitted above or
modifications or enhancements that have not been authorised
by Siemens Plessey Controls may invalidate Type Approval of this

TAMP Issue 1.0
18-11-92

Works Order Number
Em No EM 24323
Engineer A Pickering

MODIFICATION RECORD

ISSUE	DATE	ENGINEER	REASON FOR CHANGE
1	25/04/95	A Pickering	First issue of Generic spec.

SPECIAL INSTRUCTIONS

NOTE TO PRODUCTION

Test Green Wave Box in accordance with 667/SD/22940/000.

SET-UP PROCEDURE FOR OTU IN GREEN WAVE BOX

- 1) Remove the six screws retaining the back panel and plug in a handset.
- 2) Connect the unit to the Mains supply, note that the 13A plug must be fitted with a 3A fuse. Switch the unit on, the OTU Power on LED will illuminate (TOP LED) and the handset will show SIEMENS OTU but no lights will illuminate on the front of the Green Wave Box.
- 3) The OTU can then be set up as per the T12 Installation and Commissioning Handbook (666/HE/43100/000), a summary is provided here to assist with the commands required when setting up a Green Wave Box. It may be necessary to contact the UTC centre for some of the setup information.
GMB=249.....Enable Write access.
GAD='N'.....Select OTU address where 'N' is 0 - 14. [UTC]
GMW='N'.....Set Baud rate & Modem Mode, 'N' is 0 - 24. [Normally 6]
GNO='N'.....Set the number of OTUs on the line, 'N' is 1 - 15. [UTC]
GOE=1.....Enable OTU Control & Reply states.

At this point if the OTU is connected to the T12 Installation, via the BT line or the T12 ITS via the Jack Plugs, the ON-LINE lamp on the Green Wave Box will illuminate.

GIS0=11111111.....Invert the the sense of input Port 0.
GLR=6.....Sets the input for the software lamp test to Port 0 bit 6.

- 4) With a Green Wave box the OTU Call / Cancel function is used to ensure that a push-button press is registered and held for long enough to ensure that the Installation receives the message.

Set the Call Cancel functions as follows:-

GIA0 0=0.....Allocate Call Cancel unit 0 to Digital Input 0.
GIA0 1=7.....Allocates the unit function to Call Cancel (Queue).

Repeat this for up to six units, as required:-

GIA1 0=1 GIA2 0=2 GIA3 0=3 GIA4 0=4 GIA5 0=5
GIA1 1=7 GIA2 1=7 GIA3 1=7 GIA4 1=7 GIA5 1=7

GRLO 0=15.....Allocate Reply Byte 0 bit 0 to Queue Unit 0.
GRLO 1=16.....Allocate Reply Byte 0 bit 1 to Queue Unit 1.
GRLO 2=17.....Allocate Reply Byte 0 bit 2 to Queue Unit 2.
GRLO 3=18.....Allocate Reply Byte 0 bit 3 to Queue Unit 3.
GRLO 4=19.....Allocate Reply Byte 0 bit 4 to Queue Unit 4.
GRLO 5=20.....Allocate Reply Byte 0 bit 5 to Queue Unit 5.

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CALL DELAY TIMES

GAQ0=0.....Set Call delay time to 0 sec.

The Call delay is normally set to 0 sec. for a Green Wave Box so that a push-button press is registered as quickly as possible.

Repeat this for the other other units, as required:-

GAQ1=0 GAQ2=0 GAQ3=0 GAQ4=0 GAQ5=0

CANCEL DELAY TIMES

GIQ0=3.....Set Cancel delay time to 3 sec.

The Cancel delay is normally set to 3 sec. for a Green Wave Box to ensure that the message is transmitted to the Instation even though the push-button is operated for a short period.

Repeat this for the other other units, as required:-

GIQ1=3 GIQ2=3 GIQ3=3 GIQ4=3 GIQ5=3

Note:- All units to be configured for test purposes.

INSTALLATION NOTES

When the OTU has been set-up as required then connect a TC12 Instation Test Set to the OTU via the Jack Plugs (or connect to the Instation) and test the unit as follows:-

1. With the OTU 'OFF LINE' press the Lamp Test push-button, check that all the lamps on the Green Wave Box illuminate. (The Lamp Test push-button is not illuminated.)
2. Put the OTU 'ON-LINE' and ensure that the 'ON-LINE' lamp illuminates. See Section 4 of the TC12 Installation and Commissioning Handbook if necessary. (667/HE/43100/000).
3. Press the push-buttons Request1 to Request6 in turn and observe the change of state on the ITS Reply Word 0 bits 0 to 5 respectively. Note that the bit will only go active after the configured Call delay time and will only reset after the configured Cancel delay time. Ensure that each push-button operates in a momentary operation.
4. On the ITS assert the Control bits Word 0 bits 0 to 7 and Word 1 bits 0 to 3
Check that each bit in turn illuminates Confirm 1 to Confirm 6 and then Request 1 to Request 6 respectively. Reset all the bits and ensure that all the Request and Confirm lamps extinguish.

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The equipment provided is:-

Green Wave Box.....667/1/22940/000

Works Specification.....EM24323 (This Document)

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