



The Tech Works **2590** is a Telephone Interface Module designed to allow any Standard Caller I.D. Telephone or PBX trunk port to become a display Master Control Station. The **2590** provides all analog station support including Ring Voltage, Talk Battery, Dial Tone, Busy Tone, Reorder Tone, DTMF Decode, and Caller I.D. for Visual Display and communication with any Tech Works RS485 network. By simply connecting a **2590** to any existing (Rev 2 or later) Tech Works network you can send and receive calls from a Cordless Phone or a PBX Desk Station. A standard RS232 serial interface to the installers PC allows programming of user dial codes and display messages for each of 512 network addresses. When the phone rings the programmed message is displayed and the user has the option of taking or queuing the call. Queued calls will ring back if not cleared in a programmed amount of time. When the user takes the call an open voice communication is established with the calling station (the network includes Tech Works *Voice-Call* Substations). To call a station the operator simply dials the programmed number for the desired Substation. If more than one call is in the queue the operator can scroll through the pending calls with emergency calls always appearing at the top (full use of system queuing is determined by the telephone station hardware used). Through the use of the latest in solid-state digital technology the operator is in complete control. Integral voice operated control (VOX) senses when the operator is talking and automatically adjusts the system for optimum transmit performance. When the operator stops talking the Substation automatically allows the operator to hear every sound from the distant location.

## **2590 INTERCOM TELEPHONE INTERFACE MODULE**

### **BENEFITS**

- Caller I.D Visual Display with any EIA Standard Telephone
- Easy to Install
- Easily Added to any Existing System
- Up to 512 Addresses Per System
- Three Twisted Pair Wiring

### **Design Information**

Input 12 VDC - @ 750 mA Max  
Dimensions - 10" W, 2" H, 6.2" D  
Wiring is Three Twisted Pair Cable  
22 Awg. Min  
(1 for Audio, 1 Data,  
1 for Central Power)

### **Connections -**

Screw Terminal Network Interface  
RJ45 RS232 Serial Interface  
RJ11 Telephone Interface

## **Tech Works™**

“Making Specialized Communication Easy”

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## Associated Equipment

2021	Intercom Speaker Station w/ Integral Call-In Switch
2025	Intercom Speaker Station – 8” w/ Round White Baffle – Ceiling/Wall Mount
2051	Intercom Patient Speaker Station
2052	Intercom Emergency Pull Cord Speaker Station w/ Acknowledge Light & Cancel Button
2528	Audio Intercom Substation w/Remote Digital Control (Wall Mount)
5221-*	“Help” Push Button with Acknowledge Light
5234-*	Corridor Light. Passive Device w/4 Red Ultra Bright LED’S
5251	Patient Station w/Acknowledge Light
5252	Emergency Pull Station w/Acknowledge Light
5254	Light Signaling Corridor Passive Light

PS1260	Power Supply	6.0 AMP	12 Volt DC	UL & CSA Listed
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## Architects' and Engineers' Specifications

The Voice Communication System Intercom Telephone Interface Module shall be an intelligent digital control unit capable of communicating from a standard DTMF telephone instrument to the Tech Works distributed digital communication system. A standard RJ type 6 pin connector shall provide Ring Voltage, Caller I.D. Signaling, Dial Tone, Talk Battery, Busy and Reorder Tones, and DTMF Decode to the TIA standard telephone equipment. The voice control system shall be a very fast all solid-state switching, hands free operation. The Master shall totally control all communication with a variety of self-powered Substations using only a single link between stations. The link can be any communication path that is bi-directional and balanced to ground for 600-ohm loads. The link shall be as specified hereinafter and shall not require multiple conductor wire or home run wiring schemes for full operation. Any system requiring home run or star topology wiring shall not be considered under this specification. Any system not capable of installer programmable interaction of Substations shall not be considered under this specification. The Master shall be an intelligent electronic device requiring no more than 750 mA at 12 Volts DC for full operation. The Intelligent Master shall employ EIA standard RS485 digital communication. The system shall operate on three twisted pair parallel wiring. Systems requiring more than three twisted pairs from one station to the next for full operation shall not be considered under this specification.

The Voice Communication System Intercom Telephone Interface Module shall be Tech Works Model 2590.