

TELEPHONE TERMINAL AN/TCC-73(V) 1

1. Description:

Telephone Terminal AN/TCC-73(V)1 provides the required PCM Multiplex equipment for 1 ea 96 channel or 2 ea 48 channel radio or cable systems or various other combinations using the available TD-204/TD-754s. The AN/TCC-73 (V)2 will be converted to an AN/TCC-73(V)1 by the addition of 2 each Asynchronous Digital Combiners (ADCs), when available. See page 2-111 for a description of the TD-976 ADC.

2. Federal Stock Number:

5805-134-5405.

3. Major Components:

<u>QTY</u>	<u>NOMENCLATURE</u>	<u>TYPE NO.</u>
1	Shelter, Electrical Equipment (Modified S-280/G)	S-419()/TCC-73(V)
8	Converter, Telephone Signal	CV-1548
8	Multiplexer	TD-660A/G
4	Multiplexer Cable Combiner	TD-204/TD-754
2	ADC	TD-976
*8	Electronic Key Generator	TSEC/KG-27

4. Ancillary Equipment:

a. Power Unit (USATROSCOM)

1 ea Generator Set, Gasoline Engine, Trailer
Mounted (2 ea 5 Kw units in 1-1/2 Ton Trailer) PU-629/G

b. Transporter (USATACOM)

1 ea Truck, Cargo 2-1/2 Ton, 6x6 M-35, M-211

c. Air Conditioner

When available and authorized by DA, it is planned to use one (1) ea 18,000 BTU trailer-mounted, engine-generator powered air conditioner.

*Has provision for mounting optional security equipment.

5. Appropriate Literature:

TM 11-5805-585-15.

6. Characteristics:

a. Physical

Dimensions: Refer to S-280/G Shelter on page 8-4.

Weight: Estimated, 5,056 lbs.

All operating components are housed in a 2-1/2 Ton (S-280/G) Shelter. The shelter is fully insulated and weatherproofed and contains ports for an air conditioner (when authorized). Equipment racks housing electronic components are secured to the wall and floor. Storage areas and mounting fixtures are provided for spares and accessory items. Power and signal wiring is housed in ducts. The assemblage can be transported by air or ground vehicle. Normally, the assemblage is intended for operation while mounted on the transporter truck. The transporter truck also tows the power unit trailer on which are mounted power supplies, cable on reels, fuel cans and additional accessory items for use with the assemblage.

b. Technical

Input Voltage	115 Volts, 50-60 Hz, Single Phase
Power Consumption	4375 Watts
Local Communications Facility	TA-312/PT and LS-147/F1
Multiplexing	Time Division (TDM)
Modulation (Multiplexer)	Pulse Code (PCM)

7. Concept of Employment:

The AN/TCC-73(V)1 is used to provide multiplex terminal or repeater facilities for Corps Area PCM Communications Systems and can be employed over either radio or cable facilities. The AN/TCC-73 Asynchronous Digital Combiner equipment is capable of terminating one 96 channel or 2 ea 48 channel radio or cable system. This item is used in the High Capacity Radio Relay System.

8. Improved Operational Capabilities Over Previous Types:

The AN/TCC-73(V)1 uses a completely solid state PCM multiplexer system. It uses the TD-976 (ADC) and therefore permits the Asynchronous Combining of up to 8 ea 12 channel PCM groups. Telephone terminals previously used for this application were less flexible in that they were limited to the synchronous combining 2 ea 48 channel PCM groups.

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9. Plans for Continuation or Replacement:

This is a new item and no replacement is anticipated.

10. Military Personnel Requirements:

Operator - MOS 31M20 Radio Relay Operator

Repair - MOS 31L20 Field Radio Relay Equipment Repairman

TELEPHONE TERMINAL AN/TCC-73(V)2

1. Description:

Telephone Terminal AN/TCC-73(V)2 provides the required PCM Multiplex equipment for 4 ea 12 channel or 4 ea 24 channel radio or cable systems.

2. Federal Stock Number:

5805-134-5404.

3. Major Components:

<u>QTY</u>	<u>NOMENCLATURE</u>	<u>TYPE NO.</u>
1	Shelter, Electrical Equipment (Modified S-280/G)	S-419()/TCC-73(V)
8	Converter, Telephone Signal	CV-1548
8	Multiplexer	TD-660
4	Multiplexer Cable Combiner	TD-204/TD-754
*8	Electronic Key Generator	TSEC/KG-27

4. Ancillary Equipment:

a. Power Unit (USATROSCOM)

1 ea Generator Set, Gasoline Engine, Trailer
Mounted (2 ea 5 Kw units in 1-1/2 Ton Trailer) PU-629/G

b. Transporter (USATACOM)

1 ea Truck, Cargo 2-1/2 Ton, 6x6 M-35, M-211

c. Air Conditioner

When available and authorized by DA, it is planned to use one (1) ea 18,000 BTU trailer mounted, engine-generator powered air conditioner.

5. Appropriate Literature:

TM 11-5805-585-15.

*Has provision for mounting optional security equipment

6. Characteristics:

a. Physical

Dimensions: Refer to S-280/G Shelter on page 8-4.
Weight: Estimated, 4,906 lbs.

All operating components are housed in a 2-1/2 ton (S-280/G) Shelter. The shelter is fully insulated and weatherproofed and contains ports for an air conditioner (when authorized). Equipment racks housing electronic components are secured to the wall and floor. Storage areas and mounting fixtures are provided for spares and accessory items. Power and signal wiring is housed in ducts. The assemblage can be transported by air or ground vehicle. Normally, the assemblage is intended for operation while mounted on the transporter truck. The transporter truck also tows the power unit trailer on which are mounted power supplies, cable on reels, fuel cans and additional accessory items for use with the assemblage.

b. Technical

Input Voltage	115 Volts, 50-60 Hz, Single Phase
Power Consumption	4375 Watts
Local Communications Facility	TA-312/PT and LS-147/F1
Multiplexing	Time Division (TDM)
Modulation (Multiplexer)	Pulse Code (PCM)

7. Concept of Employment:

The AN/TCC-73(V)2 is used to provide multiplex terminal or repeater facilities for Corps Area PCM Communications Systems and can be employed over either radio or cable facilities. It provides the flexibility of terminating 8 ea 12 channel or 4 ea 24 channel cable or radio links. This item is used in the High Capacity Radio Relay System.

8. Improved Operational Capabilities Over Previous Types:

The AN/TCC-73(V)2 uses a completely solid state PCM Multiplexer System to provide greater flexibility in operation, increased efficiency and reliability over previous tube type multiplexer systems.

9. Plans for Continuation or Replacement:

This is a new item and no replacement is anticipated.

10. Military Personnel Requirements:

Operator - MOS 31M20 Radio Relay Operator

Repair - MOS 31L20 Field Radio Relay Equipment Repairman