

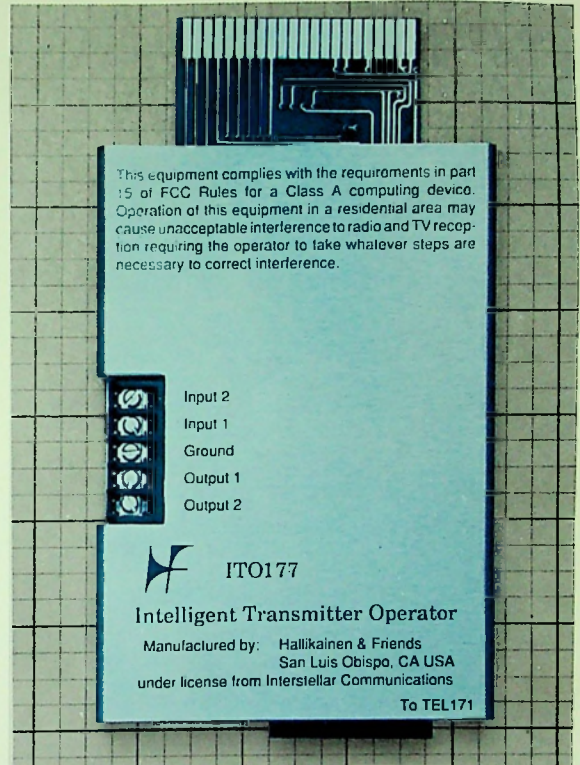
# Hallikainen & Friends

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*Introducing an idea from the past. A return to the days when someone kept constant vigil over operation of your transmitter.*

## A RETURN TO THE DAYS OF THE: INTELLIGENT TRANSMITTER OPERATOR!

The ITO 177 provides fully automatic operation of a Moseley TRC-15 remote control equipped with a Hallikainen & Friends TEL 171 digital telemetry adapter. The ITO 177 will monitor your transmitter and save money.



### Simple System

The ITO 77 allows fully automatic operation of a Moseley TRC-15 remote control equipped with a Hallikainen & Friends TEL 171 digital telemetry adapter.

The ITO 177 plugs into the memory expansion port of a Commodore-64 personal computer. A 25 conductor cable connects the ITO 177 to the Data port on the front of the TEL 171. Through this interface the Commodore-64 has complete control of the Moseley TRC-15 and access to the meter readings displayed on the H&F TEL 171.

The ITO 177 provides the Commodore-64 with an enhanced Basic instruction set. These Basic statements and functions provide you with the power to automate your transmitter site control.

The ITO 177 can obtain a meter reading on a given channel as easily as typing PRINT METER(x). The ITO 177 then instructs your remote control to select channel x and obtain the meter reading. The meter reading is then displayed as you requested. Remote control functions such as Raise or Lower are also easily accomplished. Typing: Raise(x), selects channel x and issues a raise command.



# ITO 177 INTELLIGENT TRANSMITTER OPERATOR

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## Operation

### Power-up

Upon power-up your Commodore-64 will attempt to load and run the first program found on the optional disk drive. This "auto-boot" feature allows you to write your own custom remote control program and have it re-load and start running should your studios experience a power failure.

### Ready to Run

If you do not wish to write your own program the ITO 177 will automatically run its own built-in program. This program will obtain and display meter readings, check for and alarm out of tolerance values, attempt corrective action and generate a log on an optional printer.

### Memory Protection

The ITO 177 contains 2K bytes of non-volatile memory which can be used to save information through a loss of power. Transmitter power limits, pattern change times, or telephone numbers for a modem are examples of information you may want to save. A battery backed clock-calendar provides intelligent recovery of the system following a power outage.

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## Features

### Full remote control access:

Uncompromising computer control of your transmitter site.

### Auto-boot:

Automatic start-up and recovery following a studio power failure.

### Battery backed 2K RAM and clock-calendar:

Saves important data through power failure and dependable time or date sensitive commands.

### Modem capability:

Dial-up access and control of your TRC-15 remote control.

### Printer support:

Just plug in a Commodore compatible printer for neat, comprehensive logs.

### Local Status Inputs and Control outputs:

Two status inputs allow you to monitor studio events. Two control outputs allow you to automatically switch studio equipment.

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## New Basic Instructions

### Statements:

RAISE(c)

Selects channel c and issues RAISE

LOWER(c)

Selects channel c and issues LOWER

TIME

Sets internal 24 hour clock (HHMMSS)

DAY

Sets day of week (0-6)

DATE

Sets current date (YYMMDD)

### Functions:

METER(c)

Selects channel c and returns value

RAISE(c)

Selects channel c, RAISE, returns value

LOWER(c)

Selects channel c, LOWER, returns value

TIME

Returns current time (24 hour mode)

TIME\$

Returns current time as AM/PM string

DAY

Returns current day as integer

DAY\$

Returns current day as text string

DATE

Returns current date as integer

DATE\$

Returns date as Month, Day, Year string